



FACULTY OF
DENTISTRY

PROGRAM BOOK



KPPIKG 2026

20TH SCIENTIFIC MEETING AND REFRESHER COURSE IN DENTISTRY
FACULTY OF DENTISTRY, UNIVERSITAS INDONESIA

IN CONJUNCTION WITH

ASEAN GERIATRIC DENTISTRY CONFERENCE 2026

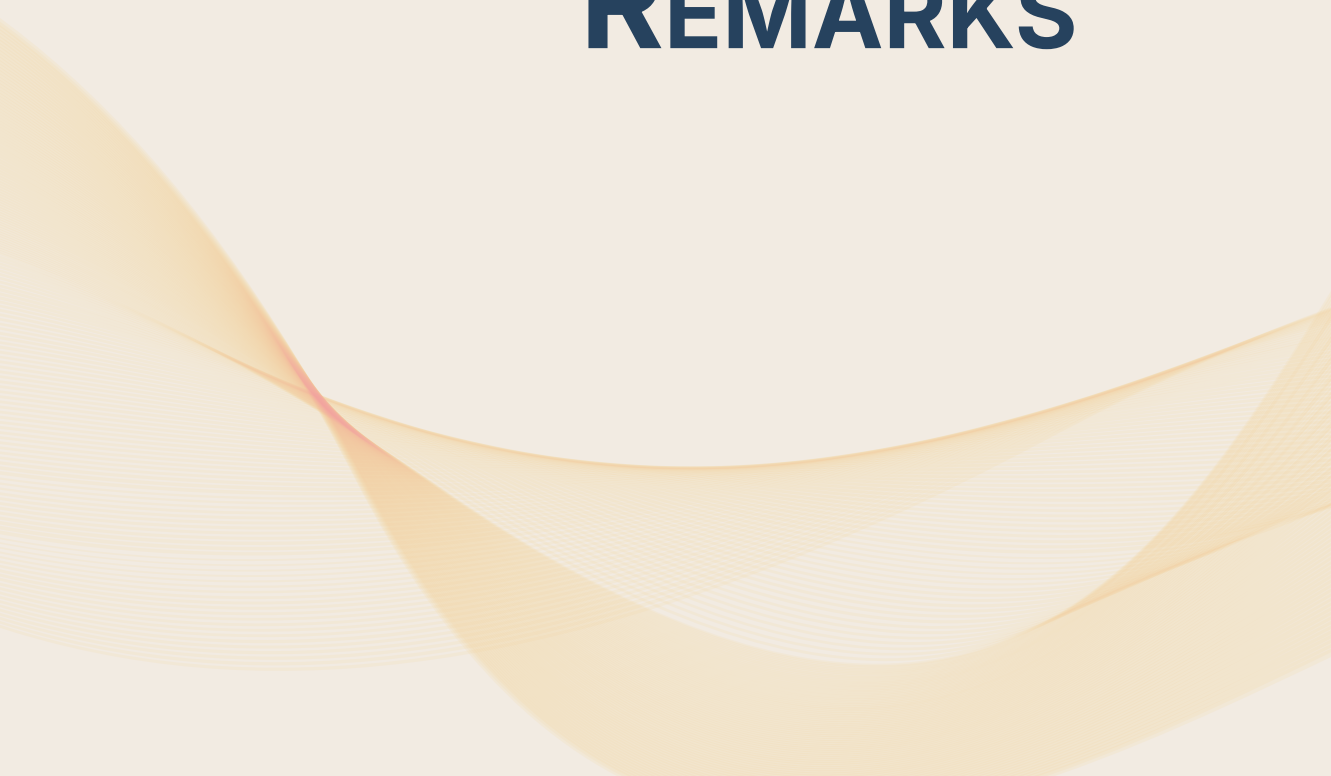
**JAKARTA INTERNATIONAL CONVENTION CENTER (JICC)
13-15 AUGUST 2026**

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SECTION A

WELCOME REMARKS

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WELCOME REMARK FROM
**THE DEAN OF
FACULTY OF DENTISTRY
UNIVERSITAS INDONESIA**



Assalamu'alaikum warahmatullahi wabarakatuh,
It is my great pleasure to welcome all participants, speakers, partners, and distinguished guests to the Kursus Penyegar dan Penambah Ilmu Kedokteran Gigi (KPPIKG) 2026. On behalf of the Faculty of Dentistry, Universitas Indonesia, I would like to express our sincere appreciation for your presence and participation in this scientific forum, one of the largest dental meetings in Indonesia.

Carrying the theme "Shaping the Future of Global Oral Health: Translating Science, Technology, and Humanity," KPPIKG 2026 serves as a platform for academics, dental practitioners, researchers, students, and stakeholders to exchange knowledge, share experiences, and explore innovative ideas in addressing the evolving challenges in oral health. This year, KPPIKG is further enriched through its collaboration with the ASEAN Geriatric Dentistry Conference (AGDC) 2026, providing valuable insights and discussions on oral healthcare for the aging population, an increasingly important issue in line with global demographic changes.

Throughout the three-day event, participants will have the opportunity to engage in a wide range of scientific programs, including lectures, symposiums, discussions, and hands-on workshops featuring renowned speakers from Indonesia and around the world. In addition, KPPIKG 2026 also presents an exhibition featuring companies and industry partners in the field of dentistry and oral healthcare, showcasing the latest innovations, technologies, products, and solutions that support the advancement of dental practice and services.

We hope that these scientific sessions and exhibition activities will not only enhance knowledge and professional competencies but also foster meaningful collaborations across institutions, disciplines, and countries. Through this forum, we aim to encourage the exchange of ideas, strengthen partnerships between academia and industry, and contribute to the continuous improvement of oral healthcare and also to strengthen the quality of dental research and education.

We believe that the advancement of dentistry is driven not only by scientific and technological developments but also by our commitment to delivering human-centered care. Therefore, the spirit of collaboration, innovation, and compassion cultivated through KPPIKG 2026 will serve as an inspiration to create more inclusive, sustainable, and impactful solutions for the community.

I would like to extend my highest appreciation to the organizing committee, speakers, sponsors, exhibitors, partners, and everyone who has contributed to the success of KPPIKG 2026. May this event provide valuable benefits for all participants and become a meaningful step forward in shaping the future of oral health.

We wish you an inspiring and enriching experience throughout KPPIKG 2026.
Wassalamu'alaikum warahmatullahi wabarakatuh.

Prof. drg. Lisa Rinanda Amir, Ph.D.,PBO.

Dean of the Faculty of Dentistry, Universitas Indonesia

WELCOME REMARK FROM
**THE CHAIRMAN OF
KPPIKG 2026**



Dear Colleagues,

It is a great honor and pleasure to welcome you to the 20th Scientific Meeting and Refresher Course in Dentistry, Faculty of Dentistry, Universitas Indonesia (KPPIKG 2026).

I would like to express my sincere appreciation to the leadership of the Faculty of Dentistry, Universitas Indonesia, for their trust, guidance, and continuous support in making this event possible.

With the theme "Shaping the Future of Global Oral Health: Translating Science, Technology, and Humanity," KPPIKG 2026 serves as an important platform for dentists, specialists, academics, and practitioners to enhance their knowledge and clinical skills. This event brings together a wide range of research and clinical insights across dental disciplines, aiming to encourage collaboration and support the application of scientific knowledge into education and clinical practice. This year, we are proud to collaborate with the ASEAN Geriatric Dentistry Conference (AGDC), strengthening regional cooperation and expanding our scientific scope.

The scientific program features 111 speakers and 32 hands-on sessions designed to enrich both knowledge and practical skills. In addition, participants will enjoy social and community activities, including the Opening Ceremony, Gala Dinner, and community service programs.

Lastly, I would like to express my sincere appreciation to all KPPIKG 2026 committee members for their dedication and support in making this event possible. I also extend my gratitude to all industrial partners for their valuable contribution to this event.

May KPPIKG 2026 inspire collaboration, advance knowledge, and contribute to improving global oral health.

Thank you.

drg. Aloysius Putut Wijanarko, M.Sc., Sp.RKG
Chair of KPPIKG 20226

WELCOME REMARK FROM
**THE CHAIRMAN OF
AGDC 2026**



Assalamu'alaikum warahmatullahi wabarakatuh,

It is both a great honor and a genuine pleasure to welcome all distinguished speakers, delegates, researchers, academics, professionals, and participants to the 2nd ASEAN Geriatric Dentistry Conference. The 2nd ASEAN Geriatric Dentistry Conference hosted by Faculty of Dentistry Universitas Indonesia in Conjunction with KPPIKG.

On behalf of the Committee of the 2nd ASEAN Geriatric Dentistry Conference, I would like to express our sincere appreciation to all speakers, delegates, partners, and committee members whose dedication and collaboration have made this important event possible. This conference comes at a highly relevant time. Across ASEAN, our populations are aging rapidly. This demographic transition brings not only longer life expectancy, but also increasingly complex health and oral healthcare needs. Older adults frequently experience multiple chronic diseases, functional limitations, cognitive decline, polypharmacy, oral frailty, tooth loss, impaired mastication, and swallowing difficulties. These conditions remind us that oral health cannot be separated from general health, nutrition, functional ability, psychological well-being, and quality of life. Therefore, geriatric dentistry must extend beyond the treatment of individual teeth. It requires a holistic, person-centered, and multidisciplinary approach that considers the older person's medical condition, functional capacity, social circumstances, personal expectations, and ability to receive and maintain oral healthcare.

The theme of the 2nd ASEAN Geriatric Dentistry Conference, "Geriatric dentistry in action, translating collaboration into system, care and impact across Asia," reflects our shared commitment to improving oral health and healthy aging throughout the ASEAN region. This AGDC conference is part of a collaborative network that the Faculty of Dentistry, University of Malaya, the National University of Singapore, Khon Kaen University Thailand, and Universitas Indonesia originally initiated. Today, this collaboration has expanded significantly following the recognition of geriatric dentistry as an ASEAN University Network Thematic network. This milestone provides an important platform to strengthen collaboration in education, research, and community engagement in geriatric dentistry across the region.

No single institution or country can address the challenges of population aging alone. We need stronger regional cooperation in education, research, clinical practice, public health policy, and community-based care. We also need to

prepare future dental professionals with the knowledge, clinical competencies, communication skills, and compassion required to care for older adults with increasingly complex needs. Through this conference, I hope to exchange scientific knowledge and best practices, strengthen professional networks, initiate collaborative research, and develop innovative strategies that are relevant to the diverse social and healthcare contexts of ASEAN countries.

I also hope that this meeting will contribute to the development of a sustainable ASEAN geriatric dentistry network—one that promotes joint education, multicenter research, professional mobility, and regional advocacy for better oral healthcare for older people.

To all our distinguished speakers, thank you for generously sharing your knowledge, expertise, and valuable experiences. Finally, I would like to extend my deepest appreciation to the organizing committee, supporting institutions, professional organizations, and sponsors. May this conference become an inspiring platform for advancing geriatric dentistry, promoting healthy aging, and ensuring that every older person can maintain oral health, dignity, function, and quality of life.

Thank you.

Wassalamu'alaikum warahmatullahi wabarakatuh.

Prof. Dr. drg. M. Lindawati. S Kusdhany, Sp.Pros., Subsp.PKIKG
Chair of 2nd ASEAN Geriatric Dentistry Conference

SECTION B

GENERAL INFORMATION

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THEME

"Shaping the Future of Global Oral Health: Translating Science, Technology, and Humanity"

DATE

13-15 Agustus 2026

VENUE

Jakarta International Convention Centre | Jakarta- Indonesia

PROGRAMS

SCIENTIFIC PROGRAMS

- Keynote Lecture
- Main Lecture
- Integrated Lecture
- E-poster Presentation
- Hands On
- Listerine Scientific Awards
- Haleon Scientific Awards

EXHIBITION

- Dental Exhibition
- UMKM Exhibition
- Food and Beverage

NONSCIENTIFIC PROGRAMS

- Opening Ceremony
- Gala Dinner
- Personal Color Analysis & Make Up Class by Wardah
- Talkshow "Be Seen. Be Trusted. Be Chosen — The Personal Branding Playbook for Dentist"
- Closing Ceremony

FLOOR PLAN MAIN LOBBY



FLOOR PLAN LOWER LOBBY



LIST OF COMMITTEE KPPiKG 2026

Advisor

Prof. drg. Lisa Rinanda Amir, Ph.D., PBO
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Head of Fund and Exhibition

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drg. Layli Pinariningan Gusti
drg. Qaiszara Puspawati

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 Immanuel Dimas Wicaksana Putra
 Mario Cornelius
 Hansen Hoseas
 Rania Nur Hazima
 Vahd Vuad Valahin Adam Talib
 Naufal Rafif Putranto
 Preety Febriming Permata Aven Tan
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 Rofiq Kurniawati
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 Diffa Akiela Damayanti
 Ditha Rachma Aulya Putri Rynto
 Faradiba Naila Ramadhiani Iskandar
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 Karen Josephine Darwis
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 Muhammad Haedar Yasin

**SECTION
C1**

**CONFERENCE
SCHEDULE**

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CONFERENCE SCHEDULE

DAY 1

Thursday, 13th August 2026

	ASSEMBLY HALL 1	MERAK 1	MERAK 2	MERAK 3	SUMMIT	NURI 1	NURI 2	KENARI	MURAI	MALEO	HANDS-ON	WORKSHOP																												
Time/Room	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.45 - 14.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00	13.00 - 13.15 13.15 - 13.30 13.30 - 13.45 13.45 - 14.00 14.00 - 14.15 14.15 - 14.30 14.30 - 14.45 14.45 - 15.00 15.00 - 15.15 15.15 - 15.30 15.30 - 15.45 15.45 - 16.00																												
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SECTION C1 CONFERENCE SCHEDULE

SECTION C1 CONFERENCE SCHEDULE

KPPIKG 2026 - 20th Scientific Meeting and Refresher Course in Dentistry

**SECTION
C2**

**ORAL & POSTER
PRESENTATION
SCHEDULE**

KPPIKG 2026**ORAL PRESENTATION****Friday, 14th August 2026****KENARI ROOM****LITERATURE REVIEW**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260610-FA025 / KP-LR02	08:05 – 08:17	Honey as a Supportive Treatment for Xerostomia: A Systematic Review	Salsabila Nuralifianti Dewatmoko, Clarissa Fadhillah, Ratna Kumala Indrastiti
2	FP-20260621-FA61B / KP-LR01	08:18 – 08:30	Single versus Double Implant Overdentures in Older Adults: A Systematic Review and Meta-Analysis	Pitu Wulandari, Alda Rizki Amanda, Daniel Rafael Batubara, Megawati
3	FP-20260610-0281D / KP-LR03	08:31 – 08:43	Are Full Crowns Still Necessary? A Systematic Review of Zirconia Restorations in Endodontically Treated Teeth	Dedy Agoes Mahendra, Almas Riska Zhafarina, Citra Kusumasari, Ahmed Abdou
4	FP-20260610-BD5CB / KP-LR07	08:44 – 08:56	Polypharmacy, Systemic Diseases, Dry Mouth, and OHRQOL in Older Adults: a Scoping Review	Faradina Siti Zahra, Yuniardini Septorini Wimardhani, Ambar Kusuma Astuti
5	FP-20260610-8470E / KP-LR05	08:57 – 09:09	Navigating the Obliterated Space: Algorithmic Approach to Static and Dynamic Guided Endodontics in Calcified Canals	Muhammad Fadhil Witjaksana, Sylva Dinie Alinda

KPPIKG 2026**ORAL PRESENTATION****Friday, 14th August 2026****KENARI ROOM****CASE REPORT**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260610-11B8F / KP-CR13	09:14 – 09:26	Unconventional Strategy: Restoring the Maxillary Canine Region with a Narrow-Diameter Implant: A Case Report	Jefrianto Wololy, Lia K. Wulansari
2	FP-20260610-AD7A6 / KP-CR22	09:27 – 09:39	Conservative Surgical Management of an Extensive Dentigerous Cyst in an Adolescent Patient: A Case Report	Nur Arifiana, Sri Rezeki, Vera Julia
3	FP-20260610-0EB58 / KP-CR23	09:40 – 09:52	Navigating the Nadir: Oral Medicine Management of Necrotizing Lesions in Acute Leukemia with Febrile Neutropenia	Fildzah Nurul Fajrin, Ambar Kusuma Astuti, Widya Apsari
4	FP-20260610-C1C8E / KP-CR09	09:53 – 10:05	Orthodontic Correction of Smile Components	Astrid Levina, Haru Setyo Anggani
5	FP-20260610-40581 / KP-CR29	10:06 – 10:18	Healing of Periapical Lesion Following Bioceramic Sealer Extrusion in Maxillary Anterior Tooth: A Case Report	Avi Aisyah Ramadini, Ratna Meidyawati
6	FP-20260610-C4907 / KP-CR26	10:19 – 10:31	Management of Chemotherapy-Induced Oral Mucositis with Topical Doxycycline as an Alternative Therapy: Case Report	Rakanda Rizki R. Duddyarto, Rahmat Cahyanur, Indriasti Indah Wardhany, Ratna Kumala Indrastiti

KPPIKG 2026**ORAL PRESENTATION****Friday, 14th August 2026****KENARI ROOM****ORIGINAL RESEARCH**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260610-B178A / KP-OR03	10:36 – 10:48	Factors Associated with Oral Health Assessment Accuracy, Knowledge, Attitudes, and Practices Among Psychiatric Nurses	Haniah Alatas, Iwan Setiadi, Indriasti Indah Wardhany, Anandina Irmagita
2	FP-20260705-C4EB4 / KP-OR05	10:49 – 11:01	Biomolecular Interaction Analysis of Green Tea Catechins Against OmpA of <i>Veillonella parvula</i> in Biofilm Formation	Matthew Andrew Saragih, Ariadna Adisattya Djais, Nurtami Soedarsono
3	FP-20260608-714BB / KP-OR01	11:02 – 11:14	Assessment of Head Posture and Dentocraniofacial Morphology in relation to Vertical Facial Growth Patterns	Amber Suzandi, Astriana Nurfitriah, Haru Setyo Anggani, Nia Ayu Ismaniaty, Ervina Sofyanti
4	FP-20260610-CC5D5 / KP-OR04	11:15 – 11:27	Cross-Cultural Adaptation, Validity, and Reliability of Dental Patients' Awareness and Understanding of TMDs Questionnaire	Syah Jehan Annisa, Nada Ismah, Haru Setyo Anggani

AGDC 2026**ORAL PRESENTATION****Friday, 14th August 2026****NURI 2 ROOM****LITERATURE REVIEW**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260629-EBD38 / AP-LR02	08:05 – 08:17	Orthodontic Tooth Movement in the Geriatric Alveolus: A Novel Clinical Framework and Accelerated Techniques	Hefita Dewi
2	FP-20260630-FFD84 / AP-LR04	08:18 – 08:30	Impact of Periodontal Therapy on Dementia Progression in Periodontitis Patients: A Systematic Literature Review	Leo Alberto Porjo, Jessica Mathonie, Faustina Elizabeth Santoso, Sarah, Fatimah Maria Tadjoeidin, Herlis Rahdewati, Benso Sulijaya
3	FP-20260630-69B6C / AP-LR05	08:31 – 08:43	Biological Mechanism Linking Oral Frailty to Physical Frailty	Steffano A. Handoko, Lindawati S. Kusdhany
4	FP-20260701-E7CDB / AP-LR07	08:44 – 08:56	A Review of Caries Prevention and Treatment Options for Root Caries Among Elderly Patients	Michelle Sunico Segarra, Sharmaine P. Sigua
5	FP-20260629-D9ECF / AP-LR08	08:57 – 09:09	Oral Health Associated with Self-Efficacy: A Scoping Review Using Arksey and O'Malley Framework	Dzakiah Khairunnisa, Herry Novrinda, Iwany Amalliah Badruddin, Armasastra Bahar

AGDC 2026**ORAL PRESENTATION****Friday, 14th August 2026****NURI 2 ROOM****CASE REPORT**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260629-A4B6D / AP-CR03	09:14 – 09:26	Prosthodontic Management and Transition to Domiciliary Dental Care in a Medically Compromised Geriatric Patient	Citra Yuliyanti, Jefrianto Wololy, Lia Kartika Wulansari
2	FP-20260701-A185B / AP-CR08	09:27 – 09:39	Comprehensive Geriatric Assessment-Guided Prosthodontic Care in Older Adults with Compromised Ridges	Syafira Arieffah, Muslita Indrasari
3	FP-20260630-B9174 / AP-CR06	09:40 – 09:52	Interdisciplinary Management of Geriatric Edentulism: Elective Endodontic Treatment as a Foundation for Overdenture Rehabilitation	Merry Elisa, Anggraini Margono, Kania Putriani
4	FP-20260705-8CA7F / AP-CR07	09:53 – 10:05	Improvement of Masticatory Performance in Periodontally Compromised Geriatric Patient using Removable Prosthesis: Case Report	Gita Andani Pradana, Pinta Marito
5	FP-20260629-DBA24 / AP-CR04	10:06 – 10:18	A Viable Alternative? Semi-Precision Attachment Removable Partial Dentures in Geriatric Care: Two Case Reports	Jefrianto Wololy, Lindawati S. Kusdhany, Lia K. Wulansari

AGDC 2026**ORAL PRESENTATION****Friday, 14th August 2026****NURI 2 ROOM****ORIGINAL RESEARCH**

No	Submission ID / Presentation Code	Presentation Schedule	Paper Title	Author
1	FP-20260610-11B8F / KP-CR13	09:14 – 09:26	Unconventional Strategy: Restoring the Maxillary Canine Region with a Narrow-Diameter Implant: A Case Report	Jefrianto Wololy, Lia K. Wulansari
2	FP-20260610-AD7A6 / KP-CR22	09:27 – 09:39	Conservative Surgical Management of an Extensive Dentigerous Cyst in an Adolescent Patient: A Case Report	Nur Arifiana, Sri Rezeki, Vera Julia
3	FP-20260610-0EB58 / KP-CR23	09:40 – 09:52	Navigating the Nadir: Oral Medicine Management of Necrotizing Lesions in Acute Leukemia with Febrile Neutropenia	Fildzah Nurul Fajrin, Ambar Kusuma Astuti, Widya Apsari
4	FP-20260610-C1C8E / KP-CR09	09:53 – 10:05	Orthodontic Correction of Smile Components	Astrid Levina, Haru Setyo Anggani
5	FP-20260610-40581 / KP-CR29	10:06 – 10:18	Healing of Periapical Lesion Following Bioceramic Sealer Extrusion in Maxillary Anterior Tooth: A Case Report	Avi Aisyah Ramadini, Ratna Meidyawati
6	FP-20260610-C4907 / KP-CR26	10:19 – 10:31	Management of Chemotherapy-Induced Oral Mucositis with Topical Doxycycline as an Alternative Therapy: Case Report	Rakanda Rizki R. Duddyarto, Rahmat Cahyanur, Indriasti Indah Wardhany, Ratna Kumala Indrastiti

KPPIKG 2026

POSTER PRESENTATION

Thursday, 13th August 2026

SCREEN 1

No	Presenters	Title	ID	TIME
1	Silke Ramadhani Tresnatri	Endodontic Management of a Mandibular Second Molar with Vertucci Type II Anatomy: A Case Report	KP-CR01	13.00 - 13.15
2	Sere Yulia	Posterior Indirect Adhesive Restoration Using Morphology-Driven Preparation Technique (MDPT) in Post-Endodontic Teeth: A Case Series	KP-CR02	13.15 - 13.30
3	Cininta Ayu Candani Kryandhari	Multidisciplinary Management of Le-Fort II Fracture with Nasal Bone Involvement Using ORIF and V-Y Closure	KP-CR03	13.30 - 13.45
4	Lidya Dimitra Kusumah	Three-Dimensional Sealing in a Vertucci Type II Canal Confluence Utilizing Sonic Irrigation Activation	KP-CR05	13.45 - 14.00

KPPIKG 2026**POSTER PRESENTATION****Thursday, 13th August 2026****SCREEN 2**

No	Presenters	Title	ID	TIME
1	Inggri Yelwita Seputri	Management of a C-Shaped Mandibular Second Molar Using Endodontic Treatment and Endocrown Restoration	KP-CR20	13.00 - 13.15
2	Margaretha Taruli Dame	Non-Surgical Endodontic Management of CBCT-Diagnosed Periapical Cyst-Like Lesion in Maxillary Central Incisor: A Case Report	KP-CR21	13.15 - 13.30
3	Biandra Azzahra	Reversing Premature Facial Aging: Esthetic and Functional Improvement through Multimodal Full-Mouth Rehabilitation With Altered VDO	KP-CR24	13.30 - 13.45
4	Rani Gamawati	Pathological Mandibular Fracture Secondary to Chronic Osteomyelitis Following Chemotherapy for Non-Hodgkin Lymphoma: a Case Report	KP-CR25	13.45 - 14.00

KPPIKG 2026

POSTER PRESENTATION

Thursday, 13th August 2026

SCREEN 3

No	Presenters	Title	ID	TIME
1	Janice Esta Hanrahan	Minimally Invasive Adhesive Onlay Restoration of an Endodontically Treated Molar with Subgingival Defect	KP-CR40	13.00 - 13.15
2	Karina Natalie Kuntjoro	Digital Smile Design Approach for Anterior Implant and Esthetic Restorative Rehabilitation: An Interdisciplinary Case Report	KP-CR41	13.15 - 13.30
3	James Sebastian	Rebuilding Smile Harmony Through Aesthetic Crown Lengthening and Lip Repositioning in Excessive Gingival Display	KP-CR42	13.30 - 13.45
4	Anisha Giantini	MDPT-Based Overlay for Single Remaining Wall Tooth as a Conservative Alternative to Full Crowns	KP-CR43	13.45 - 14.00
5	Misra Hanum	Subgingival Biodiversity in Periodontitis Patients With Type 2 Diabetes Mellitus: A Systematic Review	KP-LR15	13.00 - 13.15

KPPIKG 2026
 POSTER PRESENTATION

Thursday. 13th August 2026

SCREEN 4

No	Presenters	Title	ID	TIME
1	Intan Puspita Purnomo Siwi	The Hidden Survivor Within: Emerging Phage Therapy Against Persistent Enterococcus faecalis	KP-LR04	13.00 - 13.15
2	Eganavra Ravinta Mundarang	Navigating the Confluence: Advanced Diagnostic and Therapeutic Strategies for Vertucci Type II Configurations 	KP-LR06	13.15 - 13.30
3	Cut Intan Firlyana	Smoking-induced Oral Dysbiosis and Its Impact on Cariogenic Bacterial Profiles	KP-LR08	13.30 - 13.45
4	Azhar Satrio Wibisono	Bacterial Microbiome Profiles in Enamel and Dentin Carious Lesions	KP-LR09	13.45 - 14.00

KPPIKG 2026

POSTER PRESENTATION

Friday, 14th August 2026

SCREEN 1

No	Presenters	Title	ID	TIME
1	Iwan Sopandi	A Systematic Rehabilitation of a Left First Molar: Integrating PIAR Design and Fiber-Reinforced Post Systems.	KP-CR06	08.00 - 08.15
2	Fanny Anduari Dianty	Management of a Severely Curved Root Canal Using Heat-Treated Nickel-Titanium Instrument and Sonic Irrigation Activation	KP-CR07	08.15 - 08.30
3	Jihan Rehana Ardanes	Aggressive Anterior Mandibular Radiolucent Lesion in an Elderly Patient: Cone-Beam Computed Tomography Case Report	KP-CR08	08.30 - 08.45
4	Mustika Arini	Management of Separated Instrument in a Curved Maxillary Molar Canal Using Nonsurgical Bypass Technique	KP-CR10	08.45 - 09.00
5	Giovanni	Healing of an Unfavorable Endodontic-Periodontal Lesion with Bioceramic and Sonic Technology Followed by Integrative Therapy	KP-CR11	13.00 - 13.15
6	Joseph Gunawan	Bimaxillary Surgery and Genioplasty in Post-Osteodistraction Skeletal Class II Patient with Severe Obstructive Sleep Apnea	KP-CR12	13.15 - 13.30
7	Vita Opica Sukmawati	Comprehensive Management of Neglected Mandibular Fractures Using Open Reduction and Internal Fixation: A Case Report	KP-CR14	13.30 - 13.45
8	Rivandy Holil	Blast-Induced Pediatric Mandibular Fractures, Balancing Orif Stability and Growth Preservation: A Case Report	KP-CR15	13.45 - 14.00

KPPIKG 2026**POSTER PRESENTATION****Friday, 14th August 2026****SCREEN 2**

No	Presenters	Title	ID	TIME
1	Bernike Davitaswasti	Translating Minimally Invasive Endodontics Using Heat-Treated EDM Files: Reduced Postoperative Pain in Two Cases	KP-CR27	08.00 - 08.15
2	Fara Salsabila Susilo	Enhancing Endodontic Outcomes in C-Shaped Canals through CBCT and Rotary Technology	KP-CR28	08.15 - 08.30
3	Reny Mawardini	Conservative Staged Management Of Extensive Ameloblastoma: From Marsupialization To Secondary Enucleation	KP-CR30	08.30 - 08.45
4	Syarifah Fitrianda	Management of Long-Separated Fractured Endodontic Instrument in Curved Canal Using Ultrasonic Technique	KP-CR31	08.45 - 09.00
5	Margareta Ermanda Kartika Putri	CBCT-Guided Ultrasonic Negotiation of Obliterated Canals in Maxillary First Molar with Fenestration: A Case Report	KP-CR32	13.00 - 13.15
6	Althaf Arifah	Management of Calcified Canals with Associated Iatrogenic Complications Using Ultrasonics and Magnification: A Case Series	KP-CR33	13.15 - 13.30
7	Elizabeth Cynthia Sikijanto	Navigating Diagnostic Complexities and Predisposing Factors of Necrotizing Ulcerative Stomatitis in Acute Myeloid Leukemia	KP-CR34	13.30 - 13.45
8	Hanafia Munzy Ramadhan	Combined Resorbable Plate and Conservative Management in Pediatric Mandible Fractures: Preserving Function and Growth Potential	KP-CR35	13.45 - 14.00

KPPIKG 2026

POSTER PRESENTATION

Friday, 14th August 2026

SCREEN 3

No	Presenters	Title	ID	TIME
1	Jan Terrie	Shovel-Shaped Incisors for Ancestry Assessment in Female Burn Victims: A Forensic Odontology Case Report	KP-CR45	08.00 - 08.15
2	Jan Terrie	Dental Attrition for Age Estimation in Young Adult Female Decedents: A Forensic Odontology Case Report	KP-CR46	08.15 - 08.30
3	Muhammad Aminullah Majedi	Forensic Odontological Identification in a Fire Victim: a Case Report	KP-CR47	08.30 - 08.45
4	Giovanna Joan Widjaja	Comparison of Dental Age Estimation and Chronological Age: A Forensic Odontology Case Report 	KP-CR48	08.45 - 09.00
5	Linda Yulianti	Forensic Odontological Analysis of Human Bite Mark in a Physical Assault Case: A Case Report	KP-CR49	13.00 - 13.15
6	Jane Djajadi	Persistence of Mamelons in Adults with Class III Malocclusion: a Forensic Odontology Case Report	KP-CR50	13.15 - 13.30
7	Valentina Medina Kusumawardhani	Biological Profile Reconstruction of "Mr. X" Through Odontogram and Lamendin Method: A Case Report	KP-CR51	13.30 - 13.45
8	Deo Develas	Orthodontic Rehabilitation of Multiple Missing Teeth in Adults With Class III Malocclusion and Functional Asymmetry	KP-CR52	13.45 - 14.00

KPPIKG 2026**POSTER PRESENTATION****Friday, 14th August 2026****SCREEN 4**

No	Presenters	Title	ID	TIME
1	Andi Anggun Mauliana Putri	Bacterial Extracellular Vesicles Drive Immunomodulation and Regeneration in Oral Wound Healing	KP-LR10	08.00 - 08.15
2	Indah Dwi Setiyowati	The Role of Mitochondrial Dysfunction as the Central Axis Linking Periodontitis and Systemic Disease	KP-LR11	08.15 - 08.30
3	Fahriza Rizki Oktaviana	Comparing Ozone Therapy and Chlorhexidine in Periodontal Treatment for Elderly Patients: A Systematic Review	KP-LR12	08.30 - 08.45
4	Sylviani The Wirianto	Three Decades of Dental Education in Prosthodontics: a Bibliometric Analysis (1996–2026)	KP-LR13	08.45 - 09.00
5	Mughny Rati	Effectiveness of Silver Diamine Fluoride (SDF) for Treatment Rampant Caries in Children Aged 2-6 Years	KP-LR14	13.00 - 13.15
6	Dzakiah Khairunnisa	Oral Health Associated With Self-Efficacy: A Scoping Review Using Arksey and O'Malley Framework	KP-LR16	13.30 - 13.45
7	Julia Maharani	The RANKL/OPG Ratio as a Biomarker of Periodontitis Severity: a Systematic Review	KP-LR17	13.45 - 14.00

KPPIKG 2026

POSTER PRESENTATION

Saturday. 15th August 2026

SCREEN 1

No	Presenters	Title	ID	TIME
1	Felicia Kurniawan	Bridging Science and Function: Endodontic Abutment Preservation in Periodontally Compromised Prosthodontic Case	KP-CR16	08.00 - 08.15
2	Adinda Putri Rahmawati	Double Barrel Fibular Free Flap Reconstruction Forflexiform Ameloblastoma: a Case Report	KP-CR17	08.15 - 08.30
3	Firdaus Sultan	Necrotizing Ulcerative Periodontitis and Linear Gingival Erythema in an HIV/AIDS Patient with Syphilis Coinfection	KP-CR18	08.30 - 08.45
4	Dean Faisal Surya Rachman	Post Extraction Necrotizing Ulcerative Stomatitis in Patient with Rheumatoid Arthritis on Methotrexate	KP-CR19	08.45 - 09.00

KPPIKG 2026**POSTER PRESENTATION****Saturday. 15th August 2026****SCREEN 2**

No	Presenters	Title	ID	TIME
1	Nadhira Dewi Hanana Irsan	Deferred Faces: Challenges and Outcomes in Surgical Management of Neglected Zygomaticomaxillary Complex and Mandibular Fractures	KP-CR36	08.00 - 08.15
2	Widya Dwi Honesty Putri	Interceptive Orthodontic Management of Increased Overjet and Impinging Overbite Using a Removable Appliance	KP-CR37	08.15 - 08.30
3	Novita Zein Harahap	Delayed Intervention with Premaxillary Setback in an Adult Cleft Patient: a Case Report	KP-CR38	08.30 - 08.45
4	Cherry Erlin Lindo	Regenerative Therapy of Advanced Peri-Implantitis Associated with Severe Periodontitis: A One-Year Follow-Up Case Report	KP-CR39	08.45 - 09.00

KPPIKG 2026

POSTER PRESENTATION

Saturday. 15th August 2026

SCREEN 3

No	Presenters	Title	ID	TIME
1	Ratu Risa Chairunnisa	Primary Caregivers' Oral Health Knowledge, Attitude, and Practice Regarding Early Childhood Caries: A Systematic Review	KP-CR16	08.00 - 08.15
2	Yesi Octavia	Correlation Between Pharyngeal Airway Morphology And Vertical Skeletal Growth Pattern 	KP-CR17	08.15 - 08.30
3	Valencia Audrey Halim	Potential of Konjac Glucomannan Gel Against Porphyromonas gingivalis from Periodontitis Patients: An In Vitro Study	KP-CR18	08.30 - 08.45
4	Rr Ghet Anggun Anggana Putri	Lactobacillus plantarum as a Probiotic Against Porphyromonas gingivalis in Periodontitis With Type 2 Diabetes	KP-CR19	08.45 - 09.00

KPPIKG 2026

POSTER PRESENTATION

Saturday. 15th August 2026

SCREEN 4

No	Presenters	Title	ID	TIME
1	Annisa Nurrahma Alwiyansyah	Konjac Glucomannan Gel Effects on Fibroblast Cell Viability and Migration: an in Vitro Study	KP-OR08	08.00 - 08.15
2	Rizki Yuli Amanda	Antibacterial and Anti-Inflammatory Effect of Hylocereus Polyrhizus in In Vitro and In Vivo Periodontitis Models	KP-OR09	08.15 - 08.30
3	Hetal Ashvin Kumar	Papaya Effective Eco-Produce (P-EEP) as Potential Denture Cleanser: Antifungal Activity, Metabolite Profiling, and Material Effects	KP-OR10	08.30 - 08.45
4	Passawee Kiatmeta	Effect of primer coating number on shear bond strength of repaired resin-matrix ceramic	KP-OR11	08.45 - 09.00

AGDC 2026**POSTER PRESENTATION****Thursday. 13th August 2026****SCREEN 5**

No	Presenters	Title	ID	TIME
1	Faradina Siti Zahra	Why Did Oral Candidiasis Present as Erythematous in an NGT-Fed Patient?: a Case Report	AP-CR01	13.00 - 13.20
2	Selviana Rizky Pramitha	Comprehensive Management for Oral Conditions Revealing Systemic Sclerosis Following Antibiotic-induced Erythema-Multiforme in Wetland-Geriatric Woman	AP-CR02	13.20 - 13.40
3	Astrya Fitryanur	Modified Suction Denture and Neutral Zone Technique for Severely Resorbed Mandibular Ridge: A Case Report	AP-CR05	13.40 - 14.00

Thursday. 13th August 2026**SCREEN 6**

No	Presenters	Title	ID	TIME
1	Jessica Francis	Wisecare Project: Integrating Oral Health, Exergame, and Self-Hypnosis for Seniors and Their Caregivers	AP-OR11	13.00 - 13.20
2	Dewi Priandini	Enhancing Oral Discomfort in Older Adults: Herbal versus CMC Saliva Substitutes	AP-OR16	13.20 - 13.40
3	Nur A'thirah binti Zulkifly	Developing a Conceptual Oral Health Care Protocol for Caregivers of Elderly in Malaysian Nursing Homes	AP-OR17	13.40 - 14.00

AGDC 2026**POSTER PRESENTATION****Friday, 14th August 2026****SCREEN 5**

No	Presenters	Title	ID	TIME
1	Mohd Amirul Fahmi B Che Mohd Fadzilah	From Questionable Prognosis to 5-Year Survival: Preserving a Compromised Mandibular Molar in an Older Adult	AP-CR09	08.00 - 08.20
2	Mike Manullang	Forensic Identification of a Deceased Crew Member Through Dental Age Estimation: A Case Report	AP-CR10	08.20 - 08.40
3	Farid Bin Che Ghazali	Microscopic Plasticity of Candida albicans in Geriatric Oral Health: Morphological Insights and Antifungal Resistance Challenges	AP-LR01	08.40 - 09.00
4	Patimaporn Pungchanchaikul	An Integrated Geriatric&Special Care Dentistry in University Dental Hospital: A Five-Phase Implementation Model.	AP-OR08	13.00 - 13.20
5	Chika Astasari Hadi	Relationship Between Mandibular Residual Ridge Morphology, Masticatory Performance, and Clinical Success of Complete Denture Treatment	AP-OR09	13.20 - 13.40
6	Agya Nanda Prasetya	Carotid Artery Calcifications on Panoramic Radiographs as Stroke Risk Indicator in Indonesian Patients	AP-OR10	13.40 - 14.00

AGDC 2026
POSTER PRESENTATION

Friday, 14th August 2026

SCREEN 6

No	Presenters	Title	ID	TIME
1	Adhitya Sofiyati Dewi	Periodontitis CRP and Ischemic Stroke Axis for Digital Biomarkers and Global Oral Health Prevention	AP-LR03	13.00 - 13.20
2	Clarissa Fadhilah	Management of Odontogenic Focal Infection in Frail Older Adults: A Review of Clinical Considerations	AP-LR06	13.20 - 13.40
3	Dewi Ayuningtyas	Efficacy of NSPT in Older Adults with T2DM and Periodontitis: Systematic Review and Meta-Analysis	AP-LR09	13.40 - 14.00
4	Adhitya Sofiyati Dewi	Potential 1.2% Statin Gel as an Adjunctive Host Modulator in Non-Surgical Therapy for Chronic Periodontitis	AP-LR10	08.00 - 08.20
5	Astrya Fitryanur	Association of Masticatory Function, Nutrition, and Sociodemographic Factors with Physiocognitive Decline Syndrome in Older Adults	AP-OR05	08.20 - 08.40
6	Fildzah Nurul Fajrin	Loneliness as Determinant of Oral Health Status and Behavior among Jakarta's Elderly	AP-OR07	08.40 - 09.00

AGDC 2026**POSTER PRESENTATION****Saturday. 15th August 2026****SCREEN 5**

No	Presenters	Title	ID	TIME
1	Nitin Dattatray Barve	CADCAM Guided Surgical Management of Maxillary Infection using 3R Concept: Rejuvenation, Regeneration, and Rehabilitation	AP-CR11	08.00 - 08.12
2	Rakesh Umashankar	Dental Dilemma : Decision Making Art	AP-CR12	08.12 - 08.24
3	Smita Athavale	Geriatric Dentistry in India — Challenges and The Role of AGed in Geriatric Oral Healthcare	AP-LR11	08.24 - 08.36
4	Asha Narde	Dry Mouth Trends Among the Older Adults in India	AP-LR12	08.36 - 08.48
5	Bindu Bhaskar	Silver Smiles, Skilled Graduates: Strengthening Dental Public Health Competencies for Older Persons	AP-LR13	08.48 - 09.00

AGDC 2026**POSTER PRESENTATION****Saturday. 15th August 2026****SCREEN 6**

No	Presenters	Title	ID	TIME
1	Rifat Falak	Evidence-based Digital Innovations in Geriatric Oral Health: a Literature Review of Teledentistry and AI-assisted Monitoring	AP-LR14	08.00 - 08.12
2	Anitha Narayanan	Lessons from Delivering Mobile Oral Healthcare to Palliative Care Patients Across Home and Hospice.	AP-OR12	08.12 - 08.24
3	Shefali Bhiwapurkar	Impact of Creative Engagement on Dental Anxiety in Geriatric Patients : A Pre-Post Interventional Study	AP-OR13	08.24 - 08.36
4	George Puthenpurayil John	Age Friendly Kochi - A True Reflection of Intention	AP-OR14	08.36 - 08.48
5	Rahmath Shameem	Beyond Teeth: Empathy-driven Development of an AI-Powered Assistive Smart Glass for Healthy Aging	AP-OR15	08.48 - 09.00

**SECTION
D1**

**LECTURE
ABSTRACTS
KPPIKG 2026**

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Prof. Jie Yang

Temple University
School of Dentistry,
Philadelphia

DATE:

13th August 2026

VENUE:

ASSEMBLY 1

TIME:

10.30 – 12.00

IMAGE INNOVATION AND AI IN DENTISTRY: FROM CURRENT APPLICATIONS TO FUTURE PERSPECTIVES

Oral and maxillofacial radiology (OMR) is a rapidly evolving dental specialty. Similar to developments in medicine, radiology continues to advance at an accelerated pace. OMR is increasingly recognized as a driving force in digital and precision dentistry. In recent years, artificial intelligence (AI) and deep learning frameworks have been rapidly integrated into both OMR and the broader field of dentistry. Concurrently, new imaging modalities are emerging for the evaluation of both hard and soft tissues in the oral and maxillofacial region.

The first half of this presentation will explore major emerging imaging technologies, including dental-dedicated magnetic resonance imaging (ddMRI), photon-counting computed tomography (PCCT), ultra-low-dose (ULD) cone-beam computed tomography (CBCT), hybrid CBCT-MRI systems, and dynamic low-dose two-dimensional (2D) sensors. The advantages, limitations, and potential clinical applications of these imaging modalities and protocols will be critically discussed.

The second half of the presentation will focus on the current status of AI and deep learning in oral and maxillofacial radiology, as well as their broader applications across dentistry. It will discuss current challenges and limitations, present insights from our research experience, and highlight future directions for AI-driven innovations in OMR and the wider field of dentistry.



**Dr. Praveen
Sharma**

University of
Birmingham

DATE:

15th August 2026

VENUE:

ASSEMBLY 1

TIME:

09.00 – 10.30

A BALANCED ORAL MICROBIOME: THE FOUNDATION OF GOOD ORAL HEALTH

The oral cavity harbours one of the most diverse microbial ecosystems in the human body. Rather than existing as isolated microorganisms, oral microbes form complex, structured and site-specific communities across distinct ecological niches, including saliva, tongue, mucosa, supragingival plaque and subgingival plaque. In health, these microbial communities exist in a dynamic state of balance with the host. However, disruption of this balance, or dysbiosis, may contribute to common oral diseases including dental caries, gingivitis, periodontitis and oral malodour.

This presentation will provide an overview of the oral microbiome, beginning with key principles of microbial ecology before exploring the unique features of the oral cavity. It will consider how the oral microbiome forms, develops and changes across the life course, and how behavioural, biological and environmental factors, including oral hygiene, diet, saliva, antimicrobial exposure and inflammation, can alter microbial composition and function.

The talk will then examine the clinical implications of a balanced versus dysbiotic oral microbiome, linking ecological shifts to caries, gingival inflammation, periodontal disease and malodour. Particular attention will be given to oral niches and site-specific microbial communities, highlighting why sampling location and methodology matter when interpreting microbiome data.

Finally, the presentation will discuss how the oral microbiome is investigated in clinical research, including the strengths and limitations of observational and interventional clinical trial designs. This will lead into a discussion of a recent randomized, double-blind clinical study evaluating the effect of zinc citrate trihydrate toothpaste on plaque microbiome ecology and function, illustrating how daily oral care products may influence microbial balance, metabolic activity and oral health.



***Dr. Astrid
Khatalia***

Escalade Dental
Specialist Centre

DATE:
13th August 2026

VENUE:
ASSEMBLY 1

TIME:
13.00 – 14.30

FROM SMILE ANALYSIS TO PROPER CEMENTATION: MAKING THE RIGHT DIAGNOSIS IN THE FIRST 10 MINUTES

The success of esthetic ceramic restorations begins with an accurate diagnosis during the initial consultation. A structured smile analysis allows clinicians to evaluate facial and dentolabial relationships, tooth morphology, periodontal condition, occlusion, restorative space, and substrate quality within the first 10 minutes.

This session presents a practical workflow that connects diagnosis with treatment planning and cementation. Emphasis will be placed on how initial findings influence preparation design, material selection, isolation, surface treatment, adhesive protocol, and resin cement selection to achieve predictable esthetic and long-term clinical outcomes.



**Dr. M. Adhitya
Latief**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MERAK 1

TIME:

13.00 – 14.30

UNDERSTANDING ISQ: THE IMPLANT STABILITY SIGNAL FOR EVERY PRACTITIONER

Background: The long-term success of dental implants depends heavily on primary and secondary stability, which reflects the quality of osseointegration. Traditional methods for assessing implant stability rely on subjective clinical judgment (e.g., percussion, torque resistance) or radiographic evaluation, both of which have limitations in predicting the optimal time for functional loading.

Objective: This lecture aims to elucidate the role of the Implant Stability Quotient (ISQ), derived from resonance frequency analysis (RFA), as a critical, objective metric that determines the clinical decision-making timeline—from insertion to prosthetic loading—thereby shaping the future success or failure of the implant.

Methods: RFA measures the implant's vibration frequency in response to a small magnetic pulse, converting it into an ISQ value ranging from 1 to 100 (higher values indicate greater stability). Serial ISQ measurements are taken at key time points: immediately after placement (baseline), during the healing phase (e.g., at 2, 4, 6, 8 weeks), and prior to loading. Published clinical guidelines and longitudinal studies (≥ 1 year follow-up) were reviewed to establish ISQ threshold values predictive of osseointegration and functional survival.

Results: Studies show that implants loaded at $ISQ \geq 65$ achieve 98–100% survival rates, comparable to those loaded after longer conventional healing. Conversely, loading at $ISQ < 60$ significantly increases the risk of peri-implant bone loss and loss of osseointegration.

Conclusion: ISQ is not merely a number—it is a predictive frequency that dictates the implant's future. By enabling evidence-based, individualized timing of prosthetic loading, ISQ reduces guesswork, minimizes early failures, and allows for faster treatment protocols without compromising safety.

Keywords: Implant Stability Quotient (ISQ), resonance frequency analysis (RFA), dental implant stability, osseointegration, early loading, treatment predictability.



**Dr. Elham
Emami**

McGill University

DATE:
13th August 2026
VENUE:
MERAK 2
TIME:
13.00 – 14.30

E-HEALTH ESSENTIALS: PRINCIPLES, PRACTICE, AND GLOBAL PERSPECTIVES

E-health represents a transformative paradigm in healthcare. To strengthen the global e-health ecosystem, sustainable and well-regulated approaches are needed to address legal, ethical, and implementation challenges across the e-health life cycle. Conceptual frameworks play a critical role in guiding the design, implementation, and evaluation of e-health solutions, ensuring they are systematic, scalable, and aligned with health system priorities. The adoption of evidence-based and equity-focused approaches can help promote accessible, effective, and inclusive e-health solutions worldwide.

This presentation will provide an overview of the fundamental concepts of e-health and examine the current evidence regarding its impact on health outcomes and healthcare delivery. Participants will gain insight into the role of conceptual frameworks in guiding the implementation and evaluation of e-health interventions, as well as the key medico-legal and ethical considerations associated with digital health technologies. The presentation will also highlight findings from recent research studies and discuss emerging opportunities and challenges in the evolving global e-health landscape.



***Prof. Atiphan
Pimkhaokham***

Chulalongkorn
University

DATE:

13th August 2026

VENUE:

ASSEMBLY 1

TIME:

14.30 – 16.00

FROM PRECISION TO
PERSONALIZATION: TRANSLATING
DIGITAL IMPLANT DENTISTRY
INTO PREDICTABLE AND HUMAN-
CENTERED CARE



**Dr. Aditya Wisnu
Putranto**

Universitas Indonesia

DATE:
13th August 2026
VENUE:
MERAK 1
TIME:
14.30 – 16.00

NEXT-GENERATION CONSERVATIVE DENTISTRY: REDEFINING POST- ENDODONTIC RESTORATION & REHABILITATION

Traditional macro-retentive post-and-core crowns have given way to minimally invasive, biomimetic adhesive procedures in the functional rehabilitation of endodontically treated teeth (ETT). The theoretical and biomechanical underpinnings of modern post-endodontic restorations are assessed in this thorough analysis. The complete preservation of pericervical dentin (PCD) through minimally invasive endodontics (MIE), which reduces the risk of catastrophic vertical root fractures linked to intraradicular posts, is essential to this evolution. To maximize adhesion prior to chemical contamination, modern protocols prioritize Deep Margin Elevation (DME) and Immediate Pre-Endodontic Dentin Sealing (IPDS). According to biomechanical finite element analysis, partial-coverage onlays and overlays, which are based on the principles of Morphology-Driven Preparation Technique (MDPT) and Posterior Indirect Adhesive Restorations (PIAR), mimic the natural dentinoenamel junction and favorably distribute occlusal forces, while traditional posts cause severe stress concentrations. These methods use anatomy-driven, micro-mechanical adhesion instead of geometric retention. This change is critically supported by material advancements. By forming an “internal adhesive ferrule” that stops the spread of cracks, short fiber-reinforced composites (SFRCs) function as a durable dentin substitute. For the best radicular sealing, resinous monoblocks are replaced concurrently by dimensionally stable bioceramic sealers. Additionally, while standard hydrofluoric acid and silane protocols consistently integrate lithium disilicate, the integration of 10-MDP functional monomers guarantees long-lasting chemical bonding to dentin, zirconia, and base metals. By combining these advancements, the modern post-endodontic rehabilitation protocol completely redefines clinical success by eschewing harmful retentive paradigms in favor of stress-absorbing, biologically driven adhesive continuums that guarantee long-term structural survivability.

Keywords: Endodontically treated teeth (ETT); Minimally invasive endodontics (MIE); Pericervical dentin (PCD); Immediate Pre-Endodontic Dentin Sealing (IPDS); Biomimetic restorations; Deep Margin Elevation (DME); Short fiber-reinforced composites (SFRCs); Morphology-Driven Preparation Technique (MDPT); Posterior Indirect Adhesive Restorations (PIAR); 10-MDP.



**Prof. Rangsin
Mahanonda**

Chulalongkorn
University

DATE:

13th August 2026

VENUE:

MERAK 2

TIME:

14.30 – 15.30

EXPLORING THE POTENTIAL OF BMP-2 MRNA TECHNOLOGY IN REGENERATIVE DENTISTRY

As the global population continues to age, restoration of critical-sized craniofacial defects and alveolar bone loss following tooth extraction has become a major challenge in regenerative dentistry and implant rehabilitation due to the reduced regenerative capacity commonly associated with older individuals. Messenger RNA (mRNA) technology has recently emerged as a promising therapeutic platform for regenerative medicine because of its transient and controllable protein expression, avoidance of genomic integration, and potential for localized therapeutic delivery. This presentation describes the development of mRNA encoding human Bone Morphogenetic Protein-2 (BMP-2) for craniofacial and alveolar bone regeneration. It covers the overall development process, including modified mRNA design, studies of protein expression, and in vivo evaluation of delivery system efficacy. Early studies demonstrated strong protein production following modified mRNA transfection in vitro and successful targeted delivery to oral tissues in vivo using lipid nanoparticles (LNPs). Subsequent preclinical investigations using rat calvarial defect models demonstrated enhanced bone regeneration using BMP-2 mRNA-engineered bone marrow mesenchymal stem cell constructs. Importantly, translational challenges including scaffold persistence and inflammatory responses prompted iterative redesign of regenerative platforms, leading to the development of scaffold-free BMP-2 mRNA-transfected cell-sheet constructs with improved regenerative outcomes. More recently, our research has progressed toward clinically relevant tooth extraction-associated alveolar defect model for alveolar ridge preservation and implant rehabilitation. Early findings from animal models suggest promising enhancement of alveolar bone regeneration using BMP-2-expressing constructs. Future directions involving non-inflammatory next-generation LNPs and efficacy testing in aged animals will also be discussed. This translational journey highlights how BMP-2 mRNA-based therapeutics, and optimized delivery system may collectively shape the future of regenerative dentistry in aging societies.



**Dr. Muhammad
Garry Syahrizal
Hanafi**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MERAK 2

TIME:

15.30 – 16.30

BEYOND TREATMENT: ENGINEERING FORENSIC ODONTOLOGY AS A GLOBAL IDENTITY INFRASTRUCTURE

Background: Human identification is often perceived as a process that begins after death. In reality, its success depends largely on information created years earlier during routine dental care. Using a confidential forensic case as the starting point, this lecture challenges the conventional perception of forensic odontology and highlights the often-overlooked role of everyday dental practice in preserving human identity.

Objective: To present forensic odontology as more than a discipline for postmortem identification, but as an identity infrastructure built continuously through routine clinical documentation, and to emphasize the responsibility of the dental profession in strengthening that system.

Discussion: The lecture begins with a confidential case in which a reconstructed mandible became the key to human identification, illustrating why teeth remain one of the most reliable sources of forensic evidence. Their individual morphology, exceptional durability, and ability to preserve biological information make them uniquely valuable for identification. However, even the strongest postmortem evidence is insufficient without corresponding antemortem records. This is illustrated by the Setiabudi 13 case, one of Indonesia's longest-standing unidentified homicide cases, where complete dental findings failed to establish identity because no dental records were available for comparison. Through this contrast, the lecture demonstrates that the success of forensic identification is determined not only by forensic investigation but also by the quality and availability of dental documentation generated during life. Drawing on Locard's principle that every contact leaves a trace, the presentation further explores how routine clinical records—including radiographs, odontograms, and even implant lot numbers—can become decisive forensic evidence. Finally, the lecture introduces a seven-pillar framework for developing forensic odontology as a sustainable identity infrastructure and discusses the challenges faced by many developing countries in achieving this vision.

Conclusion: Forensic identification begins long before a body reaches the morgue. Every dental record created in daily practice has the potential to become an individual's only surviving link to their identity. Strengthening dental documentation, standardization, and data integration is therefore not only a clinical responsibility but also a humanitarian commitment.

Keywords: Antemortem dental records; Disaster victim identification; Forensic odontology; Human identification; Odontogram standardization



**Dr. Mochamad
Fahlevi Rizal**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

NURI 1

TIME:

15.30 – 16.30

COMPREHENSIVE MANAGEMENT OF PEDIATRIC DENTAL CARE FROM THE PERSPECTIVE OF DENTAL EDUCATION AND PRACTITIONERS

Pediatric dental care requires a comprehensive approach that integrates clinical competence, behavioral management, preventive strategies, and effective communication with children and their caregivers, as we know the pediatric dental triangle. The quality of pediatric oral healthcare is influenced not only by practitioners' clinical skills but also by the adequacy of dental education in preparing graduates to manage the unique challenges of treating pediatric patients. This presentation aims to explore the comprehensive management of pediatric dental care from the perspectives of both dental education and clinical practice, highlighting the competencies, educational strategies, and practical considerations necessary to optimize oral health outcomes in children. It is essential for all educators and practitioners to understand why the Department of Pediatric Dentistry at Universitas Indonesia makes it our strength. A narrative review and conceptual analysis were conducted to examine key components of pediatric dental care, including preventive dentistry, behavior guidance, minimally invasive treatment approaches, family-centered care, and competency-based dental education. The discussion integrates perspectives from academic institutions and practicing dentists to identify areas of alignment and potential gaps between educational preparation and real-world clinical demands. Comprehensive pediatric dental care extends beyond the management of dental disease and encompasses oral health promotion, risk assessment, behavioral support, and long-term patient engagement that means following the human growth and development. Dental education plays a critical role in developing competencies related to clinical decision-making, communication, professionalism, and interprofessional collaboration. However, challenges remain in ensuring adequate clinical exposure, consistency in competency assessment, and preparedness for managing diverse pediatric populations. Practitioners emphasize the importance of experiential learning, mentorship, and continuous professional development to bridge the transition from undergraduate training to independent practice. But unfortunately, most institutions only think about the speed of graduating their students. Effective pediatric dental care requires a synergistic relationship between dental education and clinical practice. Educational programs should adopt competency-based and patient-centered approaches that foster both technical and non-technical skills, while practitioners should engage in lifelong learning to address evolving patient needs. Strengthening the integration between educational outcomes and clinical expectations may contribute to improved quality of care, enhanced patient experiences, and better oral health outcomes for children.

Keywords: pediatric dentistry, dental education, competency-based education, pediatric oral health, behavior management, clinical practice, comprehensive dental care



Prof. Syngcuk Kim

University of
Pennsylvania

DATE:
13th August 2026

VENUE:
ASSEMBLY 1

TIME:
16.00 – 17.30

FROM CONVENTIONAL ENDODONTICS TO MICROENDOSURGERY: SAVING TEETH IS OUR OBLIGATION

The field of endodontics has undergone extraordinary advancement over the past three decades here in USA. Modern endodontic therapy, both nonsurgical and microsurgical and has fundamentally transformed the prognosis of teeth previously considered hopeless. Major advancements include, transition from stainless steel hand files to NiTi rotary and 3-dimensional file systems, incorporation of the dental operating microscope, evolution from conventional radiography to CBCT imaging, development of bioceramic sealers and biologically proven root-end filling materials, microsurgical instrumentation and retropreparation with ultrasonic instruments, in microsurgery transforming osteotomy technique to Bone Window technique with Piezotome. These innovations have dramatically improved precision, biologic healing, and long-term success rates, with the primary objective of preserving natural dentition whenever possible. Current evidence and clinical experience demonstrate that teeth with adequate periodontal support, minimal mobility, and absence of significant periodontal pockets can often be predictably retained through modern endodontic treatment and endodontic microsurgery—even in cases previously deemed non-restorable. This presentation will review the biologic principles, technologies, materials, and clinical protocols that define contemporary endodontic therapy and microsurgery. Clinical cases and long-term outcomes will be presented to illustrate how modern endodontics compares with implant therapy in the preservation of natural dentition. The central message is simple “Whenever biologically feasible, preservation of natural dentition should remain the primary goal of dental treatment.”

Keywords: advances in endodontic technology, microsurgical techniques, biologic materials, imaging, and the overarching goal of preserving natural teeth.



**Prof. Manabu
Kanazawa**

Institute of Science
Tokyo

DATE:

13th August 2026

VENUE:

MERAK 1

TIME:

16.00 – 17.30

THE CUTTING EDGE OF DIGITAL COMPLETE DENTURES

Recent advances in digital technology have enabled the full digitalization of both clinical and laboratory procedures for the fabrication of complete dentures. This lecture explores the current capabilities of digital workflows in complete denture fabrication, with a particular focus on their clinical implications and future potential. The step-by-step digital workflow for complete denture fabrication is reviewed in comparison with conventional methods, highlighting simplified clinical procedures and the ability to quantify denture morphology through CAD/CAM systems. In addition, the cost-effectiveness of digital dentures is discussed, taking into account the expanding range of fabrication options, including milled and 3D-printed complete dentures. Compared with traditional techniques, digital denture workflows offer more streamlined fabrication processes and improved reproducibility. These systems enhance efficiency while broadening prosthetic options, allowing more individualized treatment planning based on patient needs and case complexity. Furthermore, digital approaches are expected to extend beyond complete dentures, potentially enabling the full digitalization of removable partial dentures through the integration of artificial intelligence and advanced material design. Overall, digital technologies in prosthodontics are reshaping the landscape of denture fabrication by expanding treatment choices, supporting cost-effective solutions, and driving future developments in AI-assisted and digitally fabricated prostheses.



**Prof. Toshihiko
Suzuki**

Tohoku University

DATE:

13th August 2026

VENUE:

MERAK 2

TIME:

16.30 – 18.00

FUTURE DEVELOPMENTS IN DENTAL FORENSICS: FROM LARGE-SCALE DISASTERS TO NORMAL TIMES

The primary purpose of forensic odontology is to establish the identities of victims through the application of dental identification techniques. Teeth are internationally recognised as a highly accurate means of personal identification, comparable to DNA analysis and fingerprinting. In numerous large-scale natural and human-made disasters around the world, the identification of numerous victims has been confirmed on the basis of dental information. Dental treatment records are useful not only in large-scale disasters but also in incidents involving relatively few victims, and in identifying the remains of individuals who died alone without family members or acquaintances. Furthermore, dental findings may be used to establish the identity not only of victims who have died, but also of living individuals who have suffered memory loss or similar conditions.

Conventionally, dental identification has relied on comparisons based on an individual's history of dental treatment. However, advances in oral hygiene have led to an increasing number of people with few or no dental restorations, or no previous experience of dental treatment. Although the complete eradication of dental diseases is improbable, dental identification that depends solely on clinical records retained by dental practices may eventually reach its limitations. From the perspective of personal identification using teeth, it will therefore be necessary to develop a multimodal approach to the information contained in teeth, rather than relying exclusively on a history of dental disease and treatment.



Prof. Yuan Quan

Sichuan University

IMPLANT-SUPPORTED ESTHETIC RESTORATIONS UNDER DIGITAL AGE

The integration of digital technologies in the field of dental implant dentistry has been the prevailing trend in the dental world as it can simplify the complex clinical therapy process and improve the esthetic outcome. Here, we propose the "VISA Principle"—guided visualized collaborative treatment concept: by collecting multi-source data to construct a digital virtual patient, and using the ideal restorative outcome as the endpoint, we work backward to derive and, through multidisciplinary evaluation, formulate a sequential treatment plan, ultimately enabling precise visualized therapy.

DATE:

13th August 2026

VENUE:

MERAK 3

TIME:

16.00 – 17.30



**Dr. Syurri
Innaddinna
Syahraini**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

NURI 1

TIME:

16.30 – 17.30

RIGHT PATIENT, RIGHT IMAGE, RIGHT TIME: EVIDENCE-BASED CBCT PRESCRIPTION IN GENERAL PRACTICE

Cone beam computed tomography (CBCT) is a three-dimensional radiographic examination that can provide more detail radiographic images in the third dimension of an object. The examination has been widely used in various fields of dentistry. There are various types of fields of view (FOV) in CBCT, which affect the scope of the object to be viewed and also influence the detail of each anatomical structure and abnormality being evaluated. Therefore, selecting the right FOV size can affect the quality of the image and the diagnosis.



Prof. Ki Tae Koo

Seoul National
University

DATE:

14th August 2026

VENUE:

ASSEMBLY 1

TIME:

09.00 – 10.30

SIGNIFICANCE OF IMPLANT STABILITY IN COMPROMISED EXTRACTION SOCKETS

In clinical settings, extraction sockets commonly result from removal of teeth affected by periodontal and/or endodontic pathology, often in medically compromised patients. Even following strict guidelines of meticulous wound debridement and healing periods exceeding 12 weeks, healing appears frequently complicated by connective tissue infiltration leading to fibrous scar tissue rather than bone formation. This is how we define erratic healing of compromised extraction sockets — data on the distribution of extraction sockets with erratic healing and associated factors are limited or non-existing. With this concept, we are now able to have a more realistic clinical approach in dealing with extraction sockets that we see in our daily practice: compromised extraction sockets that have been affected by inflammatory processes for various lengths of time with alterations in the architecture of the socket. This lecture is first aimed at introducing this concept and explaining the biology behind the phenomenon, and how the design and features of dental implants can help maximize obtaining initial stability even in the most challenging and difficult situations. The stability of the internal connection and its effect on marginal bone loss and peri-implantitis will also be discussed in detail. Learning objectives: understand the concept of compromised extraction sockets; learn erratic healing and its biologic consequences; propose a treatment regimen for compromised extraction sockets with erratic healing; learn how implant design can help maximize initial stability; understand peri-implantitis and its relevance to implant stability; learn the zero bone loss concept; and understand how a stable connection can prevent marginal bone loss.



**Prof. Junji
Tagami**

Institute of Science
Tokyo

DATE:

14th August 2026

VENUE:

MERAK 1

TIME:

09.00 – 10.30

SCIENCE AND TECHNOLOGY SUPPORTING THE DENTISTRY OF HUMANITY - UNIVERSAL AESTHETIC RESTORATIONS WITH DIRECT BONDED COMPOSITE CERAMIC

Direct adhesive restoration enables minimally invasive restorations without cutting of intact dentin, one of the mesodermal tissues of the human body. Recent adhesives and composite resins have been greatly improved to achieve high performance with very simplified clinical procedures. The aesthetic results of these restorations have been confirmed to exhibit excellent durability over long periods. These universal aesthetic restorations are minimally invasive physically, psychologically, and economically for patients, and patient satisfaction is correspondingly high. Because of this high satisfaction and recognition of the value of a minimally invasive approach, patients accept considerable charges for this kind of treatment. On this occasion, a new term "composite ceramic" is suggested in place of "composite resin," since recent materials demonstrate extremely excellent clinical performance and, in fact, contain the greatest fraction of ceramic filler particles.



***Dr. Lochana
Ramalingam***

University of Melbourne

SHARED MANAGEMENT OF THE PAEDIATRIC PATIENT WITH SPECIAL HEALTHCARE NEEDS - PERSPECTIVES FROM A TERTIARY HOSPITAL

As the number of paediatric patients living with special healthcare needs increases, dental practitioners play a vital role in providing them with the appropriate dental care and prevention. There is a well established link between oral health and overall health. Evidence suggests that access to timely dental care is a challenge for these families. Therefore, close collaboration between the medical teams, dental practitioners in the community and hospitals is paramount. Learning objectives of this session include understanding broadly how to get a good medical history and examine a patient with special healthcare needs, identify common paediatric medical conditions which require special considerations in the provision of optimal oral health care. Know when to refer to a tertiary hospital (with some cases to illustrate) for advice or management. Lastly, implement preventive visits as part of shared care and make for a smooth transition.

DATE:

14th August 2026

VENUE:

MERAK 2

TIME:

09.00 – 10.30



***Prof. Nicholas
Jakubovics***

Newcastle University

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

09.00 – 10.30

THE IMPORTANCE OF EVIDENCE: ORAL HEALTH RESEARCH IN THE AGE OF AI

Dentistry is an evidence-based profession, built on the foundations of scientific enquiry. As tools for research improve, the pace of scientific output has increased dramatically. Unfortunately, not all these outputs reflect robust science. Identifying high quality evidence among the background of 'noise' generated by the sheer volume of publications is increasingly difficult. Journals play a key role in maintaining the quality of published science and promoting public trust in the scientific process. I will share my experience as Editor-in-Chief of the Journal of Dental Research of how we handle new developments such as the widespread introduction of generative artificial intelligence. Greater transparency in the research process is one approach to improve confidence in research data. The development of new tools can also open opportunities to address longstanding questions. I will discuss how new evidence is advancing my scientific specialty of oral microbiology and broadening our view of the key players in oral health and disease such as 'ultrasmall' bacteria with reduced genomes that were first cultured just over 10 years' ago. Finally, this talk will consider how scientists in the field of dental, oral and craniofacial research can help shape the research agenda, for example by lobbying for national oral health research strategies. All researchers have a role to play in ensuring that healthcare decisions are based on the best possible evidence.



**Prof. Nita
Viwattanatipa**

Mahidol University

DATE:

14th August 2026

VENUE:

ASSEMBLY 1

TIME:

10.30 – 12.00

OPTIMIZING OUTCOMES IN FACIAL RECONSTRUCTION FOR CLEFT PATIENTS

Background

Cleft lip and palate (CLP) is one of the most common congenital craniofacial anomalies. Patients frequently present with complex facial, skeletal, dental, soft tissue, and functional impairments that evolve throughout growth and development. Achieving optimal facial reconstruction therefore requires a comprehensive, interdisciplinary approach that extends from infancy to adulthood, with orthodontists playing a crucial role in coordinating dentofacial development and optimizing both functional and esthetic outcomes.

Overview

This presentation provides an overview of the orthodontic management of patients with CLP across the continuum of care, highlighting treatment strategies that optimize facial esthetics and functional rehabilitation. The lecture begins with the epidemiology of CLP and the national framework for interdisciplinary cleft care in Thailand, emphasizing the key pillars of national healthcare policy and coordinated interdisciplinary management.

Infancy: Early intervention during infancy focuses on feeding support and presurgical orthopedic treatment, including nasoalveolar molding (NAM). During the mixed dentition stage, orthodontic growth modification, maxillary expansion, and preparation for secondary alveolar bone grafting are discussed, together with strategies for guiding craniofacial growth and minimizing the progression of skeletal discrepancies.

Adolescents and adults: Orthodontic camouflage is discussed emphasizing appropriate case selection, including tertiary alveolar bone grafting, extraction strategies, and long-term stability. For patients with moderate to severe maxillary deficiency, the indications for conventional orthognathic surgery and distraction osteogenesis are reviewed, with emphasis on treatment planning, surgical timing, digital workflows, and interdisciplinary coordination to maximize facial harmony, occlusal function, airway, and long-term stability. Representative clinical cases will be presented to illustrate treatment planning and outcomes at different stages of care.

Conclusion

Optimizing facial reconstruction in patients with CLP requires individualized treatment planning throughout growth and development. The integration of orthodontic treatment with surgical reconstruction is essential to achieve harmonious facial esthetics, functional occlusion, normal speech, and improved psychosocial well-being. Interdisciplinary, evidence-based approach remains the cornerstone of successful long-term outcomes for patients with cleft lip and palate.



Prof. Su-Jung Shin

Yonsei University

DATE:

14th August 2026

VENUE:

MERAK 1

TIME:

10.30 – 12.00

BIOCERAMIC REVOLUTION: REDEFINING ROOT CANAL SEALING AND HEALING

The development of ProRoot MTA (Mineral Trioxide Aggregate) marked a pivotal turning point in modern endodontics. Prior to its introduction, clinical procedures involving moisture- and blood-contaminated environments, such as periapical surgery, perforation repair, and apical plug placement in open apex cases, posed significant challenges with conventional materials; the inherent hydrophilicity and biocompatibility of MTA enabled predictable outcomes in these previously difficult scenarios, fundamentally expanding the scope of endodontic treatment. Building upon the success of the original MTA, a new generation of bioceramic cements has since been developed, preserving its core advantages while addressing well-known limitations such as handling difficulty, discoloration potential, and extended setting time; several of these contemporary formulations are available as premixed, ready-to-use systems, eliminating the variability introduced by manual mixing and reducing technique sensitivity. Beyond their role as repair materials, bioceramics have more recently been introduced as root canal sealers, enabling a more efficient and simplified obturation protocol, with clinical outcomes comparable to, and in some parameters superior to, those achieved with previously established obturation techniques. This lecture provides a comprehensive overview of the bioceramic revolution in endodontics, tracing its origins from MTA development, examining the properties and clinical rationale of current bioceramic cements and sealers, reviewing the latest scientific evidence, and offering practical guidance for their integration into everyday clinical practice, with special emphasis on the application of bioceramic cements in vital pulp therapy and key clinical considerations for the use of bioceramic sealers during root canal obturation.



***Dr. Mohd.
Haikal Bin
Muhamad Halil***

International Islamic
University Malaysia

DATE:

14th August 2026

VENUE:

MERAK 2

TIME:

10.30 – 12.00

PRACTICAL STRATEGIES IN POSTERIOR COMPOSITE RESTORATIONS: FROM DIAGNOSIS TO DEFINITIVE CARE

This lecture focuses on practical strategies in managing posterior composite restorations in everyday clinical practice, beginning from diagnosis and caries assessment to restoration placement. Topics will include conservative caries removal, cavity preparation considerations, material handling, matrix adaptation, layering techniques, and finishing procedures. The session aims to share simple and practical tips to improve confidence, efficiency, and long-term success in posterior composite restorations.



**Dr. Inka
Saraswati**

Universitas Indonesia

IMAGING AND AI SUPPORT FOR ALVEOLAR BONE GRAFT IN CLEFT CARE

Alveolar bone graft planning in cleft care is a complex decision-making process that requires coordination among surgeons, orthodontists, pediatric dentists, and other members of the cleft team. Close collaboration with dentomaxillofacial radiologists can help reveal important characteristics unique to each patient. This lecture will also provide an overview of AI applications relevant to alveolar bone graft planning in cleft care, with a primary focus on imaging-based studies. It will highlight both the promise and the current limitations of these technologies. Emphasis will be placed on how radiologists and AI may contribute to more standardized assessment, clearer communication within the cleft team, and more informed planning; underscoring the importance of clinical judgment and multidisciplinary collaboration in guiding patient care.

DATE:

14th August 2026

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NURI 1

TIME:

10.30 – 12.00



***Dr. Leonard C.
Nelwan***

Petra Christian
University

DATE:

14th August 2026

VENUE:

ASSEMBLY 1

TIME:

13.00 – 14.30

CURRENT ISSUES AND CONTROVERSIES OF VERTICAL DIMENSION OF OCCLUSION

Vertical Dimension of Occlusion (VDO) is one of the most widely debated concepts in prosthodontics. For many years, the loss of tooth structure was considered synonymous with the loss of VDO, and increasing the VDO was believed to carry a significant risk of functional impairment and temporomandibular disorders (TMD). However, recent evidence suggests that the stomatognathic system possesses a remarkable capacity for adaptation, allowing changes in VDO within certain biological limits to be well tolerated.

This presentation reviews the latest scientific evidence addressing whether VDO is truly lost in patients with tooth wear, when modification of VDO is indicated, the extent to which VDO can be increased within biologically acceptable limits, and current controversies surrounding TMD, esthetics, function, implant dentistry, and digital technology.

A thorough understanding of these concepts is essential for clinicians to make evidence-based decisions in prosthodontic treatment involving oral rehabilitation.



Dr. Teng Peng Hui

Universiti Kebangsaan
Malaysia

DATE:

14th August 2026

VENUE:

MERAK 1

TIME:

13.00 – 14.30

LONGITUDINAL CRACKS AND FRACTURES OF TEETH: TO TREAT OR NOT TO TREAT?

Cracked teeth and longitudinal root fractures have become increasingly common in our clinical practice due to ageing populations, prolonged retention of natural teeth, improved diagnosis, and awareness among practitioners and patients. Although heavily studied by scientific research over the years, there are still considerable confusions and lack of consensus on the classification and diagnosis for cracked teeth and root fractures, often resulting in the wrong or delayed treatment for patients. Cracks and fractures of teeth may cause pulpal/periapical pathology, and potentially tooth loss without timely identification and management. Therefore, this lecture aims to provide a concise, evidence-based overview on the clinical presentation, diagnosis, and appropriate treatment plan for cracked teeth and root fractures in general dental practice.



***Prof. Osamu
Suzuki***

Tohoku University

DATE:

14th August 2026

VENUE:

MERAK 2

TIME:

13.00 – 14.30

OCTACALCIUM PHOSPHATE BONE SUBSTITUTE MATERIALS: ELUCIDATING BIOACTIVE PROPERTIES AND DEVELOPING APPROACHES FOR CLINICAL DENTAL APPLICATION

Octacalcium phosphate (OCP) has been advocated as a precursor of biological apatite crystals. OCP has been identified in the locus where the formation of hydroxyapatite (HA) crystals is initiated in human dentine and murine and human bones. We hypothesized that if OCP exists as a precursor of bone apatite crystals, it may enhance bone formation, and found that synthetic OCP enhances bone formation more than HA and biodegradable β -tricalcium phosphate (β -TCP) materials experimentally in various bone defects. We have developed OCP composite materials combined with tissue-derived reconstituted collagen for dental surgeries and analyzed their material properties from the viewpoint of dental biomaterials science, investigating their clinical applicability; the OCP/collagen composite has been approved in Japan as a bone substitute for use in conjunction with dental implants. This talk synthesizes our findings on OCP bone substitute materials, ranging from fundamental biomaterial properties and responses at the cellular and tissue levels to practical dental clinical applications.



**Dr. Usman
Sumantri**

Chairman of Indonesian
Dental Association

DATE:
14th August 2026
VENUE:
NURI 1
TIME:
13.00 – 13.45

THE POWER OF PREVENTION: EVIDENCE-BASED GUIDELINES FOR SELF-ORAL CARE

Oral diseases remain among the most prevalent and preventable public health problems in the Asia-Pacific region. Dental caries, gingivitis, periodontitis, tooth loss, and oral biofilm-related complications continue to affect quality of life, productivity, healthcare expenditure, and overall well-being. In many communities, access to dental care remains uneven; therefore, strengthening evidence-based self-oral care is essential to shift oral healthcare from a predominantly curative model toward a prevention-oriented, life-course approach.

This presentation introduces the Asia Pacific Dental Federation white paper, *The Power of Prevention: Evidence-Based Guidelines for Self-Oral Care*, developed to synthesize current scientific evidence and clinical recommendations on preventive oral hygiene practices, particularly the appropriate adjunctive use of antimicrobial and fluoride mouthwashes. Adjunctive mouthwash use may provide additional clinical benefit when selected according to indication, age, medical status, and individual risk profile.

Current evidence supports the use of antimicrobial mouthwashes containing essential oils, chlorhexidine, or cetylpyridinium chloride for reducing plaque and gingival inflammation, while fluoride mouthwashes can support caries prevention, especially in high-risk populations. The white paper also highlights the role of pre-procedural antimicrobial rinsing in reducing bacterial contamination in dental aerosols, contributing to safer clinical practice during aerosol-generating procedures.

For Indonesia and the wider Asia-Pacific region, the key message is that prevention must become a shared responsibility between dental professionals, patients, health systems, policymakers, educators, and industry partners. Evidence-based self-care should be integrated into school oral health programs, community outreach, dental practice protocols, health literacy initiatives, and national prevention strategies.

This session will call for stronger collaboration to translate scientific evidence into practical, culturally relevant, and accessible oral health messages for the public. By empowering individuals with simple, proven, and professionally guided preventive behaviors, Indonesia can contribute to reducing the burden of oral diseases, improving population health, and advancing the global goal of oral health for all.



Dr. Haslina Rani

Universiti Kebangsaan
Malaysia

DATE:
14th August 2026

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NURI 1

TIME:
13.45 – 14.30

BEYOND NUMBERS: USING QUALITATIVE AND MIXED-METHODS RESEARCH TO UNDERSTAND ORAL HEALTH BEHAVIOURS AND COMMUNITY NEEDS

Numbers can tell us how many people have poor oral health, but they rarely tell us why. Behind every statistic on caries, treatment uptake, or missed appointments are beliefs, fears, and everyday constraints that a survey alone will not reveal. This talk looks at how qualitative and mixed-methods research can fill that gap.

For those less familiar with these approaches, this presentation will offer a brief orientation to qualitative and mixed-methods research in oral health. It will introduce the purpose of qualitative inquiry, commonly used methods such as interviews and focus group discussions, and basic approaches to interpreting qualitative data, including thematic analysis. It will also outline how mixed-methods designs can bring together quantitative and qualitative findings to support a more complete understanding of oral health behaviours and community needs.

Drawing on examples from patients, caregivers, healthcare providers, and policy settings, the talk will show what these methods can uncover that numbers on their own tend to miss, and where they fit alongside more familiar quantitative work, across research, clinical practice, and health systems more broadly.

The talk closes with a practical takeaway, giving researchers and practitioners a clearer sense of when and how to reach for qualitative or mixed-methods approaches, and why that choice matters for understanding oral health behaviours in the populations they work with.



**Prof. Siti Adibah
Binti Othman**

Universiti Malaya

ORTHODONTIC CONSIDERATIONS ACROSS THE LIFESPAN: GROWTH, FUNCTION, AND AGING

Orthodontic needs evolve significantly throughout life, reflecting changes in growth, function, and aging of the craniofacial complex. This lecture explores key orthodontic principles relevant from childhood through older adulthood, emphasizing early assessment, occlusal development, interceptive opportunities, and the unique considerations presented by aging dentition and supporting structures. With increasing demand for functional, aesthetic, and minimally invasive approaches, clinicians require a clear framework for evidence-based appliance selection, timing, and interdisciplinary coordination. Through practical clinical insights and illustrative case examples, this session highlights how orthodontic principles can support oral health, enhance function, and contribute to quality of life across the lifespan.

DATE:

14th August 2026

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MERAK 1

TIME:

14.30 – 16.00



**Prof. Masahiro
Saito**

Tohoku University

DATE:

14th August 2026

VENUE:

MERAK 2

TIME:

14.30 – 16.30

THE ENDODONTIC TRIAD: SCAFFOLDS, STEM CELLS, AND ANTI- INFLAMMATORY STRATEGIES

As people live longer, more patients want to save their natural teeth, and endodontic therapy for apical periodontitis has become increasingly important. This therapy not only preserves chewing function but also helps prevent systemic disease. Apical periodontitis develops when bacteria inside the root canal cause infection, leading to inflammation that destroys the pulp, the periodontal tissue around the root tip, and the surrounding bone. Standard root canal treatment removes the infection and allows the body's natural healing ability to repair the tissue. This standard treatment succeeds in more than 75% of cases, but some cases fail to heal even after retreatment—a condition known as treatment-resistant apical periodontitis. Recent studies suggest that systemic conditions, including autoimmune disease, cardiovascular disease, and lifestyle-related disease, contribute to this treatment resistance. Clarifying this relationship is essential for developing better clinical treatments for these patients. A second major challenge is that large bone defects caused by apical periodontitis often fail to heal completely with standard treatment alone. Endodontic regenerative therapy, including bone regeneration therapy, aims to solve this problem by repairing and regenerating these large bone defects.

Our research addresses both of these challenges. First, we found that colitis-induced immune dysregulation in the jawbone marrow worsens jawbone destruction in apical periodontitis, and that adding anti-inflammatory therapy to standard treatment can reduce this bone loss. Second, for bone regeneration, we isolated a new population of skeletal stem cells from the jawbone, which we call jaw bone alveolar-derived skeletal stem cell progenitors (JASCs). When combined with a 3D biodegradable scaffold, JASCs can form new bone in vivo. Building on this finding, we are now developing bone tissue engineering approaches toward clinical application for treating large bone defects. This talk will present both lines of research and discuss their implications for the future of dental treatment.



***Dr. Catherine
Hong***

National University of
Singapore

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

14.30 – 16.00

A PRACTICAL FRAMEWORK FOR MANAGING THE MEDICALLY COMPLEX PATIENT

The increasing prevalence of patients with multiple medical conditions, polypharmacy, and chronic systemic disease means that outpatient clinicians are increasingly required to manage medically complex individuals in ambulatory settings. Safe and effective care depends on understanding how medical conditions, medications, and functional status influence clinical decision-making, procedural risk, and treatment outcomes. This lecture will focus on practical principles of outpatient management, including patient assessment, risk assessment, and treatment planning considerations.



**Dr. Aryo
Megantoro**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

NURI 1

TIME:

14.30 – 16.00

MINIMALLY INVASIVE ADHESIVE RESTORATION

Dental caries, one of the most prevalent diseases worldwide, requires appropriate and evidence-based management to achieve successful treatment outcomes. One of the preferred treatment options is direct restoration based on the principles of minimally invasive dentistry using adhesive restorative materials. Recent advancements in adhesive restorative materials have significantly improved their clinical performance, enabling predictable, durable, and esthetic long-term outcomes when appropriate case selection and clinical techniques are employed.

Keywords: dental caries, direct restoration, adhesive restoration, minimally invasive dentistry.



**Prof. Oranart
Matangkasombut**

Chulalongkorn
University

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

16.00 – 17.30

ORAL MICROBIOME: A GATEWAY TO GOOD HEALTH

The human body is home to a vast number of microorganisms that play important roles in human physiology and health, with the oral microbiome as the second most diverse ecosystem. Homeostasis of the microbiome is crucial in maintaining good health, while oral dysbiosis is the root cause of many oral diseases. Importantly, not only the prevalent oral conditions, such as dental caries and periodontitis, oral dysbiosis also influence systemic health with different microbiome profiles observed in association with many systemic diseases. Oral microbiome research progresses rapidly and is providing insights into its physiological roles. This presentation aims to give an introductory overview of research in this field, with examples from recent works of our research team, and will discuss potential applications in diagnostic, prognostic, preventiv



***Prof. James Kit
Hon Tsoi***

Hongkong University

DATE:

14th August 2026

VENUE:

MERAK 2

TIME:

16.00 – 17.30

GENAI FOR DENTAL PROSTHESIS DESIGN

CAD/CAM workflow has significantly improved dentistry, but is still labour-intensive and time-consuming, particularly because of the need for customisation for each patient using the CAD software tooth library in assisting the prosthetic designs. Despite Generative AI (GenAI) can be used to foster a faster and more accurate design, many AI approaches design a 'lookalike' product whereas the functionality, production ability and clinical usability were not well proven. Here, we propose our various GenAI projects that functionalises data-driven AI into real dental application with proven biomechanical and clinical data. We hope this smart manufacturing technology will be the stepping stone for driving Industry 4.0 in dentistry, which is vital to meet the challenges of an ageing society and lack of qualified dental personnel.



**Dr. Widya
Kusumadewy**

Universitas Indonesia

DATE:
14th August 2026
VENUE:
MERAK 3
TIME:
16.00 – 17.30

EARLY DETECTION OF BODY DYSMORPHIC DISORDER IN ORTHODONTIC PATIENTS

Body Dysmorphic Disorder (BDD) is a mental health condition characterized by excessive preoccupation with perceived flaws in physical appearance, which may be minimal or unnoticeable to others. In orthodontic practice, patients often seek treatment to improve dental alignment, smile esthetics, and facial harmony. However, in some cases, esthetic concerns may be influenced by unrealistic expectations, distorted self-perception, or underlying psychological distress. Therefore, early detection of BDD is essential to ensure appropriate diagnosis, treatment planning, and patient-centered care.

This seminar will discuss the relevance of BDD in orthodontic patients, particularly in individuals presenting with excessive dissatisfaction toward their dental or facial appearance despite mild clinical findings. The session will highlight key clinical signs, patient communication patterns, screening considerations, and the importance of distinguishing realistic orthodontic concerns from symptoms that may require psychological referral.

By improving awareness and early detection of BDD, orthodontic practitioners can better manage patient expectations, reduce the risk of dissatisfaction after treatment, and support safer, more holistic clinical outcomes. This seminar aims to provide practical insights for recognizing potential BDD in orthodontic settings and integrating psychological awareness into modern orthodontic care.



***Dr. Ani
Ruspitawati***

Head of the DKI Jakarta
Provincial Health Office

DATE:

15th August 2026

VENUE:

SUMMIT

TIME:

13.00 – 14.30

STRENGTHENING COMMUNITY ORAL HEALTH THROUGH PRIMARY HEALTH CARE: LESSONS FROM JAKARTA'S HEALTH SYSTEM



**Dr. Mohamad
El-Zaafarani**

Style Italiano
Endodontics Member

DATE:

15th August 2026

VENUE:

MERAK 1

TIME:

09.00 – 10.30

SMART SHAPING IN RESTRICTED ANATOMY: A STRATEGY FOR THE EXTREMELY DIFFICULT CANALS

Root canal shaping becomes significantly more demanding when anatomy is restricted by severe curvature, limited canal diameter, calcification, long roots, abrupt canal divisions, or reduced dentin thickness; in these extremely difficult canals, conventional shaping strategies may increase the risk of ledging, transportation, instrument separation, excessive dentin removal, or loss of the original canal trajectory. This lecture presents a clinically driven approach to smart shaping in restricted anatomy, focusing on how to achieve safe, predictable, and conservative canal preparation without compromising biological and mechanical objectives, highlighting the importance of preoperative assessment, access refinement, glide path creation, file selection, kinematics, irrigation strategy, and decision-making during complex canal negotiation. Special emphasis will be placed on shaping philosophy in narrow and curved canals, including the role of minimally invasive preparation, regressive taper concepts, heat-treated instruments, reciprocation or adaptive motion, and strategies to reduce torsional and cyclic fatigue, with clinical cases demonstrating how to manage restricted anatomy step by step, from initial scouting to final shaping, while preserving pericervical dentin and respecting the natural canal anatomy. By the end of this lecture, participants will be able to recognize high-risk anatomical patterns, modify their shaping protocol according to canal complexity, and apply safer strategies for managing extremely difficult canals with greater confidence and clinical control.



**Prof. Anne
Marie
Kuijpers-
Jagtman**

Hongkong University

DATE:

15th August 2026

VENUE:

MERAK 2

TIME:

09.00 – 10.30

ADVERSE EFFECTS IN ORTHODONTICS TODAY: WHAT IS NEXT?

High-quality orthodontic finishing is often judged by facial esthetics, functional harmony, and occlusal detail. Yet true treatment excellence also depends on what we prevent: adverse effects that may compromise an otherwise successful outcome.

Orthodontic tooth movement relies on a controlled biological response within the periodontal ligament, alveolar bone, and surrounding tissues. However, the same biological principles that enable treatment may also produce unwanted consequences. These may include treatment-induced apical root resorption, changes in periodontal or dental health, and other adverse effects that can influence the quality of the final result.

This lecture will explore current strategies for identifying, reducing, or modifying these risks. Can adverse effects be biologically prevented or better controlled? Are clear aligners, better at that? Can AI help us move from damage control to prevention? As orthodontics becomes increasingly personalized and data-driven, the key question is: what will be the next big thing?



**Prof. Ratna Sari
Dewi**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MERAK 3

TIME:

09.00 – 10.30

PRECISION AND ESTHETIC EXCELLENCE IN INDIRECT RESTORATIONS: INTEGRATING DIGITAL AND CONVENTIONAL WORKFLOWS

The development of digital technology has brought significant changes to the field of restorative dentistry, particularly in the fabrication of indirect restorations. Although digital workflows are increasingly used due to their increased efficiency, accuracy, and predictability, conventional techniques still play a vital role in various clinical situations. Therefore, a comprehensive understanding of the integration of digital and conventional workflows is key to achieving optimal restorative success. This seminar and hands-on session will cover the basic principles and latest developments in indirect restorations, from diagnosis and treatment planning, material selection, tooth preparation design, conventional and digital impression techniques, to definitive cementation procedures. Various types of indirect restorations, including inlays, onlays, veneers, and all-ceramic crowns, will be discussed based on biological, mechanical, and aesthetic considerations. Furthermore, participants will gain an understanding of the advantages, limitations, and indications for each workflow to support informed clinical decision-making. Through hands-on sessions, participants will gain practical experience in applying the concepts they have learned, including preparation design appropriate to the type of restorative material, the use of digital technology in the restorative process, and clinical steps that contribute to the long-term success of indirect restorations. By integrating digital and conventional approaches appropriately, it is hoped that participants will be able to improve treatment precision, achieve optimal aesthetic results, and increase the predictability and durability of restorations in daily clinical practice.



**Dr. Nieka
Adhara
Wahono**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MERAK 3

TIME:

09.00 – 10.30

PREMATURE LOSS OF PRIMARY TEETH: LEAVE OR TREAT?

Premature loss of primary teeth refers to the loss of primary teeth before the eruption of their permanent successors into the oral cavity, primarily due to dental caries and trauma. Its reported prevalence ranges from 4.3% to 42.6%. This condition has the potential to adversely affect the growth and development of the stomatognathic system, including masticatory function, speech, esthetics, and the development of normal occlusion. These effects occur as a result of reduced arch length, drifting of adjacent teeth into the edentulous space, and disturbances in the eruption of both the permanent successor and neighboring teeth.

The use of a space maintainer is one of the preventive approaches to minimizing the adverse consequences of premature loss of primary teeth. Considering that children undergo continuous growth and development, a comprehensive assessment is essential before deciding on space maintainer therapy. Subjective and objective clinical examinations, along with supplementary investigations—including study model fabrication for space analysis and radiographic examinations such as panoramic radiography and Cone Beam Computed Tomography (CBCT)—are necessary to establish an accurate diagnosis and formulate a holistic, comprehensive treatment plan.

The child's behavior and level of cooperation, oral hygiene status, dental age, and occlusal condition should all be considered when selecting the appropriate treatment for premature loss of primary teeth. Consequently, not every case requires the placement of a space maintainer. Furthermore, the success of space maintainer therapy depends largely on accurate diagnosis, appropriate appliance design selection, and effective collaboration among the dentist, the patient, and the parents to support optimal occlusal development in children.



**Prof. Endang
Winiati**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

NURI 1

TIME:

09.00 – 10.30

FROM LAB TO CLINIC: ACCELERATING THE TECHNOLOGY READINESS LEVEL OF OMICS-BASED ORAL HEALTH INNOVATIONS

Recent advances in OMICS technologies—including genomics, transcriptomics, proteomics, metabolomics, microbiomics, epigenomics, and extracellular vesicle profiling—are transforming oral health research by enabling a comprehensive understanding of disease mechanisms and facilitating the development of precision dentistry. These technologies have accelerated the discovery of novel biomarkers and therapeutic targets for major oral diseases, including dental caries, periodontal disease, oral potentially malignant disorders, oral squamous cell carcinoma, and craniofacial tissue defects. However, despite remarkable scientific progress, many promising OMICS-based discoveries remain confined to laboratory settings, highlighting the persistent “Valley of Death” between research innovation and clinical implementation.

The translational pathway required to advance OMICS-based innovations through the Technology Readiness Level (TRL) framework, emphasizing the critical steps from basic discovery, proof-of-concept studies, and preclinical validation to regulatory approval, commercialization, and routine clinical adoption. Particular attention will be given to saliva-based multi-OMICS diagnostics as a non-invasive platform for precision disease detection and monitoring, as well as stem cell-derived extracellular vesicles, including dental pulp stem cell (DPSC)-derived and mesenchymal stem cell (MSC)-derived exosomes, as emerging cell-free therapeutics for immunomodulation and tissue regeneration. Together, these complementary applications demonstrate how extracellular vesicles can serve both as diagnostic biomarkers and regenerative therapeutics, providing an integrated approach to personalized oral healthcare.

By integrating scientific discovery with translational medicine, innovation management, and clinical application, this presentation highlights practical strategies for accelerating the development of OMICS-based oral health technologies from laboratory research to patient care. Ultimately, successful translation of these innovations will support the realization of precision dentistry, improve patient outcomes, and strengthen the global innovation ecosystem for next-generation oral healthcare.



**Prof. Park Ji
Woon**

Seoul National
University

DATE:

15th August 2026

VENUE:

ASSEMBLY 1

TIME:

10.30 – 12.00

WHEN SLEEP MEETS PAIN: DENTAL SLEEP MEDICINE AT THE CROSSROADS OF TWO CLINICAL REALITIES

Sleep disorders, including insomnia, obstructive sleep apnea (OSA), restless legs syndrome (RLS), and periodic limb movement (PLM), are intimately linked to alterations in pain perception, as they can impair endogenous pain modulation mechanisms, leading to decreased pain inhibition and increased pain facilitation. The high prevalence of sleep disturbances in patients with orofacial pain compared to healthy populations underscores this bidirectional interaction. Chronic pain affects approximately 30% of the global population, with a higher prevalence in women, and is frequently comorbid with mood and sleep disorders. Temporomandibular disorder (TMD), the most prevalent orofacial pain condition, is characterized by dysfunction of the masticatory muscles and temporomandibular joint and is frequently accompanied by psychological comorbidities and sleep disturbances; approximately 90% of patients with fibromyalgia, in which sleep disturbance is a primary symptom, also present with TMD. Several headache types are closely linked to sleep and biological rhythms, including migraine, hypnic headache, paroxysmal hemicrania, and cluster headache, while OSA patients commonly report morning headaches that often improve with mandibular advancement device therapy, and neuropathic conditions such as burning mouth syndrome are associated with sleep and mood disorders. Assessment for both sleep and pain disorders requires a multidisciplinary approach using validated screening tools such as STOP-BANG, the Berlin Questionnaire, and NoSAS for OSA; the Epworth Sleepiness Scale, Pittsburgh Sleep Quality Index, and Insomnia Severity Index for sleep quality; and the DC/TMD framework for TMD diagnosis. Management strategies include behavioral therapy (brief naps to reverse pain sensitivity from sleep restriction), lifestyle modification, caution with pharmacological agents such as benzodiazepines and gabapentinoids that may induce or exacerbate OSA in elderly patients, and judicious use of intraoral appliances, including stabilization splints for TMD and mandibular advancement devices for bruxism with comorbid OSA.



Dr. Yeoh Oon Take

Universiti Malaya

DATE:
15th August 2026

VENUE:

MERAK 1

TIME:
10.30 – 12.00

EXCEL IN IMPLANT DENTISTRY WITH DIGITAL DENTAL TECHNOLOGY

Dental implant and digital technology have been available for more than half of a century. Today, the practice of dental implantology is inseparable from the discussion of digital dental technology.

The lecture will discuss on the application of digital dental technology in the aspects of implant planning, surgery and fabrication of implant restoration. In particular, elaboration will be extended to covering the proper technique applications to enhance the clinical outcome of dental implant practice.

Learning outcomes:

- To relate the use of various dental implant designs for different clinical scenarios
- To illustrate the workflow and clinical cases of digital workflow
- To categorise the dental materials that are suitable for implant restorations



**Prof. Thomas
Maal**

Radboud University
Nijmegen Medical
Centre

DATE:

15th August 2026

VENUE:

MERAK 2

TIME:

10.30 – 12.00

3D TECHNOLOGY IN HEALTHCARE: FROM INNOVATION TO CLINICAL IMPLEMENTATION

Three-dimensional (3D) technologies have transformed the way oral and maxillofacial surgeons diagnose, plan, and perform complex procedures. Over the past two decades, the 3D Lab at Radboudumc, led by Prof. Thomas Maal, has pioneered the clinical implementation of patient-specific 3D solutions. Initially focused on oral and maxillofacial surgery, the lab introduced innovative applications in orthognathic surgery, mandibular reconstruction, dental implant planning, and trauma surgery through virtual surgical planning, 3D printing, and patient-specific guides and implants.

Building on this expertise, the 3D Lab has evolved into one of the world's largest medical 3D labs, collaborating with more than fifteen hospitals and supporting a wide range of medical specialties. This expansion has enabled the translation of innovations originating in oral and maxillofacial surgery into broader clinical practice, maximizing the impact of 3D technologies across healthcare.

The next phase of innovation is driven by the convergence of 3D technology, artificial intelligence (AI), and extended reality (XR). AI is enhancing image analysis, automated treatment planning, and clinical decision support, while XR technologies—including augmented and virtual reality—are transforming surgical planning, intraoperative guidance, education, and patient communication. Together, these technologies are enabling more intelligent, immersive, and personalized care.

Through clinical examples from oral and maxillofacial surgery and multidisciplinary applications, this presentation highlights how the integration of 3D technology, AI, and XR is shaping the future of patient-specific healthcare, while remaining rooted in innovations that originated within oral and maxillofacial surgery.



**Prof. Naoya
Kakimoto**

Hiroshima University

DATE:
15th August 2026
VENUE:
MERAK 3
TIME:
10.30 – 12.00

IMAGING FINDINGS OF ORAL AND MAXILLOFACIAL MALIGNANCIES

Oral and maxillofacial malignancies comprise a diverse group of neoplastic diseases that differ in biological behavior, prognosis, and imaging characteristics. Among these, oral squamous cell carcinoma is the most common malignant tumor, accounting for more than 90% of oral cancers. Accurate imaging evaluation plays a pivotal role in the diagnosis, staging, treatment planning, and post-therapeutic assessment of these lesions.

This lecture provides an overview of imaging findings of oral and maxillofacial malignancies with an emphasis on practical interpretation of radiographic, computed tomography (CT), magnetic resonance imaging (MRI), ultrasonographic (US), and positron emission tomography/computed tomography (PET/CT) examinations. The characteristic imaging features of malignant tumors, including ill-defined margins, cortical bone destruction, infiltrative growth patterns, periosteal reactions, and cervical lymph node metastases, will be discussed. Particular attention will be paid to the role of imaging in TNM staging, including assessment of tumor extent, depth of invasion, osseous involvement, extranodal extension, and distant metastasis.

Representative cases of oral squamous cell carcinoma arising in the tongue, gingiva, buccal mucosa, and floor of the mouth will be presented to illustrate site-specific imaging characteristics. In addition, imaging features of less common malignancies, including adenoid cystic carcinoma, osteosarcoma, malignant lymphoma, multiple myeloma, malignant melanoma, and primary intraosseous carcinoma, will be reviewed. The differential diagnostic points that aid in distinguishing these entities from benign lesions and inflammatory diseases will also be addressed.

Through a case-based approach, this lecture aims to enhance understanding of the radiologic manifestations of oral and maxillofacial malignancies and to demonstrate how multimodality imaging contributes to accurate diagnosis and optimal patient management.



**Dr. Benso
Sulijaya**

Universitas Indonesia

DATE:
15th August 2026
VENUE:
SUMMIT
TIME:
10.30 – 12.00

LATE STAGE OF PERIODONTITIS: FROM DIAGNOSIS TO COLLABORATIVE TREATMENT APPROACHES

Stage IV periodontitis presents a critical challenge in clinical practice, characterized by severe attachment loss, extensive bone destruction, tooth hypermobility, and masticatory dysfunction. Successfully managing these complex cases requires a shift from isolated therapies to a highly coordinated, multidisciplinary approach. This seminar outlines the essential detection, diagnostic, and therapeutic pathways necessary to stabilize and rehabilitate patients suffering from late-stage disease, offering valuable perspectives for general practitioners, specialists, and dental students alike.

The diagnostic segment details the integration of full-mouth periodontal charting with advanced radiographic imaging, including Cone Beam Computed Tomography (CBCT), to precisely map complex bone defects. Additionally, the presentation addresses systemic risk profiling to mitigate modifying factors such as diabetes and tobacco use.

The treatment framework covers a stepwise, collaborative strategy, progressing from meticulous non-surgical debridement to advanced surgical interventions (including laser therapy), as well as pocket-reduction and regenerative procedures. Finally, the session explores restorative solutions, such as occlusal adjustment, splinting, and implant rehabilitation, alongside the critical role of customized supportive periodontal therapy (SPT). Attendees will gain practical insights into sequencing complex workflows and fostering effective interdisciplinary communication to salvage natural dentition and restore oral function.

Keywords: Periodontitis, late-stage, diagnosis, treatment



**Dr. Nurtami
Soedarsono**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

NURI 1

TIME:

10.30 – 12.00

DEVELOPMENT OF FORENSIC ODONTOLOGY COMPETENCIES, LEVELLING FOR GENERAL AND SPECIALIST DENTISTS

Forensic odontology is a progressing discipline combining theoretical knowledge and clinical practice for the increasing demands of forensic investigation and medico-legal practice. Its main scope includes human identification, age, sex, and ancestry estimation, analysis of bitemarks, and oro-maxillofacial trauma related to dento-medico-legal assessment. As the discipline continues to expand, the development of clearly defined competency levels is essential to ensure that forensic dental services are delivered safely, systematically, and in accordance with professional and medico-legal standards.

The competence in forensic odontology must be differentiated by level of professional training, in particular between general dental practitioners and specialist forensic dentists. Competency at the level of the general dental practitioner is primarily directed at enabling dentists to make significant contributions to human identification processes. This includes the ability to acquire, document, and preserve appropriate ante-mortem and post-mortem dental records, to identify and interpret relevant dental findings, and to estimate age, sex, and ancestry within the limits of their training and professional expertise. General dentists, therefore, are an important component of multidisciplinary forensic identification teams, particularly in providing and interpreting reliable dental evidence.

Specialist level competency represents a higher level of clinical, analytical, and forensic skill. Forensic odontologists are expected to be specialists with comprehensive clinical skills, the ability to independently assess complex forensic cases, to integrate dental findings with other forensic evidence, to apply validated scientific methodologies, to critically interpret findings, and to provide scientifically defensible professional opinions. Specialist competency includes medico-legal accountability, including responsibility for the integrity of forensic examinations, documentation, interpretation, reporting, and expert testimony in cases within the scope of forensic odontology.

Thus, a structured, competency-based approach is essential to clearly distinguish between general and specialist practice and to ensure appropriate standards of education, clinical practice, professional accountability, and medico-legal responsibility. Such a framework may contribute to the quality, consistency, and credibility of forensic odontology services and provide a basis for the development of internationally comparable standards for forensic dental practice.

Keywords: forensic odontology, competency-based education, forensic odontology practice



**Dr. Marino
Sutedjo**

Petra Christian
University

DATE:

15th August 2026

VENUE:

ASSEMBLY 1

TIME:

13.00 – 14.30

ENDODONTIC RETREATMENT: LESSONS FROM CLINICAL CASES AND SCIENTIFIC EVIDENCE

Endodontic retreatment remains a critical procedure for managing persistent or recurrent apical pathology following primary root canal therapy. This lecture explores key principles of retreatment through a series of clinical cases integrated with current scientific evidence. Emphasis will be placed on identifying causes of endodontic failure, including missed anatomy, inadequate disinfection, and coronal leakage. Clinical decision-making, case selection, and modern retreatment strategies—such as enhanced irrigation, advanced instrumentation, and bioceramic obturation materials—will be discussed. By correlating real clinical scenarios with contemporary literature, this session aims to highlight practical approaches that simplify retreatment while maintaining predictable outcomes. Participants will gain insights into translating scientific concepts into daily clinical practice, improving both treatment efficiency and long-term success in endodontic retreatment.



Prof. Guang Hong

Tohoku University

DATE:

15th August 2026

VENUE:

MERAK 1

TIME:

13.00 – 14.30

THE POSSIBILITY OF ZIRCONIA DENTAL IMPLANT

Titanium is the best choice for dental implant materials with high success rates; however, despite the optimal functions of the titanium implant, the aesthetic outcome is compromised due to its metallic color, and the high concentrations of titanium deposits in the vicinity of titanium dental implants suggest a role as a sensitizer. Zirconia is one of the most promising implant materials due to its favorable physical, mechanical, and biological properties. This presentation explains the physical and biological properties of zirconia based on the speaker's research and discusses the possibility of zirconia as a dental implant material. From the literature review and the speaker's study, the results suggest that zirconia may have potential as a substitute for metal implant materials, though effective surface modification methods and long-term clinical follow-up remain necessary. Keywords: zirconia, dental implant, surface modification, biocompatibility, osseointegration.



***Prof. Takafumi
Hayashi***

Niigata University

DATE:

15th August 2026

VENUE:

MERAK 3

TIME:

13.00 – 14.30

DENTAL POINT-OF-CARE ULTRASOUND: CURRENT APPLICATIONS AND FUTURE PERSPECTIVES OF INTRAORAL ULTRASONOGRAPHY

Point-of-care ultrasonography (POCUS) has become an indispensable diagnostic tool in many medical specialties owing to its ability to provide immediate, radiation-free imaging at the chairside. In dentistry, recent advances in ultrasound technology and the development of dedicated intraoral probes have expanded the clinical applications of ultrasonography, enabling high-resolution assessment of oral soft tissue lesions.

This presentation reviews the current role of intraoral ultrasonography in dental practice, with particular emphasis on its value as a chairside diagnostic modality. Representative clinical applications include the evaluation of inflammatory diseases, salivary gland disorders, reactive lesions, and oral malignancies. Special attention will be given to the assessment of tumor depth of invasion (DOI), an essential parameter for the staging and treatment planning of oral squamous cell carcinoma.

The presentation also introduces the Pocket Oral Echo®, a compact tablet-based ultrasound system equipped with a dedicated miniature intraoral probe. Its portability, ease of operation, and real-time imaging capability make it particularly well suited for point-of-care use in routine dental practice.

These technological advances are transforming ultrasonography from a specialist imaging modality into a practical diagnostic tool for general dental clinicians. This presentation highlights the current evidence supporting intraoral ultrasonography and explores its future role in Dental Point-of-Care Ultrasound (Dental POCUS), emphasizing its potential to improve diagnostic accuracy, facilitate earlier clinical decision-making, and integrate ultrasonography into everyday dental practice.



Dr. Sylva Dinie

Universitas Indonesia

DATE:
15th August 2026
VENUE:
SUMMIT
TIME:
13.00 – 14.30

THE REGENERATIVE POTENTIALS OF ADIPOSE-DERIVED EXOSOMES IN DENTAL APPLICATIONS

Cell-based therapies for dental pulp regeneration are limited by the ischemic root canal microenvironment, immunogenicity, and regulatory challenges, driving research toward cell-free extracellular vesicle applications. Exosomes isolated from the adipose-derived stromal vascular fraction (AD-SVF) provide a targeted alternative, utilizing the inherent ischemia resistance and cellular heterogeneity of the SVF source.

Following confirmation of classical nanoscale morphology and tetraspanin markers, AD-SVF exosomes demonstrate dose-dependent regulation of human dental pulp stem cells (hDPSCs). Specific concentrations promote directed cellular homing, while sustained exposure accelerates hDPSC proliferation. Additionally, exosomal delivery of angiogenic factors such as VEGFA and FGF2 may induce endothelial tubulogenesis and microvascular organization, addressing vascularization in pulp repair.

However, transitioning from in vitro models to clinical regenerative endodontics requires resolving several translational gaps. Future development must focus on validation in orthotopic animal models, adherence to standardized vesicle characterization protocols, and the engineering of hydrogel scaffolds for localized, sustained intracanal delivery.



**Dr. Herlis
Rahdewati**

Niigata University

DATE:

15th August 2026

VENUE:

NURI 1

TIME:

13.00 – 14.30

PERIODONTAL MANAGEMENT IN MEDICALLY COMPROMISED PATIENTS: EVIDENCE AND CLINICAL PRACTICE

Periodontal disease is a chronic inflammatory condition characterized by dysbiosis of the oral microbiome and destruction of the supporting tissues of the teeth. Increasing evidence indicates that periodontal dysbiosis and inflammation are associated with various systemic conditions, including diabetes mellitus, cardiovascular disease, frailty, and immunocompromised states. Alterations in the subgingival microbial community, together with an exaggerated host inflammatory response, may contribute not only to periodontal tissue breakdown but also to increased systemic inflammatory burden and impaired general health.

Systemic conditions can influence the onset, severity, progression, and treatment outcomes of periodontal disease through changes in immune response, healing capacity, inflammatory status, and oral environmental balance. Conversely, chronic periodontal inflammation and microbial dysbiosis may affect systemic health by promoting persistent low-grade inflammation and disrupting host homeostasis. These interactions highlight the importance of understanding the oral-systemic connection in contemporary periodontal practice.

Management of periodontal disease in systemically compromised patients requires a comprehensive and individualized approach that integrates medical assessment, risk evaluation, infection control, and evidence-based periodontal therapy. Non-surgical periodontal therapy remains the foundation of treatment, although modifications in treatment planning, supportive periodontal care, and interdisciplinary collaboration are often necessary according to the patient's systemic condition. Maintaining microbial balance and controlling dysbiosis are also increasingly recognized as important components of periodontal management. Integrating periodontal and systemic healthcare may improve not only oral health outcomes but also overall health and quality of life in medically compromised patients.



***Prof. Hiroshi
Egusa***

Tohoku University

DATE:

15th August 2026

VENUE:

MERAK 1

TIME:

14.30 – 16.00

TRANSLATING DIGITAL AND BIO- TECHNOLOGIES INTO THE FUTURE OF DENTISTRY

Modern dentistry is evolving from the prosthetic replacement of missing tissues with artificial materials toward a future defined by biological regeneration and digital precision. While CAD-CAM technologies have already optimized prosthodontic workflows and patient-specific treatments, the integration of bioengineering is driving a deeper transformation; by harnessing induced pluripotent stem (iPS) cells and organoid technology, stem cell microenvironments and circadian rhythms can now be regulated to fabricate grafts with regenerative potential for bone, cartilage, and teeth. Furthermore, the development of nano-engineered surfaces that mimic tooth cementum enables the formation of periodontal ligament-like tissue around implants, suggesting a paradigm shift from osseointegration toward biomimetic integration. By bridging these digital and biotechnological innovations, this lecture aims to translate advanced science into human-centric solutions that redefine the future of global oral health.



**Prof. Anand
Marya**

University of Puthisastra

DATE:

15th August 2026

VENUE:

MERAK 2

TIME:

14.30 – 16.00

THE INTELLIGENT DENTIST: NAVIGATING AI, TRUST, AND CLINICAL EXCELLENCE

Artificial intelligence is rapidly transforming contemporary dental practice, redefining how clinicians diagnose, plan, and deliver care; in orthodontics, AI-driven tools, ranging from automated cephalometric analysis to predictive treatment modeling, are enabling a shift toward precision, efficiency, and data-informed decision-making, alongside a critical need to balance technological capability with clinical judgment, ethical responsibility, and patient trust. This lecture presents the concept of the “intelligent dentist” as a clinician who not only adopts AI technologies but also critically appraises and integrates them within an evidence-based framework, highlighting how rigorous scientific methodology, including validated imaging systems, machine learning models, and reproducible clinical protocols, can enhance the reliability and applicability of AI in practice; case-based insights and research-driven examples, particularly in craniofacial analysis and predictive modeling, will demonstrate how AI can augment, rather than replace, clinician expertise. The lecture further explores the expanding applications of AI across the continuum of dental care, including diagnostics, treatment planning, and outcome assessment, synthesizing current evidence and clinical practice trends to provide a comprehensive overview of how AI is reshaping interdisciplinary dental care and enhancing patient-specific outcomes, before concluding with future implications of AI in dentistry, including the evolution of fully integrated digital ecosystems, real-time clinical decision support, and the role of intelligent systems in advancing global oral health delivery, with a focus on how clinicians can proactively adapt to these advancements while sustaining excellence, trust, and patient-centered care in an increasingly technology-driven landscape.



**Prof. Nina
Djustiana**

Tohoku University

DATE:

15th August 2026

VENUE:

MERAK 3

TIME:

14.30 – 16.00

THE USE OF ELECTROSPINNING TECHNIQUES FOR BIOCERAMIC NANOFIBER APPLICATIONS IN DENTISTRY

Recent advances in nanotechnology have accelerated this transformation through the development of bioceramic nanofibers, which closely mimic the architecture and composition of the natural extracellular matrix. Electrospinning has emerged as a versatile as well as cost-effective technique for producing continuous nanofibers with controlled morphology, high porosity, and an exceptional surface area-to-volume ratio. The unique physicochemical properties of nanofibers including enhanced bioactivity, biomineralization capacity, cellular interactions, and mechanical performance make them attractive candidates for a broad range of dental applications. Electrospun nanofibers based on calcium phosphate, hydroxyapatite, bioactive glass, zirconia, alumina, titania, and carbon-based materials, have shown promising outcomes in regenerative endodontics, periodontal and craniofacial tissue engineering, implant surface modification, guided bone regeneration, and reinforcement of restorative composites. Incorporation of bioceramic nanofibers into polymer matrices has also been associated with improved flexural strength, fracture toughness, wear resistance, reduced polymerization shrinkage, and enhanced stem cell adhesion, proliferation, and differentiation. Future interdisciplinary collaboration among dental clinicians, materials scientists, and biomedical engineers will be essential to facilitate the translation of these emerging technologies into routine clinical practice. The use of electrospinning techniques for fabricating bioceramic nanofibers represents a promising frontier in regenerative and restorative dentistry, offering innovative solutions that may redefine the next generation of dental biomaterials and improve patient outcomes worldwide.

Conclusion: Bioceramic nanofibers represent a frontier in Smart & Green Dentistry by bridging the gap between material science and biological response.



Herry Novrinda

Universitas Indonesia

DATE:

15th August 2026

VENUE:

NURI 1

TIME:

14.30 – 16.00

THE BIOPSYCHOSOCIAL BEHAVIORAL MODEL IN DENTISTRY: UNDERSTANDING PATIENT BEHAVIOR TO IMPROVE PREVENTIVE AND CLINICAL OUTCOMES

Introduction

Overview of the biopsychosocial-spiritual model in dentistry emphasizing its role in understanding patient behavior to improve preventive and clinical outcomes.

Summary of Related Publications

1. Examines dental anxiety linked to demographic, behavioral, social, and spiritual support, underscoring the comprehensive model.
2. Reviews religiosity's influence on oral health and quality of life through biopsychosocial mechanisms.
3. Studies behavioral and social factors influencing mouthguard use among athletes.
4. Investigates socio-behavioral determinants of recurrent aphthous stomatitis.
5. Analyzes oral health inequalities through social and psychosocial environmental factors.

Interconnection with Behavior Change Theories and the Biopsychosocial-spiritual Model

These publications collectively illustrate how biopsychosocial-spiritual aspects intersect with behavior change theories such as the Health Belief Model and Motivational Interviewing. They highlight behavioral, social, and spiritual dimensions crucial for patient adherence and effective dental interventions.

Applications in Dentistry

The integrated model guides preventive strategies and clinical care by addressing psychological, social, and spiritual patient needs. Evidence shows this approach improves compliance, reduces anxiety, and enhances oral health outcomes.

Conclusion and Future Perspectives

The biopsychosocial-spiritual behavioral model bridges dental science and patient-centered care, fostering holistic understanding of behavior to improve prevention and treatment. Further research and incorporation into dental education are essential for advancing oral health outcomes.



**Prof. Febrina
Rahmayanti**



**Dr. Indriasti Indah
Wardhany**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MERAK 3

TIME:

13.00 – 14.30

UNVEILING THE ORAL RED FLAGS: IDENTIFYING AND NAVIGATING THE GUIDELINES OF INFECTIOUS DISEASES IN DENTAL PRACTICE

Background: In Indonesia, the rising incidence of sexually transmitted infections like syphilis, alongside the persistent burden of tuberculosis (TB) and HIV/AIDS, poses a critical challenge for dentists. Patients with undiagnosed systemic infections frequently seek routine dental care and present with subtle or atypical oral lesions. General dentists must serve as frontline diagnosticians to intercept these diseases early.

Objective: This presentation aims to equip Indonesian dentists with clinical pictures to recognize oral red flags of prevalent infectious diseases, manage cases at the primary care level, and navigate official referral pathways.

Discussion: The presentation will review the distinct oral presentations of global infectious threats, including syphilis, gonorrhoea, human papillomavirus (HPV), herpes simplex virus (HSV), and human immunodeficiency virus (HIV). Beyond lesion recognition, initial management and a multidisciplinary approach will be discussed.

Conclusion: With thorough knowledge of the oral manifestations of infectious diseases, dentists will recognize these red flags, ensure early patient diagnosis, and enhance occupational safety.



**Dr. Hanny
Nilasari**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MERAK 2

TIME:

14.30 – 16.00

ORAL MANIFESTATIONS OF VARIOUS SKIN AND GENITAL INFECTIONS

The oral cavity is a mirror of systemic health, and the most common extragenital area for the manifestation of sexually transmitted infections (STIs) and various inflammatory skin disorders. Changes in sexual behavior, particularly the increase in oral sex practices, caused a significant epidemiological shift in 2024-2026. Oral lesions can appear as initial signs, accompanying manifestations, or indicators of the progression of systemic diseases and STIs. Some common conditions include oral candidiasis, aphthous ulcers, vesicles, mucosal erosions, and papillomatous lesions associated with syphilis, herpes simplex, gonorrhea, human papillomavirus (HPV), and HIV infections, as well as vesiculoulcerative lesions in patients with Mpox. In addition to causing local complaints such as pain, dysphagia, and eating disorders, oral manifestations can also impact patients' quality of life, nutritional status, and psychosocial well-being.

A multidisciplinary approach is crucial for the early detection and management of oral lesions associated with inflammatory skin diseases such as erosive lichen planus, which can transform into malignant lichen planus, and Behçet's disease. The 2025 CDC STI Guidelines emphasize increased awareness of oro-genital transmission and the importance of screening and education about risky sexual behavior. Meanwhile, the 2025 WHO Oral Health Updates emphasize oral health as an integral part of general health and infectious disease control.

The PERDOSKI and PDGI guidelines emphasize the need for routine oral examinations in patients with inflammatory skin disorders and STIs to expedite diagnosis and prevent further complications. Early detection of oral lesions is expected to improve treatment success, reduce the risk of disease transmission, and support patients' overall quality of life.

Keywords: sexually transmitted infections, skin and genital diseases, oral manifestations, oral lesions



**Dr. Yudy Ardila
Utomo**

Universitas Indonesia

DATE:
13th August 2026
VENUE:
NURI 1
TIME:
13.00 – 14.00

FROM OCCLUSION TO FACIAL HARMONY: AN INTEGRATED APPROACH TO ORTHOGNATHIC SURGERY

Orthognathic surgery is a comprehensive approach for correcting dentofacial deformities that focuses not only on improving occlusion, but also on achieving facial balance, stomatognathic function, and overall patient quality of life. Discrepancies in jaw relationships may affect mastication, speech, temporomandibular joint health, periodontal stability, and overall facial esthetics. Therefore, orthognathic treatment planning requires a multidisciplinary approach that integrates orthodontic, oral and maxillofacial surgical, prosthodontic, periodontal, and psychosocial considerations. This seminar will discuss the fundamental principles of diagnosis and treatment planning in orthognathic surgery, including occlusal analysis, skeletal evaluation, facial analysis, and the establishment of treatment objectives that prioritize both function and esthetics. The role of pre-surgical and post-surgical orthodontics will be highlighted, including dentoalveolar decompensation, arch coordination, occlusal stabilization, and biomechanical control to support optimal surgical outcomes. In addition, the seminar will address the importance of evaluating facial proportions, soft tissue profile, airway considerations, and the use of digital technologies such as virtual surgical planning and three-dimensional imaging to enhance diagnostic accuracy and treatment predictability. The success of orthognathic surgery depends on effective interdisciplinary collaboration, clear communication, and appropriate case selection. Through an integrated approach, orthognathic treatment can achieve stable occlusal correction, improved facial harmony, enhanced function, and greater patient satisfaction. This seminar is expected to provide clinical insight into how the principles of occlusion and facial esthetics can be combined in modern orthognathic surgical planning.



Dr. Nada Ismah

Universitas Indonesia

DATE:

13th August 2026

VENUE:

NURI 1

TIME:

13.00 – 14.00

THE TRANSFORMATIVE IMPACT OF ORTHOGNATHIC SURGERY: CHANGING FACES, CHANGING LIVES

Orthognathic surgery is an interdisciplinary treatment that combines the fields of orthodontics and maxillofacial surgery. Orthognathic surgery corrects dentofacial deformities by adjusting the position of the teeth, jaws, and soft tissues. The goal of orthognathic surgery is to improve the function of the stomatognathic system including optimal occlusion, mastication, speech, breathing, and swallowing, as well as facial aesthetics.

Technological advancements have transformed the field of dentistry, bringing about significant progress and various conveniences. These advancements enable faster and more accurate examinations to establish precise diagnoses and develop predictable and safe treatment plans, thereby achieving the desired treatment outcomes.

Changes in the psychosocial aspects of orthognathic surgery patients are also part of the transformation that occurs. The success of orthognathic surgery not only brings about anatomical and functional changes but also aesthetic improvements that lead to patient satisfaction and an improved quality of life. A patient-centered approach to care is expected to optimize treatment outcomes while strengthening multidisciplinary collaboration in the management of dentofacial deformities.

Keywords: Orthognathic surgery, Dentofacial deformities, Facial aesthetics, Stomatognathic function, Quality of life.



Dr. Sariesendy

Dr. Natalina

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MERAK 3

TIME:

14.30 – 16.00

INTERDISCIPLINARY MANAGEMENT OF ORTHODONTIC TREATMENT IN PERIODONTALLY COMPROMISED PATIENTS: BIOLOGICAL CONSIDERATIONS, BIOMECHANICS, AND CLINICAL OUTCOMES

Orthodontic treatment can be used for patients with reduced periodontal support to stabilize clinical conditions and improve function and aesthetics. This requires a thorough understanding of altered biomechanics and a tailored interdisciplinary treatment approach. The goal of periodontal health in orthodontic patients requires a comprehensive approach that addresses biomechanical principles, interdisciplinary collaboration, patient education, and adjunctive periodontal therapy. Orthodontic treatment in patients with periodontal disorders can be effective if preceded by appropriate periodontal therapy and managed through interdisciplinary care. By integrating periodontal considerations into the planning and implementation of orthodontic treatment, clinicians can ensure good tooth alignment and a healthy, stable periodontium, ultimately leading to successful treatment and long-term oral health.



**Prof. Boy M.
Bachtiar**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

NURI 1

TIME:

09.00 – 10.30

THE ORAL ECOSYSTEM MICROBIAL SHIFTS UNDER ORTHODONTIC STRESS

Orthodontic mini-implants (MIs) generate new niches that can change the oral microbiota and influence host immune responses. Clinical inflammation is not always apparent, yet microbial and molecular alterations may arise before visible peri-implant infection. This study examined microbial shifts and inflammatory responses after MI placement, concentrating on *Saccharibacteria*, nitrate-reducing bacteria (NRB), and periodontopathogens. Saliva and peri-mini-implant crevicular fluid (PMICF) were sampled from eight orthodontic patients at baseline (T0), one week (T1), and one month (T2) after MI placement. DNA was extracted from each sample and pooled by patient group for each time point, then underwent 16S rRNA gene sequencing on the Oxford Nanopore MinION platform. Statistical analyses assessed changes in bacterial abundance, diversity, and co-occurrence patterns between sample types and across time points. Alpha diversity fell in PMICF at T2, whereas saliva diversity stayed unchanged. Periodontopathogens (*Porphyromonas gingivalis*, *Treponema denticola*, *Fusobacterium nucleatum*) rose in PMICF at T2, while NRB, *Saccharibacteria*, and *Schaalia odontolytica* stayed relatively constant. Co-occurrence analysis revealed antagonistic links between *Saccharibacteria*/NRB and periodontopathogens. IL-6 decreased significantly from T1 to T2, and CRP trended downward, though not significantly. Nitrate reductase genes *narG* and *napA* maintained stable expression throughout. Although no clinical inflammation was observed, MI placement caused a localized microbial shift and modest inflammatory responses. The stability of NRB and *Saccharibacteria*, along with their antagonistic interactions with periodontopathogens, suggests a role in preserving microbial homeostasis. These results point to potential early biomarkers and ecological approaches that could support oral health in MI patients.

Keywords: Orthodontic; Mini-implant; Oral microbiome; *Saccharibacteria*; Periodontopathogens; Nitrate-reducing bacteria.



Dr. Nada Ismah

Universitas Indonesia

DATE:
14th August 2026
VENUE:
NURI 1
TIME:
09.00 – 10.30

INFLAMMATORY MRNA EXPRESSION IN POSTORTHODONTIC TREATMENT PATIENT WITH TMD

Orthodontic treatment aims to align the dentition through a mechanical process that can trigger an inflammatory response in the stomatognathic system. In some cases, this inflammatory response can progress to temporomandibular joint disorder (TMD) with varying clinical manifestations. mRNA expression of the inflammatory biomarkers interleukin (IL)-1 β and C-reactive protein (CRP) has the potential to serve as a molecular approach to strengthen evidence of TMD following orthodontic treatment.

A total of 105 buccal mucosal swabs were collected from patients following orthodontic treatment and grouped based on clinical manifestations of TMD using the DC/TMD classification. mRNA expression of the inflammatory biomarkers IL-1 β and CRP was analyzed using quantitative real-time polymerase chain reaction (qRT-PCR).

The results showed that 37 patients did not have TMD (group 1), 17 patients had TMD associated with muscle pain (group 2), 29 patients had intra-articular TMD (group 3), and 22 patients had a combination of muscle pain and intra-articular TMD (group 4). CRP expression was higher than IL-1 β expression in groups 2 and 3, whereas IL-1 β expression was higher than CRP expression in group 4. The Kruskal-Wallis test showed that the levels of IL-1 β and CRP expression in groups 2, 3, and 4 were not statistically different. Gender and adult age had a significant influence on the occurrence of TMD in patients following orthodontic treatment. Conclusion: Higher IL-1 β expression was found in patients following orthodontic treatment with more complex TMD. mRNA expression through the IL-1 β and CRP biomarkers reinforces the evidence of inflammation in patients following orthodontic treatment with TMD.

Keywords: Temporomandibular Joint Disorder, Orthodontic Treatment, mRNA Expression, IL-1 β , and CRP.



Dr. Fadli Jazaldi

Universitas Indonesia

DATE:

14th August 2026

VENUE:

NURI 1

TIME:

09.00 – 10.30

PREDICTION MODEL OF CLASS II MALOCCLUSION IN INDONESIA SUBPOPULATION (STUDY OF DEMOGRAPHIC, RADIOGRAPHIC AND GENE POLYMORPHISMS RISK FACTORS)

Class II malocclusion is the second largest prevalence of malocclusion, affecting approximately 30% of the world's population, and its convex facial characteristics cause psychosocial problems in patients, making orthodontic treatment necessary; understanding the etiologic factors and prognosis of the case, including genetic factors as one of the dominant aetiological elements alongside demographic, clinical, radiological, and physical examination risk factors, is needed to construct prediction models that can be used to estimate the occurrence of Class II malocclusion cases. The study was conducted via buccal swabs in 141 subjects (67 with Class II malocclusion, 74 with Class I malocclusion) at the Orthodontic Clinic of RSKGM FKG UI, proceeding in two stages: PCR and RFLP analysis of genes affecting mandibular growth (LEPR Q223R) and maxillary growth (MSX1 799 G>T), followed by interviews, demographic and clinical observations, and cephalometric analysis. Chi-square testing showed that LEPR gene polymorphism (Q223R), MSX1 gene polymorphism (799, G>T), and family history of Class I and Class II malocclusion were prognostic variables included in a multivariate logistic regression prediction model; the resulting Model I (LEPR Q223R + MSX1 799 G>T + clinical data) achieved the highest discrimination value (AUC 86%) with a Hosmer-Lemeshow calibration value of 0.98, compared with alternative Model II (LEPR Q223R + clinical) and Model III (MSX1 799 G>T + clinical), both with AUC values above 79% and a calibration value of 0.97. These findings suggest that Models I, II, and III can all be used as predictors of Class II malocclusion.



***Prof. Linda
Rasubala***

University of Rochester

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

10.30 – 12.00

DENTAL MANAGEMENT OF THE MEDICALLY COMPLEX PATIENTS IN DENTAL EMERGENCY SETTINGS



**Dr. Masita
Mandasari**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

NURI 1

TIME:

09.00 – 10.30

ORAL HEALTH CARE AFTER HEAD AND NECK CANCER DIAGNOSIS: TURNING A PERIOD INTO A COMMA

Head and neck cancer represents a significant global health burden, ranking as the sixth most prevalent malignancy worldwide. Beyond its immediate threat to survival, the disease and its treatment often leave survivors with long-lasting challenges. Radiotherapy, a cornerstone of management, is particularly associated with oral complications that extend far beyond the treatment period, including xerostomia, mucositis, trismus, osteoradionecrosis, and dental caries, all of which can profoundly affect speech, swallowing, nutrition, and social interaction. The resulting disfigurement and functional impairment disrupt daily life and diminish overall quality of life. This lecture explores both short-term and long-term oral sequelae following head and neck radiotherapy, highlighting their clinical manifestations, underlying mechanisms, and impact on survivors' physical, psychological, and social well-being. Emphasis is placed on the importance of preventive oral health strategies, multidisciplinary management, and patient-centered care approaches that aim not only to mitigate complications but also to restore dignity and improve survivorship outcomes. By reframing oral health care as a continuous journey rather than a terminal endpoint, the discussion underscores the role of dentistry and oncology collaboration in transforming a "period" into a "comma" in the lives of cancer survivors.



**Prof. Anggraini
Margono**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

13.00 – 14.30

UNDERSTANDING TISSUE RESPONSES TO ORTHODONTIC FORCES: IMPLICATIONS FOR PULPA AND PERIAPICAL STRUCTURES

Orthodontic tooth movement is achieved through controlled mechanical forces that induce biological responses in the periodontal ligament, alveolar bone, dental pulp, and periapical tissues. These responses are essential for tissue remodeling and successful tooth movement but may also affect pulpal vitality and periapical health depending on the magnitude, direction, and duration of the applied forces. Excessive or prolonged forces can compromise blood flow, trigger inflammatory responses, and increase the risk of external root resorption, pulpal alterations and exacerbation of pre-existing periapical lesions. Current evidence indicates that healthy dental pulp generally undergoes reversible physiological changes when optimal orthodontic forces are applied, while teeth with well-managed endodontic treatment can also be moved safely with appropriate clinical considerations. Understanding the biological mechanisms underlying these tissue responses is essential for minimizing adverse effects and improving treatment outcomes. This review examines the effects of orthodontic forces on pulpal and periapical structures and discusses their clinical implications for evidence-based orthodontic practice.

Keywords: orthodontic forces; orthodontic tooth movement; dental pulp; periapical tissues; pulp vitality; tissue remodeling; external root resorption



**Prof. Retno
Widayati**

Universitas Indonesia

DATE:
14th August 2026
VENUE:
MERAK 3
TIME:
13.00 – 14.30

ORTHODONTIC TOOTH MOVEMENT IN ENDODONTICALLY TREATED TEETH: BIOLOGICAL CONSIDERATIONS AND CLINICAL OUTCOMES

Orthodontic tooth movement in endodontically treated teeth remains an important clinical consideration, as these teeth are commonly encountered in adult orthodontic patients. Although root canal treatment alters the internal pulpal condition of the tooth, the periodontal ligament, cementum, and surrounding alveolar bone remain the primary biological structures responsible for orthodontic movement. Therefore, endodontically treated teeth can generally be moved orthodontically, provided that the tooth is free from active periapical pathology, has adequate periodontal support, and demonstrates satisfactory coronal and radicular integrity. This seminar discusses the biological principles underlying orthodontic tooth movement in endodontically treated teeth, including periodontal ligament response, bone remodeling, inflammatory mediators, and the potential influence of previous periapical lesions or root resorption. Clinical factors such as treatment timing after endodontic therapy, quality of root canal treatment, presence of posts or restorations, root morphology, and periodontal status will also be reviewed. Special attention will be given to risk assessment and treatment planning to prevent complications such as external root resorption, ankylosis, mobility, or failure of restorative components during orthodontic mechanics. Current evidence suggests that well-treated endodontically treated teeth can respond to orthodontic forces in a manner comparable to vital teeth when appropriate force systems and careful monitoring are applied. However, compromised teeth may require interdisciplinary management involving orthodontists, endodontists, periodontists, and restorative dentists to achieve predictable outcomes. Through biological understanding and clinical evaluation, orthodontic treatment involving endodontically treated teeth can be performed safely and effectively while maintaining long-term tooth stability and function.



Dr. Dini Asrianti

Universitas Indonesia

DATE:

14th August 2026

VENUE:

MERAK 3

TIME:

13.00 – 14.30

CONSIDERATIONS FOR POST-ENDODONTIC RESTORATION IN ENDODONTIC-ORTHODONTIC INTERDISCIPLINARY PATIENTS

The long-term success of endodontically treated teeth in patients undergoing orthodontic treatment depends on comprehensive interdisciplinary planning that integrates endodontic, restorative, and orthodontic principles. Although root canal treatment itself does not substantially alter the mechanical properties of dentin, the loss of tooth structure caused by caries, trauma, previous restorations, and endodontic access significantly compromises fracture resistance, making preservation of sound tooth structure the primary determinant of prognosis. Consequently, post-endodontic restoration should be selected based on the amount of remaining coronal structure, functional demands, and the anticipated effects of orthodontic tooth movement rather than the endodontic procedure alone.

This integrated lecture reviews contemporary evidence on the restoration of endodontically treated teeth in orthodontic patients, including assessment of structural integrity, indications for fiber posts, adhesive restorations, cuspal coverage, ferrule effect, and minimally invasive restorative strategies. It also discusses the timing of definitive restoration relative to orthodontic treatment, the biomechanical response of endodontically treated teeth to orthodontic forces, and strategies to minimize complications such as coronal leakage, restoration failure, root fracture, and external apical root resorption. Clinical cases are presented to illustrate evidence-based decision-making and effective interdisciplinary communication throughout treatment planning.

By integrating current restorative concepts with orthodontic biomechanics and endodontic principles, this lecture aims to provide clinicians with practical guidelines for preserving tooth structure, optimizing restorative longevity, and achieving predictable functional and aesthetic outcomes in complex endodontic-orthodontic interdisciplinary patients.

Keywords: endodontic, orthodontic, interdisciplinary, post-endodontic restoration

**SECTION
D2**

**LECTURE
ABSTRACTS
AGDC 2026**



**Prof. Manabu
Kanazawa**

Institute of Science
Tokyo

DATE:

13th August 2026

VENUE:

SUMMIT

TIME:

13.00 – 14.30

EVALUATION OF ORAL FUNCTION IN SUPER-AGED SOCIETY

Japan has entered a super-aged society, and this demographic trend is now spreading worldwide, with the gap between average life expectancy and healthy life expectancy—years typically spent needing long-term care—remaining substantial. Among the causes of care dependency, frailty, a state of increased vulnerability to stress encompassing physical, mental, and social domains, plays a critical role, and it is preceded by a specific stage termed oral frailty. This lecture presents a conceptual framework linking oral frailty, oral hypofunction, and oral function disorders as a continuum leading toward long-term care dependency, and reviews chairside methods for evaluating oral function in older adults. Standardized diagnostic criteria and devices are introduced for assessing oral hygiene (bacterial counter or tongue coating index), oral dryness (moisture checker or Saxon test), occlusal force (pressure-sensitive film or number of remaining teeth), tongue and lip motor function (oral diadochokinesis), tongue pressure, masticatory performance (glucose-based gummy jelly test), and swallowing function (EAT-10), together with practical alternative methods for settings without specialized equipment. Particular attention is given to edentulous patients, who are almost universally diagnosed with oral hypofunction and for whom denture fabrication alone does not improve food and nutrient intake; simple dietary guidance using an illustrated brochure is shown to meaningfully increase intake of protein-rich and vegetable foods. Early, population-based screening and stepwise intervention—from community health programs through dental clinics to specialist care—are proposed as a practical model for preventing the progression from oral frailty to disability, applicable to rapidly aging societies such as Indonesia.



**Prof. Czeresna
Heriawan**

Universitas Indonesia

DATE:
13th August 2026
VENUE:
SUMMIT
TIME:
14.30 – 16.00

COMPREHENSIVE GERIATRIC ASSESSMENT AS THE FOUNDATION FOR INTEGRATED MEDICAL-DENTAL CARE

In general, Borg-Bartolo (2022) reported that the prevalence of tooth decay in elderly was 45%; while Xing in China (2018) reporting 98% of older adult aged 65 – 74 years old suffered from tooth decay. National Institute of Dental and Craniofacial Research (2025) reported that 93% of those aged >65 had tooth decay. Periodontal diseases was the second most frequent ailment, 70% of those aged >65 years had periodontal disease (NHANES, 2015). Singapore Longitudinal Ageing Study (2024) reporting that the prevalence of tooth loss was increasing from 74.6% - 89.9% within the past six years.

Oral and dental problem in elderly could be primary in origin or as a result from systemic medical condition. Oral and dental diseases perse or as a comorbid may influence the course of illness as well as their outcome. Those facts showed the need of special approach for the older adult patients. Ageing process in various organs and the characteristic of geriatric patient (i.e.: multiple pathology, decreased reserve capacity, changes in functional capacity, changes in clinical signs and symptoms, malnutrition, frailty and changes in psycho-cognitive function) provided specific perspective for this special clinical approach in oral-dental care as well as the whole entire outcome.

Special clinical approach in geriatric patient comprises physical-biological domain (including oral and dental areas), psycho-cognitive domain, social, functional, and nutritional, as well as environmental domain. Promotive, preventive, and rehabilitative approach are as important as the curative approach; not only in organ system point of view, but also from the perspective of function (disability) and handicap. The treatment should provide not only pharmacological modalities and specific procedure, but also should include nutritional, fluid, activity and psychosocial support. Above all, the need for collaboration/ integrative interprofessional care becoming an absolute matter.



**Prof. Nai - Chia
Teng**

Taipei Medical
University

DATE:

13th August 2026

VENUE:

SUMMIT

TIME:

14.30 – 16.00

BRIDGING THE GAP IN TAIWAN'S LONG-TERM CARE: NURSING PERSPECTIVES ON INTEGRATING INNOVATIVE ORAL HEALTH PRODUCTS INTO DAILY ELDERCARE

Taiwan's rapid transition into a super-aged society highlights a critical gap in long-term care (LTC): oral health. Inadequate oral hygiene among frail, dependent older adults directly contributes to systemic complications such as aspiration pneumonia, malnutrition, and reduced quality of life. Although innovative oral care products—ranging from ergonomic tools and specialized gels to smart sensors—are available, they remain underutilized in daily care settings.

Nurses and frontline care staff are pivotal in closing this implementation gap. This presentation examines the practical realities and clinical opportunities of integrating innovative oral care solutions into LTC workflows from a nursing perspective. Key discussion points include:

Operational Barriers: Addressing time constraints, safety concerns, and training deficits when caring for residents with dysphagia or cognitive decline.

Usability in Practice: Evaluating how modern oral health tools adapt to the functional limitations of older adults and care staff.

Nurse-Led Implementation: Establishing standardized protocols, interprofessional collaboration with dental experts, and institutional strategies to sustain routine oral care.

Product innovation alone cannot resolve oral health disparities in LTC settings. Sustainable impact requires nurse-led strategies that seamlessly incorporate user-friendly tools into everyday routines, transforming oral hygiene into a core pillar of preventive eldercare in Taiwan.



**Dr. Matana
Kettratad**

Thammasat University

DATE:

13th August 2026

VENUE:

SUMMIT

TIME:

14.30 – 16.00

INTERPROFESSIONAL COLLABORATION FOR GERIATRIC PATIENTS' DENTAL TREATMENT

Professional silos often lead to fragmented care pathways, which may compromise the clinical outcomes and safety of geriatric patients with complex comorbidities. Interprofessional collaboration (IPC), on the contrary, is essential for facilitating the seamless exchange of clinical data and fostering a holistic approach to patient wellness. This presentation demonstrates that the provision of geriatric care presents a significant opportunity for the establishment of IPC between the dental profession and other healthcare disciplines. The objectives of this presentation aim for 1) demonstrating diverse collaborative models, ranging from oral care in critical settings, home-visiting teams, to interventions for dysphagia, diabetes, osteoporosis, oncology, and palliative care; 2) discussing clinical coordination and communication approaches; and 3) proposing recommendations for educators and practitioners. Ultimately, this talk provides a roadmap for breaking professional silos to improve care for the aging population.



Moderated By:

***Prof. Waranuch
Pitiphat***

Khon Kaen University

GERODONTOLOGY CURRICULUM & WORKFORCE DEVELOPMENT IN ASIA MULTIPLE REPRESENTATIVES ACROSS ASIA (PANELISTS)

This is a panel discussion lead by Prof. Waranuch Pitiphat. The panelists consist of representative from 5 countries (Malaysia, Thailand, India, Indonesia, and Japan). The discussion will focus on the current status of gerodontology education: curriculum, clinical exposure and workforce development, sharing best practices and innovation and finally to discuss recommendation for regional collaboration in Asia. The expected outcome of summary of key gaps in the curriculum and workforce development, recommendation of core competencies for dental graduates, and potential directions for Asian regional network for gerodontology education, training, and research.

DATE:

13th August 2026

VENUE:

SUMMIT

TIME:

16.00 – 17.30



Prof. Jacob John

University Malaya

DATE:
14th August 2026
VENUE:
SUMMIT
TIME:
09.00 – 11.00

ADDRESSING AGEISM IN ORAL HEALTH CARE: PREVENTION AND QUALITY FOR OLDER ADULTS

Background: Ageism in oral health care remains an under-recognized barrier affecting access, prevention, and quality of care for older adults, as negative stereotypes, low expectations of oral health outcomes, and therapeutic scepticism may lead to under-treatment, delayed interventions, and compromised patient dignity. **Objective:** this presentation explores the impact of ageism on preventive practices, clinician attitudes, and the overall quality of oral healthcare delivered to older adults, while identifying strategies to promote equitable and person-centred care. **Methods:** a narrative review and perspective analysis were conducted, drawing on current literature in geriatric dentistry, public health, and health services research, examining provider attitudes, systemic barriers, preventive care uptake, and models of age-friendly oral healthcare. **Results:** ageism manifests at multiple levels, individual, institutional, and policy; clinicians may unintentionally adopt less proactive preventive approaches for older adults, particularly those with multimorbidity or functional dependency, contributing to higher prevalence of untreated caries, periodontal disease, and oral frailty, while evidence supports that early preventive interventions, individualized care planning, and interprofessional collaboration significantly improve outcomes and quality of life, and education and training in geriatric dentistry alongside exposure to positive ageing models can mitigate ageist attitudes among healthcare providers. **Conclusion:** addressing ageism is essential to advancing preventive oral healthcare and ensuring quality, dignity, and equity for ageing populations, with strengthened awareness, integration of geriatric competencies into curricula, and inclusive care models identified as critical steps toward transforming oral healthcare systems for the future.



**Dr.
Padmanabham
Thallam**

Association of Geriatric
Dentistry India

DATE:

14th August 2026

VENUE:

SUMMIT

TIME:

09.00 – 11.00

DELIVERING GERIATRIC ORAL HEALTH CARE IN COMMUNITY AND OUTREACH SETTINGS

India faces significant challenges amid a rapidly aging population, with over 80% of elderly residing in rural areas lacking adequate dental services. Unlike ASEAN counterparts like Thailand and Japan, which integrate geriatric oral care into universal health systems with specific policies for older adults, India struggles with fragmented delivery, limited geriatric training, and no dedicated national oral health policy prioritizing seniors. Key barriers include insufficient geriatric training for dental students and faculty, poor access in remote regions, financial constraints, and mobility issues for elderly patients; rural infrastructure deficits leave many primary health centers without dental surgeons or equipment, unlike better-resourced urban ASEAN models, and dentists report low confidence treating complex geriatric cases due to comorbidities and drug interactions. By contrast, Thailand and Japan provide comprehensive coverage that embeds oral health in general elderly care through home visits and subsidized services, while India's 306 dental colleges largely produce graduates untrained in geriatrics and public spending on oral health remains minimal, contributing to higher periodontal disease prevalence among seniors. The Government mandates mobile dental units via the Dental Council of India for outreach to villages and old-age homes, though implementation remains inconsistent; NGOs and service clubs support village adoption for care funding, dental teaching institutions drive interns' community service and policy advocacy for integrated geriatric curricula, and private practitioners, who dominate urban care, often hesitate to engage in low-reimbursement rural outreach, underscoring the need for public-private partnerships.



**Dr. Wong Mun
Loke**

National University of
Singapore

INTEGRATING ORAL HEALTH INTO HEALTHY AGEING POLICIES AND CARE SYSTEMS

The ageing population is a public health issue which has gained increasing attention. Maintaining the health and wellbeing of older adults has become an imperative. Oral health constitutes a pivotal part of overall health and wellbeing. Its role in helping older adults stay healthy and well cannot be underestimated. The promotion of oral health requires a multi-pronged approach including inter-professional stakeholder engagement, development of evidence-informed guidelines and policies as well as incorporating oral health within the broader context of healthcare systems. This presentation reinforces the importance of oral health for the older adult population, highlights key strategies to promote oral health among older adults as well as approaches to integrate oral health within policies and systems aimed at promoting healthy ageing.

DATE:

14th August 2026

VENUE:

SUMMIT

TIME:

09.00 – 11.00



**Dr. Fatimah
Maria
Tadjoedin**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

SUMMIT

TIME:

11.00 – 12.00

LINKING PERIODONTAL HEALTH TO HEALTHY AGING: CURRENT EVIDENCE AND FUTURE DIRECTIONS

Periodontal health is increasingly recognized as an essential component of healthy ageing. Growing evidence links periodontitis to systemic diseases and age-related conditions. These associations are thought to be mediated by interconnected inflammatory, microbial, and immunological pathways linking oral and systemic health. Maintaining healthy periodontal tissues not only preserves oral function and dentition but also contributes to overall health, quality of life, and well-being in older adults. As populations continue to age, understanding the relationship between periodontal health and healthy ageing is fundamental to developing comprehensive preventive and therapeutic strategies. This lecture will present current evidence supporting the role of periodontal health in healthy ageing, discuss the biological basis of oral-systemic interactions, and highlight future directions in periodontal medicine to support healthier ageing across the lifespan



**Prof. Eef
Hogervorst**

University Malaya

DATE:
14th August 2026
VENUE:
SUMMIT
TIME:
13.00 – 14.30

HOW DOES DENTAL STATUS AFFECT COGNITIVE DECLINE AND DEMENTIA RISK?

Several studies have found that loss of teeth is associated with a doubled risk for dementia. Recent studies indicate that dementia risk, characterised by severe memory and other cognitive function loss impacting independent living, may be especially high in Indonesia, and promoting better dental health could be an important preventative factor. Dr. Henry Setyawan and Dr. Dewi Priandini both found that loss of teeth was associated with dementia in an Indonesian Javanese cohort; IL-6 was also independently associated with dementia, while periodontitis/gingivitis and cardiovascular risk factors were not directly related. Several explanations are considered: prior dental issues such as gingivitis may have caused tooth loss; tooth loss could lead to inadequate nutritional intake, causing cognitive decline and frailty that increases fall risk and worsens cognitive function; other factors such as diabetes mellitus (linked to a sweet diet) could independently drive both tooth loss and dementia; and reduced chewing with a soft-food diet could lower cerebral perfusion, leading to hypoxia and reduced nutrient uptake in the brain. The evidence for these models will be discussed. Prof. Linda Kusdhany and her team investigated dental treatments that may result in improved cognitive function, and these data suggest that dentists can play a crucial role in reducing age-related cognitive decline and dementia risk.



**Dr. Melissa
Adiatman**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

SUMMIT

TIME:

11.00 – 12.00

INTEGRATED STRATEGIES FOR EARLY DIAGNOSIS AND PREVENTION OF ORAL DISEASES IN ASIA PACIFIC

Oral diseases remain among the most prevalent noncommunicable conditions worldwide, yet prevention and early diagnosis are still insufficiently prioritised. Across the Asia-Pacific region, dental caries, periodontal diseases, and dentine hypersensitivity affect substantial proportions of the population, impair quality of life, and contribute to considerable clinical and economic burdens. Many patients seek professional care only after symptoms become severe, when restorative, surgical, or rehabilitative treatment is required.

Oral discomfort—including tooth sensitivity, pain, gingival bleeding, inflammation, and chewing difficulty—may provide an important opportunity for earlier recognition of oral disease. Regional evidence from Malaysia, the Philippines, Vietnam, Thailand, Indonesia, and Taiwan highlights the need to identify risk factors and early clinical indicators before disease progresses to irreversible stages. Early caries lesions may be managed through remineralisation and risk-factor control, gingivitis may be reversed through effective plaque control and professional preventive care, and dentine hypersensitivity may be reduced through accurate diagnosis, behavioural modification, and appropriate oral care products.

Oral diseases are also closely associated with noncommunicable diseases through shared modifiable risk factors, including unhealthy diet, tobacco use, harmful alcohol consumption, obesity, and poorly controlled diabetes. A common risk-factor approach therefore offers an opportunity to integrate oral health promotion into broader preventive healthcare. Interprofessional collaboration between dental and medical professionals may support earlier recognition, patient education, referral, and coordinated management, particularly in populations with limited access to dental services.

Integrated prevention should combine risk-based assessment, effective self-care counselling, fluoridated and condition-specific oral care products, professional preventive interventions, recall systems, public awareness programmes, and interprofessional referral pathways. Shifting from symptom-driven treatment towards early, preventive, and person-centred care may reduce disease progression, treatment complexity, oral health inequalities, and long-term healthcare costs across the Asia-Pacific region.

Keywords: oral diseases; early diagnosis; preventive strategies; dental caries; periodontal diseases; dentine hypersensitivity; systemic health; noncommunicable diseases; interprofessional collaboration.



**Prof. Tri Budi W.
Rahardjo**

Universitas Indonesia

**Prof. Lindawati S
Kusdhany**

Universitas Indonesia

Dr. Imran Pambudi

Ministry of Health
Republic of Indonesia

DATE:

14th August 2026

VENUE:

SUMMIT

TIME:

16.00 – 17.30

FUTURE DIRECTIONS OF GERIATRIC DENTISTRY IN ASIA

Asia is experiencing one of the fastest demographic transitions in the world. The proportion of older adults is increasing rapidly, creating significant challenges and opportunities for healthcare systems, social services, and policymakers. To ensure healthy ageing and maintain quality of life among older populations, comprehensive and integrated strategies are needed at national, regional, and global levels.

In Indonesia and across Asia, the growing burden of chronic diseases, frailty, cognitive decline, functional dependency, and oral health problems among older adults necessitates stronger collaboration among policymakers, healthcare providers, researchers, and academic institutions. The development of age-friendly health systems and interdisciplinary approaches has become increasingly important to support healthy and active ageing.

This workshop brings together key experts and policymakers to discuss current policies, global directions, and future opportunities in geriatric care, including the often-overlooked role of oral health and geriatric dentistry in promoting healthy ageing.

The workshop is expected to provide a platform for exchanging knowledge, strengthening collaboration, and developing strategic directions for geriatric care in Asia. By bringing together policymakers, researchers, clinicians, and educators, the event will contribute to advancing healthy ageing and improving the quality of life of older adults through integrated and person-centered care approaches, including the essential contribution of oral health and geriatric dentistry.

**SECTION
D3**

**ORAL
PRESENTATION
ABSTRACTS**

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KP-LR02 (Literature Review)**Honey as a Supportive Treatment for Xerostomia: A Systematic Review***Salsabila Nuralifianti Dewatmoko¹, Clarissa Fadhilah¹, Ratna Kumala Indrastiti²*¹Dentistry Program, Faculty of Dentistry, Universitas Indonesia, Jakarta Pusat 10430, Jakarta-Indonesia²Department of Oral Medicine, Faculty of Dentistry, Universitas Indonesia, Jakarta Pusat 10430, Jakarta-Indonesia

Correspondence e-mail to: ratna.kumala02@ui.ac.id

ABSTRACT

Introduction: Xerostomia is commonly caused by medications, systemic diseases, salivary gland dysfunction, and cancer therapy, all of which may impair oral function and reduce quality of life. Existing therapies for xerostomia, including sialagogues, artificial saliva, and oral moisturizers, are available, but their efficacy and availability are often limited, highlighting the need for alternative supportive therapies. Honey has gained attention for its moisturizing, anti-inflammatory, and antimicrobial properties, as well as its affordability and availability. However, data on its efficacy and clinical application in xerostomia management remain unclear. Therefore, this systematic review aims to evaluate evidence regarding the efficacy, application, and safety of honey-based interventions for xerostomia management. Literature **Review:** A systematic literature review (SLR) was conducted in accordance with PRISMA 2020 guidelines. Literature searches were performed in PubMed, Scopus, ScienceDirect, ClinicalKey, Sage Journals, ProQuest, and EBSCOhost using the terms ("xerostomia" OR "mouth dryness" OR "salivary hypofunction" OR "hyposalivation") AND ("honey" OR "bee product") for English-language full-text articles published between April 2016 and April 2026. Risk of bias was assessed using the Cochrane RoB 2 tool and Newcastle–Ottawa Scale (NOS). Of 667 identified articles, 9 studies met the inclusion criteria. **Discussion:** The SLR results showed improvements in salivary flow and oral dryness, which may be from mechanical and chemical stimulations. Subjective outcomes and quality of life also showed improvements. Most randomized trials reported a low risk of bias or only minor concerns. Although the studies varied in application methods, timing, and dosage, none reported adverse effects. **Conclusion:** Findings indicate that honey may benefit patients with xerostomia, but variability in study design, outcome measures, and patient populations limits direct comparison. Further studies are required to confirm these results and clarify honey's role as a supportive therapy.

Keywords: Xerostomia; Hyposalivation; Mouth Dryness; Honey

KP-LR01 (Literature Review)

Single versus Double Implant Overdentures in Older Adults: A Systematic Review and Meta-Analysis

I Gusti Agung Ayu Tirana Pramesti Widari^{1,*}, I Gusti Ngurah Dwirendra Sastra Wardana¹, Putu Lestari Sudirman¹

¹Dentistry Study Program, Faculty of Medicine, Udayana University, Bali, Indonesia

Correspondence e-mail to: Agungtirana15@gmail.com

ABSTRACT

Background: The optimal number of implants for mandibular overdentures remains clinically important due to considerations of cost, surgical burden, maintenance, and prosthetic survival. This study compared failure, fracture, and relining risk outcomes between single implant and double implant mandibular overdentures.

Methods: PubMed, ScienceDirect, and Google Scholar were searched from inception to April 2026 [PROSPERO ID: CRD420261389353]. Comparative studies evaluating single implant versus double implant mandibular overdentures were included. The primary outcome was implant failure. Secondary outcomes included prosthetic fracture and relining. Pooled odds ratios with 95% confidence intervals were calculated. Analyses were conducted with Stata software.

Results: Eighteen studies comprising 699 patients were included, of whom 344 received single implant overdentures and 355 received double implant overdentures. The total number of implants in this study is 1,054 implants. Implant failure was significantly higher with single implant overdentures than with double implant overdentures (OR 1.89, 95%CI 1.04 to 3.44, $p=0.04$, $I^2=0\%$). In subgroup analysis by loading protocol, early loading was associated with higher failure risk for single implant overdentures (OR 3.45, 95%CI 1.13 to 10.50, $p=0.029$), whereas immediate and delayed loading showed no significant difference. Age stratification showed a progressively higher failure risk for single implant overdentures with increasing age, from ≥ 40 years (OR 1.39) to ≥ 50 or ≥ 60 years (OR 1.96) and ≥ 65 years (OR 2.51), although differences between age strata were not statistically significant. Overdenture fracture was markedly more frequent with single implant overdentures (OR 7.29, 95%CI 2.84 to 18.71, $p<0.001$, $I^2=0\%$). Relining did not differ significantly between groups (OR 1.14, 95%CI 0.29 to 4.38, $p=0.85$, $I^2=0\%$).

Conclusion: Single implant mandibular overdentures were associated with higher implant failure and higher fracture than double implant overdentures, while relining requirements were comparable. Double implant overdentures may offer greater reliability and stability. Keywords: single implant; double implants; implant failure; overdenture fracture

KP-LR03 (Literature Review)**Are Full Crowns Still Necessary? A Systematic Review of Zirconia Restorations in Endodontically Treated Teeth**

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ABSTRACT

Introduction: Restoration of endodontically treated teeth (ETT) remains challenging due to their structurally compromised nature and increased susceptibility to fracture. Zirconia-based restorations, including full crowns and partial restorations, have been widely used because of their favorable mechanical and biological properties. However, there is limited consensus on whether zirconia full crowns or conservative partial restorations provide better outcomes for ETT. **Objective:** The aim of this systematic review is to evaluate the performance of zirconia full crowns compared to zirconia-based partial restorations in ETT by assessing fracture resistance, failure patterns, and clinical outcomes. **Methods:** A literature search was conducted in Pubmed and Scopus from database inception to May 2026. The review included both randomized controlled trials (RCT), prospective studies, as well as in vitro experimental studies reporting on mechanical performance and clinical outcomes of zirconia-based restorations in ETT. **Results:** A total of 331 records were identified from the initial search, of which 16 articles met the inclusion criteria. **Discussion:** In vitro evidence consistently demonstrated higher fracture resistance for zirconia full crowns compared to partial restorations. Nevertheless, partial restorations showed acceptable mechanical performance and were often associated with more favorable failure patterns. Clinical findings indicated high survival rates for both restoration types in the short- to medium-term, with conservative designs offering additional biological advantages. **Conclusion:** Zirconia full crowns provide superior mechanical strength, whereas partial restorations offer a conservative approach with favorable clinical performance. Both modalities demonstrate reliable outcomes, supporting the use of partial restorations as a viable alternative in appropriately selected cases.

Key words: crowns, dental restorations, endodontically-treated teeth, fracture resistance, zirconia

KP-LR07 (Literature Review)**Polypharmacy, Systemic Diseases, Dry Mouth, and OHRQoL in Older Adults: A Scoping Review***Faradina Siti Zahra¹, Yuniardini Septorini Wimardhani¹, Ambar Kusuma Astuti^{1*}*¹Oral Medicine Research Group, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia

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Introduction: Dry mouth is a common problem among older adults and often occurs as a side effect of multiple diseases and long-term medication use. Previous researchers had largely treated polypharmacy, systemic diseases, dry mouth, and oral health-related quality of life (OHRQoL) as separate topics, thereby limiting understanding of their interrelationships. This scoping review aimed to map and synthesize the available evidence on the relationships among polypharmacy, systemic diseases, dry mouth, and OHRQoL in older adults. **Literature Review:** The review was conducted based on the PRISMA-ScR framework. Systematic searches were conducted in PubMed, Scopus, Europe PMC, CINAHL, the Cochrane Library, ProQuest, and ScienceDirect. Only articles published in English or Indonesian between 2011 and 2026 were included. Included studies involved adults aged 60 years and older and examined medication use, systemic diseases, xerostomia, or OHRQoL. Primary and secondary sources were used in the study to ensure the evidence was covered. Data were collected and analyzed through descriptive analysis. A total of 920 records were identified, with 75 sources included in the final synthesis. Most of the included studies were cross-sectional, and a few were systematic reviews. The sources were from different healthcare settings, including community and clinical environments. **Discussion:** Antihypertensives, antidepressants, and agents with anticholinergic effects are the most frequently reported xerogenic drugs. Diabetes mellitus and cardiovascular disease were the systemic conditions most often associated with dry mouth. Most sources demonstrated a negative impact of dry mouth on OHRQoL. **Conclusion:** The current evidence remains fragmented despite increasing research interest. Polypharmacy and systemic diseases are the major causes of dry mouth and lowered quality of life in older adults. More integrative, conceptually aligned research is needed to clarify relationships and facilitate patient-centered geriatric care.

Key words: Dry Mouth, OHRQoL, Older adults, Polypharmacy, Systemic diseases

KP-LR05 (Literature Review)**Navigating the Obliterated Space: Algorithmic Approach to Static and Dynamic Guided Endodontics in Calcified Canals***Muhammad Fadhil Witjaksana¹, Sylva Dinie Alinda^{2*}*¹Postgraduate Student, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia²Lecturer, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia

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ABSTRACT

Introduction: Pulp canal obliteration (PCO) is a complex endodontic condition characterized by the deposition of hard tissue within the root canal space, resulting in partially or entirely calcified root canals. This condition is frequently associated with chronic caries progression, previous vital pulp therapy procedures, tooth restoration, aging process and dental trauma. Conventional access relying on tactile sensation and 2D radiograph imaging may increase the risk of excessive dentin removal, ledge formation and root perforation. Literature **Review:** Recent advances in guided endodontics, either with computer static navigation (SN) or dynamic navigation (DN) techniques, have enabled more predictable management of PCO to avoid iatrogenic damage. Static navigation techniques are fabricated using CBCT data and 3D scanner to fabricate customized 3D printed guides that direct the bur along a predefined path during procedures. In contrast, dynamic navigation provides real time feedback which allows the operator to adjust instrument angulation during canal negotiation in complex anatomical situations.

Discussion: Conventional approaches enhanced by magnification and ultrasonic tips may still be effective in mild to moderate PCO cases, however these techniques are associated with higher volume of tooth structure loss and higher angle deviation compared with guided endodontic techniques. Static navigation using 3D printed guides has demonstrated high accuracy and precision in access preparation, although slight lateral deviations may occur due to scan misalignment and the fixed drill pathway. Dynamic navigation overcomes this limitation by providing real-time tracking and allowing intraoperative adjustment of drill angulation during canal negotiation. Based on the reviewed literature, a decision making framework may assist clinicians in selecting the most appropriate modality according to complexity of PCO and anatomical accessibility. **Conclusion:** Modern management of PCO should focus not only on locating the root canal, but also on preserving structural integrity. Guided endodontics enhances procedural accuracy and treatment predictability when applied within a structured clinical decision-making framework. The selection between conventional, static and dynamic navigation techniques should therefore be based on the complexity of the calcification, anatomical accessibility and dentin preservation.

Key words: pulp canal obliteration; guided endodontics; static navigation; dynamic navigation; minimally invasive endodontics; decision-making algorithm

KP-CR13 (Case Report)

Unconventional Strategy: Restoring the Maxillary Canine Region with a Narrow-Diameter Implant: A Case Report

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ABSTRACT

Introduction: The maxillary canine region poses specific challenges in managing high lateral shear forces while fulfilling anterior esthetic demands. Narrow-diameter implants (NDIs), generally defined as having a diameter of less than 3.5 mm, are typically indicated only for strictly limited anatomical spaces, primarily the incisor region. Consequently, their application in the canine region is considered unconventional. **Case Report:** A 24-year-old female presented with agenesis of tooth 23, a restricted mesiodistal space of 5.5 mm, a buccopalatal width of 6.0 mm, and a localized buccal horizontal bone defect. Guided by pre-treatment occlusal planning, an NDI (Ø 3.0 x 11 mm) was placed utilizing a surgical guide, achieving a final insertion torque of 35 Ncm. Simultaneous guided bone regeneration (GBR), utilizing a combination of autogenous bone scraps, a particulate graft, and a collagen membrane, was performed to address the buccal defect. **Discussion:** Although NDIs demonstrate survival rates comparable to standard- diameter implants, clinical guidelines often restrict their use to the incisor region. Application in the canine site traditionally carries a guarded prognosis due to excessive lateral shear forces. In the present case, the restricted 5.5 mm mesiodistal space necessitated the use of an NDI. Furthermore, GBR was essential to augment the apical anatomy and support the buccally positioned implant. The final outcome was optimized by establishing a definitive occlusal scheme designed to safely distribute eccentric forces, thereby minimizing stress, strain, and fatigue deformation on both the narrow implant components and the surrounding alveolar bone. **Conclusion:** The combination of an NDI with simultaneous GBR and meticulous occlusal optimization represents an effective, albeit unconventional, strategy for maxillary canine restoration. This approach successfully overcomes strict spatial and biomechanical limitations to achieve optimal functional and esthetic rehabilitation.

Key words: maxillary canine, narrow-diameter implant, agenesis, guided bone regeneration, occlusal scheme

KP-CR22 (Case Report)**Conservative Surgical Management of an Extensive Dentigerous Cyst in an Adolescent Patient: A Case Report***Nur Arifiana¹, Sri Rezeki¹, Vera Julia¹*¹Department of Oral and Maxillofacial Surgery, Universitas Indonesia Hospital, Depok, Indonesia

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ABSTRACT

Introduction: Extensive dentigerous cysts in adolescent patients may present significant surgical challenges due to cortical perforation, displacement of adjacent teeth, and the risk of damage to vital anatomical structures. Conservative approaches such as marsupialization have been advocated to reduce surgical morbidity while preserving mandibular integrity and promoting gradual bone regeneration. This report describes the conservative management of a large mandibular dentigerous cyst associated with multiple impacted teeth in an adolescent patient. **Case Report:** An 18-year-old male presented with progressive swelling of the left mandible for two years. Clinical examination revealed a firm enlargement involving the left posterior mandible. Computed tomography demonstrated a large cystic lesion extending from teeth 34–38 with cortical perforation, root resorption, displacement of adjacent teeth, and association with impacted teeth. Differential diagnoses included dentigerous cyst and odontogenic keratocyst. Histopathological examination confirmed a dentigerous cyst without malignant transformation. The patient underwent marsupialization under general anesthesia combined with odontectomy of impacted third molars and extraction of severely involved teeth. An obturator was applied to maintain decompression of the cystic cavity and facilitate postoperative healing. Follow-up evaluation demonstrated favorable wound healing, reduction of facial asymmetry, gradual improvement of transient paresthesia, and no evidence of recurrence after three months.

Discussion: Large dentigerous cysts with cortical perforation may mimic more aggressive odontogenic lesions, making histopathological confirmation essential. Marsupialization was selected to minimize surgical morbidity and preserve surrounding anatomical structures in this young patient. **Conclusion:** Marsupialization combined with selective tooth extraction and obturator therapy may represent an effective conservative approach for extensive mandibular dentigerous cysts, providing satisfactory healing with minimal postoperative morbidity.

Keywords: Dentigerous Cyst; Marsupialization; Tooth, Impacted; Odontogenic Cysts; Mandible

KP-CR23 (Case Report)

Navigating the Nadir: Oral Medicine Management of Necrotizing Lesions in Acute Leukemia with Febrile Neutropenia

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Abstract

Introduction: Necrotizing periodontal diseases (NPDs), including necrotizing gingivitis (NG) and stomatitis (NS), are aggressive infections frequently associated with severe immunosuppression. In leukemia patients, chemotherapy-induced febrile neutropenia creates a high-risk environment for these necrotic oral lesions, requiring immediate intervention to prevent further systemic complications. This case series aims to illustrate the clinical progression and multidisciplinary management of necrotizing oral lesions in leukemia patients during chemotherapy-induced neutropenia. **Case Report:** This series describes two cases managed by Oral Medicine at Dharmais Cancer Hospital. Case 1 involved a 31-year-old male with Acute Lymphoblastic Leukemia (ALL) who developed a painful necrotic ulcer on the lateral tongue (NUS) twelve days post-HyperCVAD IIIB chemotherapy. Onset occurred during profound neutropenia (ANC: $0.01 \times 10^3/\mu\text{L}$). Case 2 involved a 45-year-old female with Acute Myeloid Leukemia (AML M3) presenting with palatal gingival necrosis (NUG) twenty-two days post-D3A7 induction chemotherapy, also coinciding with an absolute neutrophil count (ANC) of $0.01 \times 10^3/\mu\text{L}$. Both patients exhibited high fevers and systemic symptoms. Oral management for both cases included intravenous metronidazole (3×500 mg), 3% hydrogen peroxide, and 0.2% chlorhexidine gluconate rinses. Complete resolution in Case 1 was achieved within six days, correlating with neutrophil recovery (ANC: $3.26 \times 10^3/\mu\text{L}$), while Case 2 showed significant pain reduction and halted progression. **Discussion:** The chemotherapy-induced nadir is the primary driver of necrotizing oral lesions in leukemia, as the depletion of neutrophils permits opportunistic anaerobic bacteria to cause rapid tissue necrosis. Intravenous metronidazole serves as a cornerstone of therapy due to its efficacy against suspected anaerobes. A multidisciplinary approach involving hematologists and oral medicine specialists is essential for the timely management of these complications. **Conclusion:** Necrotizing oral lesions are critical markers of profound immunosuppression in leukemia patients. Early detection and a combination of systemic antimicrobial therapy with meticulous local antiseptic care are vital for tissue recovery and the prevention of systemic sequelae.

Key words: necrotizing e stomatitis, necrotizing gingivitis, acute myeloid leukemia, acute lymphoblastic leukemia, febrile neutropenia

KP-CR09 (Case Report) Orthodontic Correction of Smile Components

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ABSTRACT

Orthodontic treatment aims to improve the function of the stomatognathic system while enhancing dental and facial aesthetics. Treatment success is determined not only by malocclusion correction, but also by the achievement of measurable aesthetic parameters. The present case highlights the contribution of smile analysis to treatment planning and aesthetic outcome assessment in a patient with mild skeletal class III malocclusion.

A 28-year-old male presented with a chief complaint of irregular tooth alignment. Clinical examination showed a balanced facial profile with a straight profile. Cephalometric analysis demonstrated a mild skeletal class III relationship (ANB -2o) with dental class I relationship. Smile aesthetics were compromised by increased buccal corridors and mandibular incisor display during smiling. Intraoral examination showed moderate mandibular crowding, slight mandibular midline deviation to the right, and a square mandibular arch form. The patient underwent non-extraction fixed orthodontic treatment using the MBT prescription.

The treatment resulted in measurable improvements in smile aesthetics. Improved anterior alignment enhanced dental symmetry and regularity, while arch form modification reduced the buccal corridors and increased smile fullness. These findings demonstrate that optimization of smile aesthetic parameters can be achieved through well-planned orthodontic treatment.

This case highlights the role of smile analysis in identifying smile-related problems and guiding orthodontic treatment. Small changes in tooth position and arch form improved smile appearance while maintaining the patient's favourable facial profile. Incorporating smile analysis into diagnosis, treatment planning, and mechanotherapy is essential to achieve predictable and aesthetic outcomes.

Key words: smile analysis; smile aesthetics; class III malocclusion; buccal corridor; arch form; smile fullness.

KP-CR29 (Case Report)**Healing of Periapical Lesion Following Bioceramic Sealer Extrusion in Maxillary Anterior Tooth: A Case Report**

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Abstract

Introduction: Pulp necrosis accompanied by chronic apical abscess in anterior teeth may lead to persistent infection, pain, and swelling that interfere with mastication and daily activities. Root canal treatment aims to eliminate intracanal infection and promote periapical healing. This case report describes periapical healing following root canal treatment using rotary instrumentation and bioceramic sealer despite the occurrence of apical sealer extrusion. **Case Report:** A 16-year-old male patient presented with pain and swelling in the upper left anterior tooth, resulting in difficulty eating for one week. The patient had previously taken analgesics; however, the symptoms persisted. Clinical and radiographic examinations revealed a diagnosis of pulp necrosis with chronic apical abscess on a maxillary anterior tooth. Root canal treatment was performed using a rotary instrumentation system for biomechanical preparation, followed by irrigation and obturation with a bioceramic sealer. During obturation, sealer extrusion beyond the apical foramen occurred. After treatment, the patient's subjective complaints and swelling resolved completely. Six-month follow-up evaluation demonstrated the absence of clinical symptoms and radiographic evidence of periapical lesion healing. **Discussion:** Bioceramic sealers possess favorable physicochemical and biological properties, including biocompatibility, bioactivity, and sealing ability, which may support periapical tissue healing. Although apical extrusion of root canal sealer is generally undesirable, limited extrusion of bioceramic sealer may be well tolerated by periapical tissues due to its low cytotoxicity and osteoconductive potential. In this case, no postoperative complications were observed, and radiographic healing was evident during follow-up evaluation. **Conclusion:** Root canal treatment using rotary instrumentation and bioceramic sealer demonstrated favorable clinical and radiographic outcomes in a maxillary anterior tooth with pulp necrosis and chronic apical abscess, despite the occurrence of apical sealer extrusion.

Key words: bioceramic sealer; periapical healing; periapical lesion; root canal treatment; sealer extrusion

KP-CR26 (Case Report)**Management of Chemotherapy-Induced Oral Mucositis with Topical Doxycycline as an Alternative Therapy: Case Report**

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Introduction: Chemotherapy causes cytotoxic damage on rapidly dividing cells, including the oral epithelium, while inducing oxidative stress and dysregulated inflammatory responses. In patients with acute myeloid leukemia (AML) treated with low-dose cytarabine (LDAC), these adverse effects are amplified by immunosuppression and pancytopenia. Oral mucositis is a common complication that arises from epithelial injury and cytokine activation, progressing to ulceration with mucosal breakdown, severe pain, and increased infection risk. Doxycycline has been proposed as an alternative therapy due to its anti-inflammatory and host-modulatory effects, including inhibition of matrix metalloproteinases and pro-inflammatory cytokines, suggesting its potential as an accessible approach for managing ulcerative oral mucositis. **Case Presentation:** A 54-year-old female referred from internist, RSUI inpatient with AML M2 undergoing LDAC chemotherapy. She reported severe oral pain and widespread ulcerations, characteristic of grade 4 oral mucositis. Clinical examination revealed an extensive ulcerative lesion with sloughing across multiple oral sites, including labial and buccal mucosa, tongue, palate, and oropharyngeal region, and without signs of fungal infection as suspected before. Patient was confirmed pancytopenia with severe leukopenia. She was treated with 100-mg dose of doxycycline-that was applied in powdered form, diluted in water and administered as a rinse-and-spit mouthwash-taken twice daily as the primary anti-inflammatory therapy. Saline mouth rinses were used adjunctively to maintain oral moisture and support oral hygiene. **Discussion:** In this case, doxycycline has anti-inflammatory and host-modulatory effects beyond its antimicrobial activity. It appears to help stabilize mucosal integrity, limit ulcer progression, and support re-epithelialization. As current approaches to mucositis treatment, emphasizing inflammation control and tissue breakdown, doxycycline represents a rational therapeutic option. Although current evidence for its use as a mouthwash remains limited, its pharmacological properties and local application are suggested as promising alternative, particularly in resource-limited settings. **Conclusion:** Topical doxycycline mouthwash demonstrated clinical benefit in reducing ulcerative lesions and associated symptoms in severe oral mucositis.

Keywords: Oral Mucositis, Alternative Therapy, Doxycycline, Acute Myeloid Leukimia, Chemotherapy

KP-OR03 (Original Research)**Factors Associated with Oral Health Assessment Accuracy, Knowledge, Attitudes, and Practices Among Psychiatric Nurses**

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ABSTRACT

Introduction: Patients with mental disorders face risk of poor oral health due to impaired self-care, psychotropic medication effects, and limited access to dental services. Nurses play a role in maintaining health, yet their knowledge, attitudes, and practices (KAP) may be insufficient and influenced by sociodemographic factors. This study aimed to examine associations between nurses' sociodemographic characteristics, KAP, and accuracy in assessing oral health using the Oral Health Assessment Tool (OHAT) among psychiatric inpatients. **Methods:** A descriptive-analytic cross-sectional study was conducted among 31 nurses working in the stable wards of Dr. Soeharto Heerdjan Hospital, Jakarta. Seventy-one psychiatric inpatients were assessed using the OHAT. Data was collected using a validated KAP questionnaire and the OHAT, with dentist evaluations serving as the reference standard. Statistical analyses included independent t-test, ANOVA, Mann-Whitney U, Kruskal-Wallis, and correlation tests (Pearson/Spearman), with a significance level of $p < 0.05$. **Results:** Knowledge scores were associated with work experience ($p = 0.043$), whereas attitudes were associated with age ($p=0.034$) and work experience ($p = 0.033$). Practice scores showed no significant associations ($p>0.05$). The mean OHAT accuracy was 59.3%, with the highest observed in the denture and oral pain, but the lowest in the gingiva/soft tissue domain. Accuracy was higher among nurses aged >50 years ($p=0.012$), bachelor-degree ($p = 0.038$), and nurses with >10 years of work experience ($p=0.029$). No significant correlations were identified between OHAT and KAP. **Conclusion:** Work experience was associated with nurses' knowledge, while both age and work experience influenced attitudes. Older age, higher education, and longer work experience were associated with greater accuracy in OHAT, whereas KAP scores were not significantly associated with OHAT accuracy. Integrating structured, competency-based oral health training into nursing education and clinical practice may enhance nurses' oral health assessment capabilities in psychiatric care settings.

Key words: psychiatric nursing; health knowledge, attitudes, practice; oral health assessment tool (OHAT)

KP-OR05 (Original Research)**Biomolecular Interaction Analysis of Green Tea Catechins Against OmpA of *Veillonella parvula* in Biofilm Formation**

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ABSTRACT

Introduction: Oral biofilm formation is a complex process involving synergistic interactions among oral bacteria, including *Veillonella parvula*. Outer membrane protein A (OmpA) plays an important role in bacterial adhesion and biofilm stability, making it a promising molecular target for antibiofilm therapy. Catechins from *Camellia sinensis* possess antibacterial properties, but their interaction with OmpA has not been extensively investigated. **Objectives:** An in silico molecular docking study was performed using AutoDock. Four catechin ligands (Epigallocatechin Gallate/EGCG, Epigallocatechin/EGC, Epicatechin Gallate/ECG, and Epicatechin/EC) were docked against the OmpA receptor. Docking validation was conducted through ligand re-docking with RMSD evaluation. Binding affinity (ΔG), inhibition constant (K_i), and non-covalent interactions were analyzed using 2D and 3D visualization. **Results:** Docking validation demonstrated an RMSD value below 2 Å, indicating reliable docking performance. Epicatechin (EC) and epicatechin gallate (ECG) exhibited the strongest binding affinity with ΔG values of -9.37 kcal/mol and -9.35 kcal/mol, respectively. Both ligands formed multiple hydrogen bonds, Van der Waals interactions, and aromatic interactions that stabilized the ligand-receptor complex. In contrast, EGCG and EGC showed weaker affinity due to fewer stabilizing interactions. **Conclusion:** Epicatechin (EC) and epicatechin gallate (ECG) demonstrated the greatest potential as OmpA inhibitors among the tested catechins and may inhibit the early formation of *Veillonella parvula* biofilm. Further molecular dynamics and in vitro studies are required to validate these findings.

Key words: *Camellia sinensis*, catechins, OmpA, *Veillonella parvula*, biofilm.

KP-OR01 (Original Research)**Assessment of Head Posture and Dentocraniofacial Morphology in relation to Vertical Facial Growth Patterns**

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ABSTRACT

Objective: The treatment strategies in long and short face syndromes vary across age groups and must be tailored according to the severity and etiology of this malocclusion. When the underlying etiology of this syndrome is identified and addressed in a timely manner during the growth phase, normal craniofacial development may be achieved. In contrast, delayed diagnosis often results in persistence of the condition into adulthood, where its management remains a considerable clinical challenge for modern orthodontic practice. This study aimed to assess the changes of head posture and dentocraniofacial morphology based on vertical facial pattern in adult orthodontic patients. **Methods:** A cross-sectional observational analytic study was conducted using pre and post lateral cephalometric radiographs from 23 adult patients for each long face syndrome (facial axis $< 86.5^\circ$) and short face syndrome (facial axis $> 93.5^\circ$), treated in Universitas Indonesia Dental and Oral Hospital. This study used Winceph software in angular variables SN-MP, UI-PP, LI-MP as well as the distance of LAFH and UI-APg to head posture (NSL/OPT, NSL/CVT, NL/OPT, NL/CVT) using the Pearson correlation test to determine the presence or absence of correlation between variables. **Results:** Significant changes was found in both groups, an increase values were observed in mandibular plane angle (SN-MP) and lower anterior facial height (LAFH) in short face syndrome group, while a decrease value was found in long face syndrome group ($p < 0.05$). However, no statistically significant changes were found in incisor inclinations (UI-PP, LI-MP, UI-APg) or any head posture measurements (NSL/OPT, NSL/CVT, NL/OPT, NL/CVT) ($p > 0.05$) in both groups. Correlation analysis revealed no significant associations between changes in dentocraniofacial morphology and head posture. **Conclusion:** This indicates that both groups demonstrated noticeable changes in the skeletal measurements SN-MP and LAFH. In contrast, the dental variables and head posture did not differ significantly between the groups. Overall, these results imply that orthodontic therapy can effectively camouflage adult patients presenting with either long face or short face syndromes.

Keywords: head posture; long face syndrome; short face syndrome

KP-OR04 (Original Research)**Cross-Cultural Adaptation, Validity, and Reliability of Dental Patients' Awareness and Understanding of TMDs Questionnaire**

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ABSTRACT

Introduction: Temporomandibular disorders (TMDs) are prevalent conditions affecting the stomatognathic system and are associated with significant physical and psychosocial burden. However, public awareness of TMDs remains limited, contributing to delayed diagnosis and management. Valid and culturally appropriate instruments to assess TMD knowledge in Indonesia are currently unavailable. **Objectives:** This study aimed to cross-culturally adapt and evaluate the validity and reliability of the Indonesian version of the Dental Patients' Awareness and Understanding of TMDs questionnaire. **Methods:** A two-phase study was conducted. Phase I involved cross-cultural adaptation based on Beaton et al. guidelines. Phase II consisted of validity and reliability evaluation. Face and content validity were first assessed by three experts in orthodontics using Aiken's V, I-CVR, I-CVI, and Modified Kappa. Subsequently, face and content validity were evaluated by 33 respondents using mean scores, I-CVI, and qualitative feedback. Each stage was followed by expert consultation and item revision. Test-retest reliability was assessed among 83 patients at RSKGM FKG UI using Cohen's Kappa and Intraclass Correlation Coefficient (ICC) with a two-week interval. **Results:** All items demonstrated high relevance (Aiken's V >0.80) and excellent content validity (I-CVI ≥0.90). Most items showed substantial to almost perfect agreement (modified Kappa ≥0.60), while three items demonstrated lower values, although still within acceptable levels. Face validity results indicated high clarity and comprehensibility. Reliability analysis showed substantial to excellent agreement, with Kappa and ICC values exceeding 0.60, confirming the stability of the instrument over time. **Conclusion:** The Indonesian version of the questionnaire is a valid and reliable instrument for assessing public knowledge of TMDs and may support future research and targeted educational interventions in Indonesia.

Key words: Temporomandibular disorders, Cross-cultural adaptation, Public knowledge questionnaire, Validity, Reliability

**SECTION
D4**

**POSTER
PRESENTATION
ABSTRACTS**

KP-CR01 (Case Report)**Endodontic Management of a Mandibular Second Molar with Vertucci Type II Anatomy: A Case Report***Silke Ramadhani Tresnatri¹, Dewi Anggraini Margono^{2*}*¹*Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia²Professor at Departement of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia

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ABSTRACT

Introduction: Anatomical variations of the root canal system may increase the complexity of endodontic treatment. One variation found in mandibular molars is Vertucci Type II canal configuration, in which two separate canals merge into one canal before reaching the apical foramen. This anatomy may complicate cleaning, shaping, and obturation procedures and increase the risk of missed canal identification. **Case Report:** A 31-year-old female patient presented with spontaneous and persistent pain in the mandibular second molar. The tooth had been restored two years previously; however, intermittent pain frequently occurred and recently became more severe and prolonged. Clinical and radiographic examinations established a diagnosis of symptomatic irreversible pulpitis with symptomatic apical periodontitis. During access cavity preparation, a large distal canal orifice was initially suspected as a single canal. Further exploration revealed two closely positioned distal canals within the same orifice. Radiographic evaluation using the SLOB technique suggested a Vertucci Type II canal configuration, which was confirmed using an electronic apex locator and gutta-percha indentation technique. Chemomechanical preparation was performed using the crown-down technique with ProTaper Ultimate rotary instruments. Irrigation with 2.5% sodium hypochlorite and 17% EDTA enhanced canal debridement and smear layer removal. Obturation was completed using a bioceramic sealer with the hydraulic condensation technique. **Discussion:** Vertucci Type II canal configuration requires consideration of different working lengths between canals to minimize apical transportation in the canal confluence area. This anatomy may also increase the risk of missed canal identification, particularly when two closely positioned canals originate from a single large orifice. Careful canal exploration and radiographic interpretation are important for effective canal disinfection and obturation. **Conclusion:** Identification of Vertucci Type II canal configuration using the SLOB technique, electronic apex locator, and gutta-percha indentation method, combined with appropriate chemomechanical preparation and obturation techniques, may support successful endodontic management of mandibular molars with complex canal anatomy.

Key words: Vertucci type II, SLOB technique, canal confluence, gutta-percha indentation, mandibular second molar

KP-CR02 (Case Report)**Posterior Indirect Adhesive Restoration Using Morphology-Driven Preparation Technique (MDPT) in Post-Endodontic Teeth: A Case Series**

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ABSTRACT

Introduction: The long-term success of root canal treatment is highly dependent on the quality of the post-endodontic restoration. Advances in adhesive dentistry have enabled more conservative restorative approaches, particularly in posterior teeth, by preserving sound tooth structure. This case series aims to present the clinical application of posterior indirect adhesive restorations (PIAR) in endodontically treated teeth. **Case Report:** Three patients treated at the Dental Hospital, Faculty of Dentistry, Universitas Indonesia, presented with posterior teeth requiring root canal treatment. Following endodontic therapy, indirect adhesive restorations in the form of lithium disilicate onlays were delivered using the morphology-driven preparation technique (MDPT). Core build-up procedures were performed using adhesive techniques with low-shrinkage materials. Tooth preparation designs included an occlusal butt joint to reinforce cusps, a cervical shoulder finish line, and selective ridge-up to preserve the marginal ridge. Adhesive cementation was carried out using resin-based luting agents. These restorations were designed to provide cuspal coverage while maintaining maximal preservation of the remaining tooth structure. **Discussion:** Posterior teeth are subjected to higher occlusal loads, increasing their susceptibility to fracture following endodontic treatment. Therefore, restorations with cuspal coverage are recommended to enhance structural integrity. PIAR rely on adhesive principles to achieve retention and stability, primarily through micromechanical interlocking and chemical bonding between resin cements and the prepared tooth surface, resulting in a more conservative preparation. The use of minimally invasive preparation designs combined with adhesive materials may improve clinical outcomes by optimizing stress distribution, preserving tooth structure, and enhancing functional and aesthetic performance. **Conclusion:** The application of PIAR using the MDPT approach demonstrated favorable clinical outcomes in all cases. These findings suggest that adhesive onlay restorations represent a viable and conservative option for the rehabilitation of endodontically treated posterior teeth.

Keywords: Posterior indirect adhesive restorations, morphology-driven preparation technique, endodontically treated teeth

KP-CR03 (Case Report)**ONE-STAGE MANAGEMENT OF LE FORT II AND NASAL FRACTURES: A CASE REPORT**

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ABSTRACT

Background: Le Fort II fracture is a pyramidal midfacial fracture that frequently involves adjacent facial structures and may result in functional and aesthetic impairment. Concurrent nasal bone and septal fractures further complicate management and often require multidisciplinary treatment.

Case Report: A 31-year-old male presented following a motorcycle accident with complaints of facial pain involving the nasal and maxillary regions. Clinical examination revealed tenderness over the nasal area and maxillary mobility. Computed tomography demonstrated multiple fractures involving the nasal bones, bilateral maxillary sinus walls, right orbital floor, and left maxillary bone, consistent with a Le Fort II fracture pattern accompanied by nasal bone fracture and septal injury. The patient underwent open reduction and internal fixation under general anesthesia. Arch bars were applied to both dental arches, followed by manual reduction and temporary maxillomandibular fixation to re-establish proper occlusion. Through a maxillary vestibular approach, fracture reduction and fixation were performed using a 1.6-mm long-span L plate at the zygomaticomaxillary buttress. Simultaneously, the otolaryngology team performed submucous resection of the nasal septum, nasal bone repositioning, and epistaxis control. Alar base cinch sutures and V-Y closure were utilized to maintain nasal width and upper lip morphology. **Results:** Postoperatively, stable occlusion was achieved with satisfactory facial symmetry. Panoramic radiography confirmed stable fixation. Clinical follow-up demonstrated uneventful healing of intraoral and extraoral wounds without evidence of infection, malocclusion, or significant functional impairment. **Conclusion:** Simultaneous management of Le Fort II fracture and nasal skeletal injuries through a multidisciplinary oral and maxillofacial surgery-otolaryngology approach can provide favorable early functional and aesthetic outcomes.

Keywords: Le Fort II fracture; Midfacial trauma; V-Y advancement flap; Nasal bone fracture

KP-CR04 (Case Report)

MDPT-BASED OVERLAY FOR SINGLE REMAINING WALL TOOTH AS A CONSERVATIVE ALTERNATIVE TO FULL CROWNS

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ABSTRACT

Introduction: The selection of a definitive restoration for posterior teeth with extensive structural loss must prioritize mechanical strength, preservation of biological tissue, and long-term prognosis. Following endodontic treatment, full crowns are traditionally preferred, however their preparation is highly invasive and significantly reduces tooth fracture resistance by sacrificing substantial tooth structure. Adhesive overlay restorations have emerged as a more conservative alternative, providing comparable cuspal protection to conventional crowns while maintaining structural integrity. **Case Report:** This report presents two clinical cases. The first involves a 19-year-old female with a fractured mandibular left first molar. The second involves a 21-year-old male with a partially dislodged temporary restoration on the mandibular right first molar. In both cases, only the buccal wall remained. After completing endodontic treatment, both patients were rehabilitated using indirect overlays following the MDPT. The chosen restoration material was lithium disilicate and cemented with adhesive protocol. **Discussion:** The choice of overlay restorations was aimed at preserving the post-endodontic tooth structure without the massive tissue reduction required for full crowns. MDPT preparation technique played a crucial role according to the tooth's specific geometry and structure, thereby optimizing tissue preservation and adhesive performance. Furthermore, cuspal coverage was integrated to enhance fracture resistance. Lithium disilicate was selected as the restorative material due to its excellent translucency, optimal adhesive properties, and high clinical success rates, up to 98.5% over a five-year period. **Conclusion:** Overlay restorations utilizing the MDPT approach prove to be a superior alternative to conventional crowns for molars with massive structural loss. This protocol not only provides adequate structural protection through cuspal coverage but also preserves biomechanical integrity through minimally invasive preparation and advanced ceramic adhesion.

Keywords: Crown, Lithium Disilicate, MDPT, Overlay, Post-endodontic restoration

KP-CR05 (Case Report)**Three-Dimensional Sealing in a Vertucci Type II Canal Confluence Utilizing Sonic Irrigation Activation***Lidya Dimitra Kusumah¹, Aditya Wisnu Putranto¹*

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ABSTRACT

Introduction: Management of Vertucci Type II canal configurations is clinically challenging due to the risk of apical transportation and excessive dentin removal during instrumentation of converging canals. This case report describes a conservative selective instrumentation approach combined with sonic irrigation activation to preserve root structure while achieving effective disinfection. **Case Report:** A 50-year-old female presented with symptomatic irreversible pulpitis and symptomatic apical periodontitis of the mandibular right second molar (#47). Radiographic and clinical evaluation revealed two mesial canals converging into a single apical foramen. The canal confluence was identified using an electronic apex locator and confirmed with the gutta-percha indentation technique. A selective instrumentation protocol was performed in which the primary mesial canal was prepared to full working length, while the secondary canal was instrumented only to the point of confluence to minimize structural weakening and procedural errors. Irrigation was performed using 2.5% sodium hypochlorite and 17% EDTA with sonic activation to enhance irrigant penetration and debridement in anatomically complex areas. Obturation was completed using a single-cone hydraulic condensation technique with a calcium silicate-based sealer. Final restoration was achieved with a customized lithium disilicate onlay. **Discussion:** Selective instrumentation in converging canals preserves dentin while reducing the risk of iatrogenic complications. Sonic irrigation activation improves hydrodynamic effects and enhances disinfection beyond mechanical preparation alone. The use of a bioceramic sealer supports effective three-dimensional sealing in irregular and minimally instrumented canal spaces. **Conclusion:** Accurate identification of canal confluence, conservative shaping, and enhanced irrigation are essential for successful management of Vertucci Type II canal systems. Sonic irrigation activation combined with bioceramic obturation provides a predictable approach for complex root canal anatomies.

Key words: Vertucci Type II; canal confluence; three-dimensional sealing; sonic irrigation; bioceramic sealer.

KP-CR06 (Case Report)**A Systematic Rehabilitation of a Left First Molar: Integrating PIAR Design and Fiber-Reinforced Post Systems.**

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ABSTRACT

Introduction: Rehabilitating endodontically treated molars requires balancing restorative retention with the preservation of compromised hard tissues. Structural loss from caries and endodontic access significantly reduces resistance to occlusal forces. Modern strategies increasingly integrate fiber-reinforced post systems for intraradicular stabilization with Posterior Indirect Adhesive Restoration (PIAR) designs. PIAR emphasizes morphology-driven, conservative preparation to optimize the adhesive interface and distribute stress uniformly across indirect restorations. **Case Report:** This report details the rehabilitation of an endodontically treated mandibular left first molar in a 19-year-old female. Due to extensive coronal wall loss, a fiber post was cemented in the distal canal to fortify the core build-up foundation. Subsequently, tooth preparation adhered to PIAR principles to receive a lithium disilicate onlay. This involved anatomically guided occlusal reduction and undercut elimination without sacrificing sound tooth structure, ensuring precise marginal adaptation and optimal adhesive bonding. **Discussion:** Fiber-reinforced posts provide biomechanical benefits through an elastic modulus closely approximating dentin, mitigating detrimental stress concentrations within the root. Concurrently, utilizing a PIAR design with a lithium disilicate restoration enhances fracture resistance by redirecting functional loads from vulnerable dentin to the robust restorative material. This synergy between intraradicular support and adhesive preparation design is crucial for mandibular molars enduring substantial axial and lateral masticatory forces. **Conclusion:** Integrating PIAR principles with fiber-reinforced post systems is clinically effective in restoring the structural integrity, function, and esthetics of endodontically treated mandibular first molars, yielding a highly favorable long-term prognosis.

Keywords: PIAR; Fiber-reinforced post; Mandibular first molar; Systematic rehabilitation; Endodontically treated teeth.

KP-CR07 (Case Report)**Management of a Severely Curved Root Canal Using Heat-Treated Nickel-Titanium Instrument and Sonic Irrigation Activation***Fanny Anduari Dianty^{1*} Anggraini Margono²*¹Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia²Professor at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia

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ABSTRACT

Introduction: Endodontic treatment of severely curved canals remains challenging due to the increased risk of procedural errors such as ledging, canal transportation, and instrument separation. Heat-treated nickel-titanium (NiTi) instruments improve flexibility and cyclic fatigue resistance, enabling safer shaping. However, effective disinfection is limited with conventional irrigation; therefore, sonic activation is used to enhance irrigant penetration and cleaning efficacy.

Case Report: A 24-year-old female presented with pain in the mandibular right second molar. Radiographs showed deep caries with pulpal involvement and severely curved mesial canals (Schneider angle 37°). Treatment was performed under rubber dam isolation. A glide path was established using stainless steel K-files (#08 and #10), and working length was determined using an electronic apex locator. Shaping was completed using heat-treated rotary NiTi instruments (ProTaper Ultimate) with a controlled, progressive approach to preserve canal anatomy. Irrigation with sodium hypochlorite and a final 17% EDTA rinse was performed with recapitulation, followed by sonic activation (EndoActivator). Obturation was performed using a hydraulic single-cone technique with a bioceramic sealer. Postoperative radiographs showed well-obtured canals with preserved curvature. At 6-month follow-up, the patient was asymptomatic with radiographic evidence of periapical healing.

Discussion: Heat-treated NiTi instruments facilitate safe shaping in severely curved canals by improving flexibility and maintaining the original canal trajectory, thereby minimizing iatrogenic errors. Sonic activation enhances irrigant penetration into anatomically complex regions beyond the reach of mechanical instrumentation, supporting effective chemo-mechanical disinfection. In addition, hydraulic obturation using a bioceramic sealer may improve adaptation to canal irregularities and contribute to favorable periapical healing.

Conclusion: A strategy combining heat-treated NiTi instrumentation, sonic irrigation, and hydraulic obturation provides a predictable approach for managing severely curved canals, enabling controlled shaping, effective disinfection, and favorable healing outcomes.

Key words: Dental instrument; molar; root canal obturation; root canal preparation; therapeutic irrigation

KP-CR08 (Case Report)**Aggressive Anterior Mandibular Radiolucent Lesion in an Elderly Patient: Cone-Beam Computed Tomography Case Report**

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ABSTRACT

Introduction: Jaw lesions comprise a broad variety of odontogenic and nonodontogenic lesions. Upon imaging, they can be classified as radiopaque, radiolucent, or mixed. Age significantly correlates with the frequency of jaw lesions. This report aims to describe radiographic features of an odontogenic radiolucent lesion in the anterior of mandible in an elderly patient. **Case report:** A 61-year-old male patient presented with gingival swelling in anterior mandible. The patient underwent panoramic, and an oval-shaped radiolucency was found with a well-defined multilocular hypodense. The internal structure of a single bony septa is well depicted on Cone-Beam Computed Tomography (CBCT) imaging, with buccal and lingual expansion accompanied by the loss of cortical plate. The involved mandibular right premolars and all mandibular incisors showed an external root resorption. The expansion of the lesion also involved the right inferior alveolar canal and extended to mental foramen. **Discussion:** Differentiating lesions could be a challenging task for radiologists. CBCT with high-quality images helps to identify and analyse lesions. Root resorptions and cortical loss, which are shown better in CBCT, indicate an aggressive lesion. Radiolucent lesion with highly distinctive characteristics of wispy septa furthermore the location of the lesion was in anterior mandible, this initial assessment pointed toward a diagnosis of Central Giant Cell Granuloma. Histopathological investigation ultimately revealed the diagnosis of Ameloblastoma. **Conclusion:** CBCT has a very important role for assessing the extent of lesion and anatomical involvement. While histopathological examination required for establishing definitive diagnosis and treatment, CBCT remains as reliable diagnostic modality to reveal characteristic of benign lesion.

Keywords: Central Giant Cell Granuloma, Ameloblastoma, Cone-Beam Computed Tomography

KP-CR10 (Case Report)

Management of Separated Instrument in a Curved Maxillary Molar Canal Using Non-Surgical Bypass Technique

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ABSTRACT

Introduction: Separation of endodontic instruments in curved root canals presents a significant clinical challenge, potentially compromising effective cleaning and shaping. The bypass technique is a conservative approach that allows maintenance of working length and continuation of treatment without instrument retrieval. **Case Report:** A 28-year-old patient was referred to Faculty of Dentistry Universitas Indonesia Dental Hospital presenting with pulp necrosis and symptomatic apical periodontitis in maxillary right first molar (tooth 16), complicated by the presence of a separated instrument. Radiographic examination confirmed the fragment located in the middle third of the distobuccal curved canal, along with apical radiolucency associated with the mesio-buccal and palatal canals. A non-surgical bypass approach was selected. A Glide path was established using a pre-curved #8 stainless steel hand file with the intention of negotiating past the separated instrument under copious irrigation. Canal patency was confirmed with a #8 file and the pathway was subsequently enlarged up to a #15 file. A confirmatory radiograph demonstrated successful negotiation around fragment with the file reaching the full working length. Following by pass, thorough chemo mechanical preparation was performed to all canals and obturation was completed using hydraulic condensation technique. Post-operative radiographs demonstrated adequate filling and apical healing. At one-week follow up, no clinical symptoms were reported. A definitive onlay restoration was planned to ensure long-term structural integrity. **Discussion:** Instrument retrieval in curved canals may require excessive dentin removal, increasing the risk of perforation. Therefore, a bypass approach was selected to preserve canal anatomy and maintain tooth structure. The use of pre-curved small stainless steel files and copious irrigation enable successful negotiation around the fragment and continuation of treatment safely. **Conclusion:** The bypass technique is a conservative and effective approach for managing separated instruments in curved canals while preserving tooth structure and maintaining treatment success.

Keywords: Bypass; curved canal; endodontic; fractured instrument; root canal therapy

KP-CR11 (Case Report)**Healing of an Unfavorable Endodontic-Periodontal Lesion with Bioceramic and Sonic Technology Followed by Integrative Therapy***Giovanni¹, Dewa Ayu Nyoman Putri Artiningsih²*¹Postgraduate Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia²Lecturer at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia

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ABSTRACT

Introduction: Endodontic-periodontal lesions (EPL) described as lesion involving both pulpal and periodontal tissues, and are considered to have an unfavorable prognosis by the AAE. This case report presents EPL management by integrating periodontal and root canal treatment (RCT), incorporating sonic activation and bioceramic technology during RCT. **Case:** A 25-year-old male was presented with discomfort while chewing on his first mandibular molar, the tooth had previous initiated endodontic therapy 10 years earlier. Clinical examination of tooth 46 showed negative responses to sensitivity, percussion, and palpation, with deep periodontal pocket and grade 1 furcation involvement. Radiographs revealed radiolucency at both apices, the disto-lateral aspect of the distal root, along with irregularity of the distal alveolar crest. The EPL was classified as true combined lesion. RCT was performed using 5% NaOCl activated by a sonic activator, with calcium hydroxide as interim dressing, followed by professional mechanical plaque removal. Obturation was done using hydraulic condensation with bioceramic cement. Four months after RCT, open flap debridement was carried out. At two-months evaluation, healing was observed, and the tooth was restored with definitive indirect restoration. **Discussion:** Integrating multi-disciplinary management between RCT and periodontal therapies is essential for a more favorable outcome. Proper root canal disinfection using sonic technology reduces bacterial load, which are important to the successful management of EPL due to reduced potential of cross-seeding between necrotic pulp and inflamed periodontal tissues. In addition to adequate disinfection, bioceramic cement has scientific evidence of having potential to promote healing of periapical lesion and stimulate osteogenesis, therefore beneficial in case of EPL. **Conclusion:** True combined EPL managed by proper root canal disinfection using sonic activated irrigation, obturation with bioceramic cement, and in conjunction with integrative periodontal therapies showed healing response at 6 months follow up.

Key words: Bioceramic, endodontic treatment, endodontic-periodontic lesion, interdisciplinary approach, sonic irrigation

KP-CR12 (Case Report)**Bimaxillary Surgery and Genioplasty in Post-Osteodistraction Skeletal Class II Patient with Severe Obstructive Sleep Apnea***Joseph Gunawan¹, Julia Andriani¹, Yudy Ardilla Utomo², Vera Julia², Nada Ismah³*¹Resident, Oral and Maxillofacial Surgery, Faculty of Dentistry Universitas Indonesia, Jakarta-Indonesia²Lecturer, Oral and Maxillofacial Surgery, Faculty of Dentistry Universitas Indonesia, Jakarta-Indonesia³Lecturer, Orthodontics Department, Faculty of Dentistry Universitas Indonesia, Jakarta-Indonesia

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ABSTRACT

Introduction: Obstructive sleep apnea (OSA) associated with craniofacial skeletal discrepancies often requires early intervention during growth. Distraction osteogenesis is commonly used to improve airway patency in pediatric patients; however, long-term stability remains unpredictable, previously successful distraction may not follow the growth. Consequently, definitive orthognathic surgery is frequently required to achieve stable functional and airway outcomes. **Case Report:** A 23-year-old mouth-breather woman presented with a 15-year history of progressive breathing difficulties and sleep disturbances. Facial asymmetry with a short lower third of the face and a convex profile. She had previously undergone orthodontics treatment and bilateral mandibular distraction osteogenesis at age 12 for micrognathia. Despite initial improvement, symptoms recurred in early adulthood and were accompanied by bilateral temporomandibular joint (TMJ) disorder. Clinical and cephalometric evaluation revealed a severe skeletal Class II deformity (SNA 74.88°, SNB 57.10°, ANB 17.78°, Pog-NB -8.82) with marked mandibular hypoplasia and facial asymmetry. Definitive orthognathic surgery was performed using Virtual Surgical Planning (VSP) of Maxillomandibular advancement (MMA), consisting of Le Fort I osteotomy with maxillary impaction, bilateral sagittal split osteotomy (BSSO) with transverse correction, counterclockwise rotation, and genioplasty. **Discussion:** Postoperatively, the patient demonstrated significant improvement in breathing and sleeping quality as well as facial profile, occlusion, and TMJ function. Maxillomandibular advancement combined with counterclockwise rotation resulted in effective enlargement of the upper airway, leading to complete resolution of OSA-related symptoms. This case highlights the limitations of childhood distraction osteogenesis in maintaining long-term airway stability. MMA remains the gold standard surgical treatment for severe OSA, as it provides three-dimensional airway expansion through coordinated skeletal and soft tissue repositioning. The addition of counterclockwise rotation and genioplasty further enhances airway patency, functional, and aesthetic outcomes. **Conclusion:** Definitive orthognathic surgery is essential in managing persistent OSA following childhood osteodistraction. A comprehensive approach combining MMA, transverse correction, and genioplasty provides stable functional, aesthetic, and airway outcomes.

Keywords: Obstructive Sleep Apnea; Osteodistraction; BSSO; Genioplasty; Maxillomandibular Advancement.

KP-CR14 (Case Report)**Secondary Reconstruction of Neglected Panfacial Fractures with Concomitant Odontogenic Infection Foci: A Case Report and Proposed Multidisciplinary Management Algorithm***Vita Opica Sukmawati¹, I Dewa Gede Budhi Asthana¹, Wenny Yulvie², Arbi Wijaya²*¹Resident, Oral and Maxillofacial Surgery, Faculty of Dentistry Universitas Indonesia, Jakarta-Indonesia²Lecturer, Oral and Maxillofacial Surgery, Faculty of Dentistry Universitas Indonesia, Jakarta-Indonesia**ABSTRACT**

Background: Delayed presentation of panfacial fractures remains a significant reconstructive challenge because progressive malunion, functional impairment, and concomitant infection can complicate surgical management. Evidence regarding secondary reconstruction of neglected panfacial fractures associated with odontogenic infection remains limited. **Case Presentation:** A 30-year-old man presented three months after sustaining high-energy facial trauma in a motorcycle accident. Clinical examination revealed severe malocclusion with anterior and posterior open bite, facial asymmetry, bilateral malar depression, restricted mandibular function, and poor oral hygiene. Computed tomography demonstrated bilateral zygomaticomaxillary complex fractures, a Le Fort II fracture, right mandibular subcondylar fracture, and left parasymphysis fracture with established malunion. Multiple odontogenic infectious foci were also identified. **Management and Outcome:** Following elimination of odontogenic infection sources and preoperative occlusal stabilization with arch bars, secondary reconstruction was performed under general anesthesia. Surgical management included refracturing of malunited segments, anatomical reduction, and rigid internal fixation using titanium miniplates and screws. Postoperative assessment demonstrated restoration of functional occlusion, improved facial symmetry, increased mandibular function, and satisfactory skeletal alignment without immediate complications. **Conclusion:** Secondary reconstruction using refracturing and open reduction internal fixation can successfully restore facial form and function in neglected panfacial fractures, even after prolonged delay. Comprehensive infection control, meticulous surgical planning, and multidisciplinary management are critical for achieving favorable outcomes in complex delayed presentations.

Keywords: Panfacial fracture; neglected fracture; fracture malunion; odontogenic infection; open reduction internal fixation; maxillofacial trauma.

KP-CR15 (Case Report)

Blast-Related Pediatric Mandibular Fracture, Balancing Internal Fixation Stability And Growth Preservation: A Case Report

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ABSTRACT

Introduction: Blast-related maxillofacial trauma is a high-energy injury mechanism that is rarely reported in the pediatric population yet may result in complex mandibular fracture patterns, posing a therapeutic dilemma between achieving adequate stability and preserving craniofacial growth and developing tooth buds. **Case Report:** A 10-year-old boy presenting with bilateral mandibular pain three weeks after a gas explosion injury, with a history of transient loss of consciousness and retrograde amnesia. Clinical examination revealed facial asymmetry, step deformities at the left body of mandibula and right mandibular angle, limited mouth opening, and malocclusion characterized by anterior open bite. The diagnosis of neglected multiple mandibular fractures with associated mandibular dislocation was established. **Discussion:** The patient was planned for open reduction and internal fixation (ORIF) combined with intermaxillary fixation under general anesthesia. Delayed presentation increased the complexity of fracture reduction and the risk of functional impairment. Although ORIF provides superior stability and occlusal restoration, its application in pediatric patients requires careful consideration to minimize potential disruption of mandibular growth centers and injury to developing tooth buds through precise plate placement and minimally invasive principles. **Conclusion:** This case highlights a rare presentation of blast-related neglected mandibular fractures in a child and underscores the importance of a growth-conscious. ORIF can be effectively utilized when applied judiciously to achieve optimal functional and esthetic outcomes without compromising long-term dentofacial development.

Keywords: Blast-Related Injury, Pediatric Mandibular Fracture, ORIF, Mandibular Growth, Tooth Buds, Neglected Fracture

KP-CR16 (Case Report)**Bridging Science and Function: Endodontic Abutment Preservation in Periodontally Compromised Prosthodontic Case**

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ABSTRACT

Introduction: Endodontic therapy is essential for preserving teeth with pulpal involvement, even under compromised conditions. Conservative endodontic treatment should be the first-line approach, with success rates exceeding 90% under optimal conditions. Its success is particularly important when teeth are intended as abutments for removable prostheses. Accurate diagnosis, effective canal disinfection, and high-quality obturation are key to long-term outcomes and support periodontal and prosthetic rehabilitation. **Case Report:** A 49-year-old female patient was referred for management of tooth 47 with spontaneous pain. The patient was diagnosed with generalized periodontitis, accompanied by anterior tooth mobility and a long-span fixed bridge exhibiting posterior open bite bilaterally in the mandibular arch. The bridge was removed and planned for replacement with a removable prosthesis, with tooth 47 designated as an abutment. During endodontic treatment, an iatrogenic perforation occurred while searching for an additional canal and was promptly repaired using a bioceramic material. Root canal obturation was performed using a hydraulic condensation technique with a bioceramic sealer, followed by restoration with a customized fiber post and a porcelain-fused-to-metal crown. Following prosthetic rehabilitation, posterior masticatory function was restored, with reduced anterior tooth mobility. **Discussion:** Endodontic treatment outcomes are a key factor in abutment selection. Iatrogenic perforations often result from unrecognized anatomical variations in the root canal system. The use of bioceramic materials enhances outcomes due to their superior sealing ability and biocompatibility. Furthermore, endodontically treated abutment teeth restored with fiber posts and full-coverage crowns demonstrate favorable survival, enhanced fracture resistance, and improved prognosis, particularly in removable partial denture (RPD) abutments. A multidisciplinary approach integrating endodontics, periodontology, and prosthodontics is essential for achieving optimal clinical results. **Conclusion:** Endodontic treatment of tooth 47 successfully rehabilitated the tooth as a strategic abutment for a removable partial denture in a periodontally compromised patient, restoring masticatory function and improving quality of life.

Keywords: Biocompatible Materials; Crowns; Dental Abutments; Post and Core Technique; Root Canal Therapy.

KP-CR17 (Case Report)**Double Barrel Fibular Free Flap Reconstruction For Plexiform Ameloblastoma: A Case Report**

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ABSTRACT

Introduction: Ameloblastoma is a benign but locally aggressive odontogenic tumor accounting for approximately 1% of all oral and maxillofacial tumors. The plexiform subtype carries significant recurrence risk if inadequately treated; segmental mandibular resection with free fibular flap reconstruction remains the gold standard for extensive anterior lesions. **Case Report:** A 44-year-old woman presented with a progressively enlarging anterior mandibular mass (7 × 5 × 4 cm, spanning tooth regions 35–44) over four years. Incisional biopsy confirmed plexiform-type ameloblastoma. She underwent segmental mandibulectomy and reconstruction with an autologous osteoseptocutaneous double-barrel free fibular flap in a joint procedure with Plastic Surgery.

Discussion: Anterior mandibular ameloblastoma poses unique reconstructive challenges. The double-barrel fibular technique was necessary to restore alveolar ridge height for future implant rehabilitation. Virtual surgical planning and multidisciplinary coordination were pivotal. **Conclusion:** Free fibular flap reconstruction following segmental mandibulectomy for anterior ameloblastoma provides reliable functional and aesthetic results when guided by meticulous planning and interdisciplinary collaboration.

Keywords: Double Barrel Free Fibular Flap; Ameloblastoma; Segmental Mandibular Resection

KP-CR18 (Case Report)**Necrotizing Ulcerative Periodontitis and Linear Gingival Erythema in a Patient with HIV/AIDS and Syphilis Infection**

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ABSTRACT

Human Immunodeficiency Virus (HIV) infection is an immunodeficiency condition characterized by progressive depletion of CD4+ T lymphocytes, leading to oral opportunistic infections and various oral manifestations. Necrotizing Ulcerative Periodontitis (NUP) and Linear Gingival Erythema (LGE) are the oral lesions associated with HIV infection. Syphilis infection is associated with HIV infection. Both HIV and syphilis may be in men who have sex with men (MSM), and increased disease transmission and progression. A nineteenth-year-old male presented with painful and extensive oral ulcers for one week. The lesions initially appeared on the gingiva and extended to the palate. Clinical examination revealed crater-like necrotic lesions covered with a grayish pseudomembrane on the interdental papilla, extending to the gingiva and palate, and gingival recession. Multiple brown reddish maculopapular distributed over the skin of the hands and feet, with multiple white patches and desquamation on the facial skin. Laboratory tests confirmed HIV infection (CD4 count: 77 cells/mm³), reactive VDRL (ratio: 1:4), and positive TPHA confirmed syphilis infection. Follow-up examination revealed a distinct linear erythema along the upper anterior gingival margin, consistent with the feature of LGE. Treatment included irrigation with hydrogen peroxide solution, systemic antibiotics (amoxicillin and metronidazole), topical antifungal therapy (nystatin), and chlorhexidine mouthwash. The patient was referred for antiretroviral therapy and received syphilis treatment. Severe immunosuppression in HIV infection promotes aggressive periodontal destruction and opportunistic infections. Syphilis coinfection contributes to mucosal disruption and immune dysregulation, increasing HIV transmissibility and worsening clinical outcomes. These conditions collectively explain the rapid progression and severity of oral lesions observed in this patient. Necrotizing Ulcerative Periodontitis and LGE are oral manifestations in patients with HIV/AIDS, reflecting severe immunosuppression and contributing to the progression of periodontal diseases. Coinfection with HIV and syphilis, particularly in high-risk groups such as men who have sex with men (MSM), demonstrates a synergistic effect that worsens conditions

Keywords: HIV/AIDS, Linear Gingival Erythema, Man Sex Man, Necrotizing Ulcerative Periodontitis, Syphilis.

KP-CR19 (Case Report)

Post Extraction Necrotizing Ulcerative Stomatitis in Patient with Rheumatoid Arthritis on Methotrexate

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ABSTRACT

Background: Necrotizing ulcerative stomatitis (NUS) is driven by a polymicrobial infection predominantly *Spirochetes* and *Fusobacterium* acting on compromised tissue, causing deep, painful ulceration, pseudomembrane formation, and severe necrosis. NUS could be associated with immunocompromised condition such as rheumatoid arthritis (RA). Methotrexate, the gold standard for RA treatment, has been reported to cause oral ulcerations and impair wound healing which can be caused by dental extraction. **Case Report:** A 59-years-old female patient diagnosed with RA and medicated with methotrexate was referred to the oral medicine department with main complaint of severe pain after dental extraction. The wound was accompanied by large ulcers coated with white and yellowish necrotic tissue spreading the whole right mandibular gingiva. X-Ray showed no evidence of bone necrosis at the affected region. Diagnosis of NUS was made based on the clinical findings. Therapies included multiple regiments of antibiotics therapies, oral rinses of 0.2% chlorhexidine gluconate and 3% H₂O₂ solution and cease of methotrexate after consultation with patient's internist. After one-month, the oral lesions showed significant improvement. **Discussion:** The pathogenesis in this case is likely multifactorial, involving local trauma from extraction, impaired wound healing, and immunosuppression associated with methotrexate therapy. Methotrexate may act as the main predisposing factor in the development of NUS following dental extraction by impairing host immune response thus increasing susceptibility to infection and delaying wound healing by inhibiting re-epithelialization and reducing collagen synthesis which finally contributing to rapid progression of necrotizing lesions. **Conclusion:** This case report showed a case of NUS which developed after dental extraction on a patient treated with methotrexate highlighting the need for early recognition and comprehensive management to prevent severe tissue destruction and disease progression.

Keywords: Necrotizing Ulcerative Stomatitis, Tooth extraction, Immunocompromise patients, methotrexate

KP-CR20 (Case Report)**Management of a C-Shaped Mandibular Second Molar Using Endodontic Treatment and Endocrown Restoration***Inggri Yelwita Seputri¹, Dini Asrianti²*¹Postgraduate Student, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia²Lecturer of Department of Conservative Dentistry, Faculty of Dentistry Universitas Indonesia, Jakarta, Indonesia

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ABSTRACT

Background: Previously initiated therapy (PIT) refers to incomplete endodontic treatment, which may result in persistent infection and structural compromise of the affected tooth. Root canal treatment involves the removal of infected pulpal tissue, followed by cleaning, shaping, and obturation. The presence of complex root canal anatomy, such as a C-shaped canal configuration, further increases the difficulty of endodontic management and may affect treatment outcomes. Definitive restorations, such as Endocrowns preserve tooth function after endodontic therapy.

Case report: A 31-year-old male patient presented with a dislodged restoration on the left mandibular second molar (tooth 37) without current pain. Clinical examination revealed negative pulp vitality, positive percussion, and negative palpation, leading to a diagnosis of previously initiated therapy with symptomatic apical periodontitis. Radiographic evaluation demonstrated a curved root canal, distal cervical radiolucency, and distal alveolar bone loss without periapical lesions. Cone-beam assessment under a dental operating microscope confirmed a C-shaped canal configuration (Fan et al., Category IV). Nonsurgical multi visit root canal treatment was performed. Obturation was completed using the warm vertical condensation technique with a bioceramic sealer. **Discussion:** The management of C-shaped canal systems presents considerable challenges due to their complex and variable anatomy, which may compromise effective cleaning, shaping, and obturation. The use of magnification and meticulous canal exploration is critical for accurate identification and management of such configurations. From a restorative perspective, the use of an endocrown combined with deep margin elevation represents a conservative and biomechanically favourable approach for posterior teeth with significant structural loss. This strategy allows for preservation of remaining tooth structure while ensuring adequate marginal integrity and functional stability. **Conclusion:** Successful management of teeth with previously initiated therapy and complex canal morphology requires accurate diagnosis, magnification-assisted treatment, and appropriate restorative strategies. The combination of non-surgical root canal treatment and endocrown restoration can result in favorable clinical and biological outcomes.

Key words: Bioceramic; C shaped root canal of tooth; Crown; Dental Marginal Adaptation ; Pulp necrosis; Root canal therapy;

KP-CR24 (Case Report)**Non-Surgical Endodontic Management of CBCT-Diagnosed Periapical Cyst-Like Lesion in Maxillary Central Incisor: A Case Report***Margaretha Taruli¹, Ike Dwi Maharti², Valeria Widita²*¹Post-Graduate Student, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia²Lecturer, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia

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ABSTRACT

Introduction: Large periapical lesions, including cyst-like lesions, abscesses, and granulomas, are typically caused by microbial infection within necrotic root canal systems. Non-surgical endodontic therapy aims to eliminate infection and is considered the first-line treatment before surgical intervention. This case report highlights the successful non-surgical management and subsequent healing of a distinct periapical cyst-like lesion, accurately dimensioned using Cone-Beam Computed Tomography (CBCT). **Case report:** A 26-year-old female was referred for endodontic treatment of teeth 11 and 21, eight years after trauma. Both teeth had porcelain-fused-to-metal crowns and were tender to percussion but negative to palpation. CBCT revealed a 6.2 mm periapical cyst-like lesion on tooth 11 and a 2.8 mm periapical abscess on tooth 21. Non-surgical root canal treatment was performed over three visits using 5% sodium hypochlorite, EDTA, and normal saline for irrigation, with calcium hydroxide as an intracanal medicament. Obturation was completed using bioceramic sealer with hydraulic condensation technique, followed by definitive restoration with lithium disilicate crowns. **Discussion:** The primary goal of endodontic therapy is the comprehensive elimination of the microbial load within the root canal system, thereby establishing a favorable biological environment for the healing of periapical tissues. Following non-surgical intervention, routine periapical radiographs demonstrated progressive radiopacity filling the initially radiolucent defects at teeth 11 and 21, indicative of early osseous healing. Cone-Beam Computed Tomography (CBCT) assessment confirmed the dimensional regression of both the cyst-like lesion on tooth 11 and the periapical abscess on tooth 21. **Conclusion:** Follow-ups at 3, 6, and 9 months demonstrated progressive healing evidenced by a reduction in lesion size and the absence of clinical symptoms. This outcome can be attributed to effective chemomechanical debridement, antimicrobial irrigation, intracanal medication, and adequate obturation. Both CBCT and routine periapical radiography provided precise assessment and monitoring of lesion healing.

Keywords: cone-beam computed tomography, periapical disease, radicular cyst, root canal therapy, treatment outcome.

KP-CR24 (Case Report)

Reversing Premature Facial Aging: Esthetic And Functional Improvement Through Multimodal Full-Mouth Rehabilitation With Altered Vdo

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ABSTRACT

Introduction: Tooth loss is commonly associated with aging; however, it may also occur in younger individuals, leading to premature functional and esthetic deterioration. Loss of posterior support may alter the vertical dimension of occlusion (VDO), resulting in facial changes disproportionate to the patient's chronological age. Although compensatory mechanisms such as passive eruption and neuromuscular adaptation may partially maintain VDO, they often mask underlying discrepancies. Therefore, accurate assessment of VDO is essential and should not be overlooked. Full-mouth rehabilitation (FMR) is indicated to re-establish occlusal harmony, function, and facial esthetics. A multimodal approach integrating direct restorations, fixed and removable prostheses enables comprehensive rehabilitation. **Case Report:** A 44-year-old female presented to RSKGM UI with multiple missing posterior teeth, lower anterior diastemas and tooth wear, and a prematurely aged facial appearance. Clinical evaluation revealed an altered VDO despite a normal freeway space (~3 mm), likely masked by neuromuscular adaptation. Comprehensive treatment planning was performed, integrating digital smile design and an intraoral mock-up, facilitating visualization of anticipated outcomes, patient communication, expectation management, and informed consent prior to irreversible procedures. A staged multimodal FMR was then undertaken. Implants were placed in the mandibular posterior region restoring posterior support, while upper interim maxillary removable partial dentures served as treatment dentures increased the VDO and evaluate neuromuscular tolerance. Following successful adaptation, definitive rehabilitation was completed using a combination of direct restorations, veneers, and crowns. **Discussion:** VDO determination requires a multifactorial approach. A normal freeway space may obscure underlying discrepancies due to neuromuscular adaptation, highlighting the limitation of static measurements alone. Treatment dentures provide reversible means to assess VDO alteration adaptation. A multimodal FMR allows individualized rehabilitation addressing both functional and esthetic needs. **Conclusion:** Multimodal FMR effectively improves esthetic and function in patients with premature facial aging. Comprehensive evaluation of VDO, including neuromuscular considerations, is essential for accurate diagnosis and predictable outcomes.

Keywords: Premature Aging; Vertical Dimension of Occlusion; Full Mouth Rehabilitation; Multimodal Restoration.

KP-CR25 (Case Report)
Pathological Mandibular Fracture Secondary To
Chronic Osteomyelitis Following Chemotherapy For
Non-Hodgkin Lymphoma: Case Report

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ABSTRACT

Introduction: Pathological mandibular fractures secondary to chronic osteomyelitis are uncommon and present significant diagnostic and therapeutic challenges, particularly in patients with a history of hematologic malignancy. Differentiating chronic infection from post-treatment changes or tumor recurrence is essential for appropriate management. **Case Report:** A 21-year-old female presented with progressive swelling of the right mandible for two years. The patient had a history of non-Hodgkin lymphoma and had completed six cycles of chemotherapy, achieving clinical remission. Clinical examination revealed facial asymmetry with a firm, well-circumscribed, non-tender mass measuring approximately 4 × 3 × 3 cm over the right mandible. Intraoral examination demonstrated vestibular swelling in the region of teeth 45–48 accompanied by grade II–III tooth mobility. Contrast-enhanced computed tomography revealed a well-defined solid lesion involving the right hemimandible, associated with bony destruction and regional lymphadenopathy. Histopathological examination of the previous biopsy demonstrated necrotic bone trabeculae and fibrotic connective tissue without evidence of malignancy. Laboratory findings were unremarkable except for moderately impaired renal function. Based on the clinical, radiological, and histopathological findings, a diagnosis of pathological mandibular fracture secondary to chronic osteomyelitis was established. **Discussion:** Preoperative management included empirical intravenous antibiotics, multidisciplinary evaluation, and systemic optimization. Surgical treatment consisting of sequestrectomy, mandibular reconstruction using a reconstruction plate, multiple odontectomies, and extraction of involved teeth was performed to eliminate necrotic tissue and restore mandibular continuity and function. **Conclusion:** Pathological mandibular fractures secondary to chronic osteomyelitis in patients with a history of lymphoma require a comprehensive diagnostic approach to exclude malignancy recurrence. Combined surgical debridement and mandibular reconstruction are essential for achieving favourable functional and structural outcomes.

Keywords: pathological mandibular fracture; chronic osteomyelitis; non-Hodgkin lymphoma; sequestrectomy; mandibular reconstruction

KP-CR27 (Case Report)**Translating Minimally Invasive Endodontics Using Heat-Treated EDM Files: Reduced Postoperative Pain in Two Cases***Bernike Davitaswasti¹, Citra Kusumasari^{2*}*¹Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Jakarta, Universitas Indonesia²Assistant Professor at Department of Conservative Dentistry, Faculty of Dentistry, Jakarta, Universitas Indonesia

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ABSTRACT

Introduction: Postoperative pain remains a common complication following root canal treatment in teeth with complex canal anatomies, affecting 25–40% of patients. Minimally invasive endodontics emphasizes preservation of tooth structure, particularly during canal shaping, through advances in rotary instrumentation technology. A heat-treated nickel–titanium system manufactured using EDM (Electrical Discharge Machining) technology, HyFlex EDM, demonstrates enhanced flexibility and cyclic fatigue resistance. These properties facilitate conservative management of complex canal anatomies by respecting the original canal curvatures and narrow canal configurations with minimal dentin removal, thereby reducing apical debris extrusion and postoperative pain. **Case Report:** Case 1. A 25-year-old female patient presented with persistent discomfort in tooth 46 following incomplete previously initiated therapy with ledge formation. The ledge was bypassed using precurved hand files, followed by glide path establishment and conservative shaping with HyFlex EDM. Case 2. A 31-year-old female patient presented with symptomatic irreversible pulpitis in tooth 47 with cervical interference and narrow canal anatomy. After meticulous canal negotiation and glide path preparation, shaping was completed using HyFlex EDM. Both cases were managed using standardized irrigation and obturation protocols. Serial Visual Analog Scale (VAS) evaluations at 1, 2, 3, and 7 days after instrumentation and 1 day after canal obturation. Both cases demonstrated low postoperative pain based on serial VAS evaluations. **Discussion:** Minimization of apical debris extrusion, which may induce inflammatory reactions in the periapical tissues, was achieved through both the shaping protocol involving glide path preparation and the mechanical characteristics of the HyFlex EDM system. Its variable taper and cross-sectional design, transitioning from rectangular apically to trapezoidal and nearly triangular coronally, enabled effective shaping of complex canal anatomies while preserving dentin structure. **Conclusion:** Postoperative pain may be minimized through the use of file systems manufactured with EDM (Electrical Discharge Machining) technology, which support minimally invasive, biologically respectful, and patient-centered approaches in root canal treatments.

Key words: Dental instruments; endodontics; nickel-titanium alloy; postoperative pain; root canal preparation

KP-CR28 (Case Report)**Enhancing Endodontic Outcomes in C-Shaped Canals through CBCT and Rotary Technology***Fara Salsabila Susilo¹, Dewa Ayu Nyoman Putri Artiningsih²*¹Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia²Assistant Professor at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta-Indonesia

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ABSTRACT

Introduction: C-shaped canals present a challenging root canal anatomy with a distinctive C-shaped cross-section and intricate internal connections. Precise diagnosis using Cone Beam Computed Tomography (CBCT) enables tailored treatment strategies. This case report details the use of CBCT and Hyflex rotary instrumentation, combined with advanced techniques to navigate and treat complex canals, ultimately enhancing patient outcomes. **Case Report:** A 25-year-old male presented with discomfort while chewing on his right mandibular second molar (tooth 47), which had undergone initial endodontic therapy one year prior. Clinical examination revealed negative responses to sensitivity and palpation, a positive response to percussion, and normal periodontal probing depths. Radiographic evaluation showed periapical radiolucency. CBCT imaging identified a C-shaped canal configuration, classified as C2 according to Melton's classification and type III according to Fan's classification. The tooth was diagnosed as previously initiated therapy, symptomatic apical periodontitis. Root canal treatment (RCT) was performed using Hyflex rotary system. Obturation was completed using the warm vertical condensation technique. At the three-month follow-up, radiographic evaluation demonstrated signs of periapical healing, and the tooth was restored with a definitive indirect restoration. **Discussion:** Precise understanding of the complex C-shaped canal configuration is crucial for successful treatment. The use of CBCT enables accurate diagnosis and treatment planning, while Hyflex rotary instruments allow better adaptation to irregular canal systems, reduce the risk of procedural errors, and facilitate effective cleaning and shaping. This integration of advanced technology supports navigation through challenging anatomy, improves treatment outcomes, and preserves natural teeth. **Conclusion:** The combination of CBCT-guided diagnosis and the Hyflex rotary system can optimize root canal treatment outcomes in complex canal configurations. This approach supports improved healing and long-term tooth preservation.

Keywords: c-shaped canal, canal configuration, CBCT, endodontic treatment, rotary system.

KP-CR30 (Case Report)**Staged Treatment Of A Unicystic Ameloblastoma, Involving Marsupialization, Enucleation, And Peripheral Osteotomy: A Case Report**

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ABSTRACT

Introduction: Ameloblastoma is a benign but locally aggressive odontogenic tumor with high recurrence potential. Unicystic ameloblastoma is considered less aggressive than solid or multicystic variants and is often treated conservatively to reduce surgical morbidity and preserve mandibular continuity. Marsupialization has been proposed for large lesions to reduce tumor size and promote bone regeneration before definitive surgery. However, recurrence and histopathological transformation remain clinical challenges, requiring long-term monitoring and staged surgical intervention. **Case Report:** A 28-year-old male presented with progressive swelling of the left mandible for three years. Clinical examination revealed facial asymmetry and a firm, non-tender mass extending from the mandibular corpus to the angle. Radiographic imaging demonstrated a large expansile cystic lesion involving the mandibular corpus, angle, and ramus associated with impacted tooth 38. Incisional biopsy confirmed unicystic ameloblastoma. Marsupialization was performed with odontectomy of tooth 38 and extraction of teeth 35, 36, and 37. The alveolar bone was completely removed, leaving only a thin cyst wall. Follow-up demonstrated gradual reduction in lesion size and progressive bone regeneration. Subsequent histopathological examination revealed follicular ameloblastoma. Eight months later, enucleation with partial ostectomy of the left mandible was performed under general anesthesia. Postoperative follow-up at 18 months demonstrated satisfactory healing, improved neurosensory function, and no signs of recurrence. **Discussion:** In this case, initial marsupialization demonstrated favorable reduction of the lesion and progressive bone healing during follow-up. Definitive management with enucleation and partial ostectomy was performed to achieve better local tumor control while maintaining acceptable functional and esthetic outcomes. This case emphasizes that staged treatment combining initial decompression with subsequent definitive surgery may be beneficial in large mandibular ameloblastomas, but careful long-term follow-up remains essential due to the tumor's high recurrence potential. **Conclusion:** Staged conservative management followed by definitive surgical intervention can provide satisfactory clinical outcomes and improved local disease control in extensive mandibular ameloblastoma cases.

Keywords: unicystic ameloblastoma, mandible, marsupialization followed by enucleation, peripheral osteotomy

KP-CR31 (Case Report)**Management of Long-Separated Fractured Endodontic Instrument in Curved Canal Using Ultrasonic Technique***Syarifah Fitrianda¹, Anggraini Margono²*¹Specialist Program Student at Department of Conservative Dentistry,
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ABSTRACT

Introduction: Instrument separation during endodontic treatment is a recognized complication that may compromise canal disinfection and treatment outcomes. Nickel-titanium (NiTi) rotary instruments are susceptible to fracture due to cyclic fatigue and torsional stress. Ultrasonic retrieval under magnification has been widely used to improve retrieval accuracy and preserve canal anatomy. This case report describes the ultrasonic retrieval of a long-separated NiTi instrument from a curved mesiobuccal canal and its clinical considerations. **Case Report:** A 31-year-old female presented with pain during mastication in the mandibular right first molar. Clinical examination revealed negative vitality, positive percussion, and negative palpation, while radiographic evaluation showed furcation radiolucency. During root canal treatment, a NiTi rotary instrument separated in the mesiobuccal canal. Radiographic assessment demonstrated that the fragment extended from the canal orifice to approximately 12 mm apically. Retrieval was attempted using an ultrasonic tip under magnification and irrigation. Glide path re-establishment, canal preparation, and obturation with bioceramic sealer were subsequently completed. Postoperative evaluation showed absence of symptoms. **Discussion:** Retrieval of separated instruments remains challenging because of limited access and the risk of excessive dentin removal. Successful retrieval of separated instruments in this case depends on adequate coronal access, direct visualization under magnification, and ultrasonic instrumentation. In this case, retrieval was achievable despite the fragment being long and located in a curved mesiobuccal canal because the coronal part was visible and straight-line access could be established. Ultrasonic vibration combined with EDTA irrigation likely disrupted the binding forces between the fragment and canal wall, resulting in successful coronal dislodgement and retrieval. **Conclusion:** Ultrasonic retrieval under magnification enabled successful removal of a long-separated NiTi instrument from a curved mesiobuccal canal while preserving canal anatomy and allowing completion of root canal treatment with favorable postoperative outcomes.

Keywords: Instrument Fracture; Ultrasonics, Nickel-Titanium; Root Canal Therapy

KP-CR32 (Case Report)**CBCT-Guided Ultrasonic Negotiation of Obliterated Canals in Maxillary First Molar with Buccal Root Fenestration***Margareta Ermanda Kartika Putri¹, Ratna Meidyawati²*¹Post-Graduate Student, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia²Lecturer, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia

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ABSTRACT

Introduction: Root canal obliteration is a challenging case in endodontic treatment. Obstruction of the canal can prevent clinicians from reaching the apical working length, potentially leading to the development or persistence of periapical infections. Maxillary first molars typically have MB1 and MB2 canals, which are prone to such calcification. **Case Report:** A 25-year-old female patient presented with a history of spontaneous, throbbing pain in the posterior right maxillary region. The tooth had received a temporary restoration two weeks prior, and the patient presented for follow-up treatment. Clinical examination of tooth 16 showed a large temporary filling. The tooth was positive to percussion, negative to palpation, and non-vital. Periapical radiographs showed obstruction of the MB1 and MB2 canals in the cervical third and narrowing of the distobuccal canal. Cone-beam computed tomography (CBCT) confirmed the obliteration of both mesiobuccal canals. Additionally, a mesiobuccal root fenestration was observed; however, no tooth mobility was noted. **Management:** Endodontic treatment was performed using ultrasonic tips to navigate the calcified canals under CBCT guidance. Careful and gradual dentin removal allowed for the identification of the canal orifices and successful apical working length determination. **Conclusion:** This case highlights the critical role of CBCT in diagnosing complex canal obliterations and guiding the direction of obliteration penetration. Furthermore, it demonstrates the effectiveness of ultrasonic techniques in safely navigating calcified canals. This technique significantly improves the predictability and success of the treatment.

Keywords: Calcified canal, Cone-Beam Computed Tomography (CBCT), Endodontic, Obliteration, Ultrasonics.

KP-CR33 (Case Report)

Management of Calcified Canals with Associated Iatrogenic Complications Using Ultrasonics and Magnification: A Case Series

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ABSTRACT

Introduction: Calcified root canals present a major challenge in endodontic treatment because of reduced canal visibility and increased risk of procedural complications, including perforation and instrument separation. The use of advanced technologies such as dental operating microscopes, ultrasonic instruments, and chelation-assisted instrumentation has enhanced clinician's ability to locate, negotiate, and manage calcified canals more predictably. **Case Report:** This case series describes the management of multiple teeth with pulp canal calcification with associated iatrogenic complications. All cases were treated using a standardized protocol involving a dental operating microscope (DOM) for enhanced visualization, ultrasonic tips for conservative dentin removal and troughing, and ethylenediaminetetraacetic acid (EDTA) as a chelating agent to facilitate canal negotiation. Initial canal scouting was performed using stainless steel K-files and stiff hand files (C+ and C-Pilot files), followed by gradual canal enlargement. Perforations were repaired using bioceramic putty, whereas separated instruments were managed using bypass techniques. Root canal preparation was completed using rotary nickel-titanium systems, including TruNatomy and ProTaper Ultimate. Obturation was performed using gutta-percha and bioceramic sealer, followed by definitive restoration with lithium disilicate indirect restorations. **Discussion:** Magnification significantly improved visualization of calcified canal orifices, while ultrasonic instrumentation enabled precise troughing with minimal removal of tooth structure. EDTA facilitated canal negotiation by softening calcified tissues. Nevertheless, procedural complications such as perforation and instrument separation may still occur during treatment. Bioceramic putty provided an effective seal for perforation repair and supported favorable healing outcomes, whereas bypass techniques allowed preservation of the original canal anatomy and successful nonsurgical completion of treatment. **Conclusion:** The combined use of magnification, ultrasonics, and chelation-assisted instrumentation may improve the management and clinical outcomes of calcified canals with associated iatrogenic complications.

Keywords: Calcified canal, dental operating microscope, EDTA, iatrogenic complication, ultrasonics

KP-CR34 (Case Report)**Navigating Diagnostic Complexities and Predisposing Risk Factors of Necrotizing Ulcerative Stomatitis in Acute Myeloid Leukemia***Elizabeth Cynthia Sikijanto¹, Faisal Parlindungan², Indriasti Indah Wardhany^{3,4}*¹Oral Medicine Residency Program, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia²Internal Medicine Unit, Universitas Indonesia Hospital, Universitas Indonesia, Depok 16424, Indonesia³Dental and Oro-Maxillofacial Unit, Universitas Indonesia Hospital, Universitas Indonesia, Depok 16424, Indonesia⁴Department of Oral Medicine, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia

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ABSTRACT

Introduction: Necrotizing ulcerative stomatitis (NUS) was a severe and rapidly progressive oral infection characterized by extensive tissue necrosis and ulceration, frequently occurred in Acute Myeloid Leukemia (AML). Extensive ulcerative lesions may worsen systemic health by inducing pain, limiting oral intake, and serve as a potential portal of entry for opportunistic infections. This case report highlights the challenges regarding NUS of an AML patient's diagnostic complexities as well as determining the predisposing risk factor. **Case Report:** A 29-year-old male, Universitas Indonesia Hospital (RSUI) inpatient referred by an internist for management of painful oral ulcerations that developed 4 days before chemotherapy for AML. Examination showed poor oral hygiene with extensive multiple major ulcers covered by necrotic pseudomembranes on the tongue. Necrotizing Ulcerative Stomatitis (NUS) was established as the working diagnosis with chemotherapy-associated oral mucositis and neutropenic ulcer as differential diagnosis. Bedside debridement was done periodically during hospitalization. Hydrogen peroxide 3% was prescribed as a mouthwash and use by compressing the lesion using moistened sterile gauze 4 times daily as well as Metronidazole 500 mg 3 times daily. Saline solution 0.9% use for oral hygiene daily maintenance. The lesion healed progressively, resulting an improve oral comfort as well as better oral intake **Discussion:** Establishing NUS as working diagnosis was challenging due to similarity with several condition related to AML and chemotherapy. Determining the sequence of events leading to lesions and episodes of AML therapy was crucial for establishing a correct diagnosis and predisposing risk factors, which was important for successful treatment by modifying the factors. **Conclusion:** The complexity of establishing a diagnosis of NUS, includes establishing timeline, and similarity with other diseases. Multifactorial predisposing factors can also obscure the diagnosis. It is very important to conduct a comprehensive and systematic examination to be able to establish the rationale working diagnosis and appropriate comprehensive therapy.

Keywords: acute myeloid leukemia; necrotizing ulcerative stomatitis; neutropenic ulcer; diagnostic complexities; predisposing risk factors

KP-CR35 (Case Report)

Combined Resorbable Plate Fixation and Conservative Management in Pediatric Mandibular Fractures: Preserving Function and Growth Potential

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ABSTRACT

Introduction: Mandibular fractures in children represent 5-15% of maxillofacial trauma, and the condyle is the most commonly injured site because of its anatomic susceptibility.(1) Management continues to be challenging, with the need to balance restoration of function with preservation of mandibular growth. Condylar fractures are usually treated conservatively because of their high remodelling potential, whereas mandibular corpus fractures are usually stabilised rigidly to restore occlusion. Resorbable fixation systems have been developed as a promising alternative, offering sufficient stability while reducing long-term interference with craniofacial growth.(2)

Case Presentation: A 5-year-old boy was referred with mandibular trauma after a fall from a height of 3 m. Clinical findings facial asymmetry, decreased mouth opening, left posterior open bite. Imaging showed a dislocated fracture of the mandibular body and a dislocated fracture of the condylar head (Lindahl classification). The corpus fracture was treated with open reduction and internal fixation (ORIF) with a resorbable plate system and the condylar fracture was managed conservatively with functional guidance. **Discussion:** This case demonstrates a hybrid treatment approach. With multicenter data demonstrate that non-displaced condylar fractures are frequently treated conservatively, whereas displaced fractures are predominantly managed with ORIF (62%).(1) Resorbable fixation systems provide sufficient mechanical stability during the critical healing phase while undergoing gradual degradation, thereby reducing the risk of growth restriction, stress shielding, and interference with developing tooth buds.(2) Compared with titanium plates, resorbable systems demonstrate comparable rates of fracture union and occlusal stability, with similar overall complication rates (~19.8%) and low nonunion rates (~1.1%), while offering additional advantage of avoiding secondary removal procedures.(2) **Conclusion:** Resorbable fixation for mandibular corpus combined with conservative treatment of condylar fractures provides an efficient approach in paediatric patients, preserving occlusal stability and growth potential. Individualised and growth-conscious treatment planning is of utmost importance.

Keywords: Pediatric Mandibular Fractures, Resorbable Plate, Condylar Fractures, Combine Treatment, Conservative Treatment

KP-CR36 (Case Report)**Deferred Faces: Challenges And Outcomes In Surgical Management Of Neglected Zygomaticomaxillary Complex And Mandibular Fractures**

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ABSTRACT

Introduction: Facial fractures are a common consequence of high-velocity traffic accidents, the leading cause of craniofacial trauma in Indonesia. Neglected facial fractures — defined as untreated beyond two to four weeks from injury — present significant reconstructive challenges due to fibrous union, bone resorption, and secondary deformities. Referral delay is frequently unavoidable when life-threatening conditions take precedence. This report describes staged surgical management of neglected facial fractures following polytrauma-related referral delay.

Case Report: A 23-year-old male presented to the OMFS Division of Persahabatan General Hospital three months after a motorcycle accident with pain, difficulty chewing, left malar depression, and facial asymmetry. Initial hospitalization prioritized traumatic brain injury and hemothorax requiring water-sealed drainage. CT reconstruction revealed four neglected fractures with displacement and bony consolidation: left infraorbital rim, left zygomaticomaxillary complex, left high-neck condyle with displacement-dislocation and medial override according to Lindahl classification, and left mandibular body. Intraoral examination demonstrated malocclusion, scissor bite, linguoversion of teeth 34–35, and grade 2 mobility of tooth 35. Preoperative assessment confirmed surgical fitness (ASA II). A staged surgical plan included ORIF with titanium mesh for the zygomaticomaxillary complex, ORIF for the infraorbital rim and the mandibular body, and closed reduction with maxillomandibular fixation for the condylar fracture. **Discussion:** Bony consolidation at three months necessitated refracturing of displaced segments, increasing operative complexity and neurovascular risk. Preoperative numbness of the lower lip and chin indicated nerve involvement, requiring careful dissection. Although three months exceeded the optimal surgical window, satisfactory outcomes remained achievable through meticulous preoperative planning. **Conclusion:** A staged multidisciplinary approach incorporating refracturing, ORIF, mesh reconstruction, alongside closed reduction improved facial symmetry, occlusal alignment, and pain resolution. Long-term follow-up remains essential for comprehensive recovery. This case underscores the importance of early OMFS referral in the acute trauma setting, as delayed management increases operative complexity and the risk of suboptimal outcomes.

Keywords: neglected facial fracture, zygomaticomaxillary complex, condylar fracture, open reduction internal fixation, maxillary reconstruction, delayed treatment

KP-CR37 (Case Report)

Interceptive Orthodontic Management Of Increased Overjet And Impinging Overbite Using A Removable Appliance

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ABSTRACT

Introduction: Increased overjet and impinging overbite in growing patients may compromise esthetics, oral function, periodontal health, anterior occlusal relationships, and psychosocial well-being. Early interceptive orthodontic management may minimize progression of malocclusion and reduce the need for more complex orthodontic treatment later in life. **Case Report:** A 9-year-9-month-old female presented with chief complaints of protrusive and spaced maxillary anterior teeth. Clinical examination revealed increased overjet (6.5 mm), impinging overbite, constricted maxillary arch form, midline diastema, and lip incompetence. Cephalometric analysis demonstrated a skeletal Class I relationship (ANB 3.5°). The patient was in cervical vertebral maturation stage II (CVMS II). Interceptive orthodontic management was performed using a maxillary removable appliance consisting of an anterior bite plane, expansion screw, labial bow, and springs on the four maxillary incisors. After approximately 9 months of treatment, overjet decreased from 6.5 mm to 3 mm and overbite decreased from 4.5 mm to 2.5 mm. Improvement of maxillary arch form, transverse arch dimensions, anterior alignment, and smile esthetics were observed. **Discussion:** Treatment results demonstrated predominantly dentoalveolar changes with improvement of anterior occlusal relationships. The anterior bite plane facilitated correction of the impinging overbite by promoting posterior disclusion and allowing eruption of the posterior teeth. The combination of transverse arch expansion using an expansion screw and labial bow activation contributed to overjet reduction and improvement of maxillary arch form. Early interceptive orthodontic management using simple removable mechanics may improve dentoalveolar relationships and reduce progression of malocclusion in growing patients. **Conclusion:** Interceptive orthodontic management using a removable appliance successfully reduced overjet and corrected impinging overbite in a growing patient. Favorable outcomes in anterior occlusal relationships, maxillary arch form, and smile esthetics were achieved through simple removable mechanics, appropriate appliance design, and good patient compliance.

Keywords: interceptive orthodontics; increased overjet; impinging overbite; removable appliance; growing patient

KP-CR39 (Case Report)

Regenerative Therapy of Advanced Peri-Implantitis Associated with Severe Periodontitis: A One-Year Follow-Up Case Report

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ABSTRACT

Introduction: Peri-implantitis is a plaque-associated inflammatory disease characterized by progressive peri-implant bone loss, potentially compromising implant survival. The condition frequently develops asymptotically, resulting in delayed diagnosis and extensive tissue destruction, particularly in patients with a history of periodontitis and inadequate plaque control. Management of peri-implantitis with complex bone defects remains clinically challenging, requiring a comprehensive treatment approach combining infection control and regenerative therapy. **Case Report:** A 63-year-old female patient with generalized stage IV grade C periodontitis was referred for evaluation of bone loss around implant #47. Clinical examination revealed poor oral hygiene with plaque index of 42.9% and bleeding on probing (BOP) of 48.6%. Probing depth around implant #47 was ≥ 6 mm with positive BOP. A CBCT demonstrated circumferential intrabony bone loss with buccal dehiscence, classified as a type III combined defect (ITI classification). Initial therapy included mechanical debridement and antiseptic rinsing to reduce peri-implant inflammation. Surgical intervention was performed through full-thickness flap elevation, implant surface decontamination using titanium scalers and NiTi brushes. Regenerative bone augmentation was carried out using a sandwich grafting technique with autogenous and xenogeneic bone grafts covered by a resorbable collagen membrane. A screw-cement retained prosthesis implant crown was fabricated for the patient. At the one-year follow-up evaluation, clinical examination showed stable peri-implant soft tissues without signs of inflammation and reduction of probing depth, while radiographic assessment revealed evident bone regeneration surrounding the treated implant sites. **Discussion:** Advanced peri-implantitis associated with complex defect morphology usually demonstrates limited response to non-surgical therapy alone. Thorough implant surface decontamination combined with regenerative therapy may improve clinical and radiographic outcomes. Regular supportive peri-implant maintenance and reinforcement of oral hygiene contributed to favorable healing and peri-implant tissue stability. **Conclusion:** A staged multidisciplinary approach integrating non-surgical therapy, regenerative management, and strict supportive maintenance may successfully restore peri-implant health and promote long-term bone regeneration in advanced peri-implantitis cases.

Keyword: Peri-implantitis, regenerative therapy, bone graft, collagen membrane, sandwich bone augmentation

KP-CR40 (Case Report)**Minimally Invasive Adhesive Onlay Restoration of an Endodontically Treated Molar with Subgingival Defect***Janice Esta Hanrahan¹, Anggraini Margono²,*¹Specialist Program Student at Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia²Professor at Departement of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia

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ABSTRACT

Introduction: Restoration of endodontically treated posterior teeth with deep subgingival defects remains clinically challenging because of limited accessibility, difficult isolation, and extensive structural loss. Posterior Indirect Adhesive Restoration (PIAR) concept promotes a minimally invasive adhesive approach aimed at preserving remaining tooth structure while maintaining marginal sealing and biomechanical stability through conservative indirect restorations such as adhesive onlays. **Case Report:** A 29-year-old female presented with pain and food impaction in the mandibular right second molar. Clinical examination revealed extensive distal caries with complete loss of the distal wall and gingival overgrowth partially covering the lesion. Electrocautery gingivectomy was performed to expose the cavity margin and improve accessibility. Bone sounding demonstrated adequate supracrestal tissue attachment, eliminating the need for surgical crown lengthening. The tooth was diagnosed with irreversible pulpitis and symptomatic apical periodontitis and subsequently underwent root canal treatment. A hybrid ceramic full-coverage onlay was selected for coronal rehabilitation due to its reparability and suitability for the patient's planned orthodontic treatment. Immediate dentin sealing and composite core build-up were completed prior to tooth preparation using the Morphologically Driven Preparation Technique (MDPT). The restoration was adhesively cemented under rubber dam isolation. Clinical evaluation demonstrated satisfactory marginal adaptation, functional occlusion, and healthy surrounding soft tissue without signs of periodontal inflammation at one month follow-up. **Discussion:** PIAR concept enables conservative rehabilitation of structurally compromised endodontically treated teeth while preserving biomechanical integrity. Hybrid ceramics exhibit a dentin-like elastic modulus, potentially improving stress distribution and reducing stress concentration within the restored tooth structure. In addition, adhesive onlay restorations preserve more sound tissue compared with conventional full-coverage crowns. **Conclusion:** Application of PIAR concept with a hybrid ceramic onlay may provide a predictable minimally invasive treatment strategy for endodontically treated posterior teeth with deep subgingival defects.

Keyword: Minimally Invasive Dentistry, Endodontically Treated Tooth, Subgingival Defect, Adhesive, Onlay, Hybrid Ceramic,

KP-CR41 (Case Report)

Digital Smile Design Approach for Anterior Implant and Esthetic Restorative Rehabilitation: An Interdisciplinary Case Report

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ABSTRACT

Introduction: Tooth loss in the esthetic region poses functional and esthetic challenges, particularly in young patients with high esthetic demands. Rehabilitation of the esthetic zone requires hard- and soft-tissue management to achieve harmonious pink and white esthetics. Digital Smile Design (DSD) supports prosthetically driven planning and implant placement aligned with the smile design. **Case Report:** A 28-year-old female patient presented with discomfort and instability of a removable partial denture replacing tooth 11, extracted in 2019 due to extensive caries without ridge preservation. Clinical examination revealed anterior crowding, gingival asymmetry, tooth discoloration, and restorative discrepancies. CBCT evaluation demonstrated buccal bone deficiency at the edentulous site, which would be used for dental implant placement. An interdisciplinary treatment plan was established with the conservative department, including DSD-guided rehabilitation of teeth 13–23, esthetic crown lengthening, guided implant placement at tooth 11, and simultaneous contour augmentation. Provisional PMMA restorations were used to mold peri-implant soft tissue and develop the emergence profile. A labial frenectomy was later performed to improve soft-tissue stability. Definitive rehabilitation consisted of an implant-supported crown on tooth 11, a crown on tooth 12, and veneers on teeth 13, 21, 22, and 23. **Discussion:** The interdisciplinary approach improved esthetics, function, and patient comfort compared with the previous removable prosthesis. DSD facilitated implant positioning and gingival contour planning, while simultaneous GBR provided adequate tissue support for implant placement. Provisional restorations contributed to gingival symmetry and the formation of a natural-looking emergence profile. **Conclusion:** An interdisciplinary approach combining DSD, periodontal surgery, implant placement with simultaneous GBR, and esthetic restorative treatment can achieve predictable functional and esthetic outcomes in anterior implant rehabilitation.

Keyword: Dental implant, Guided bone regeneration, Digital Smile Design, Interdisciplinary treatment, Esthetic rehabilitation,

KP-CR42 (Case Report)

Rebuilding Smile Harmony Through Aesthetic Crown Lengthening and Lip Repositioning in Excessive Gingival Display

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ABSTRACT

Introduction: Excessive gingival display can compromise smile aesthetics by disturbing the balance between tooth proportion, gingival architecture, and upper lip position. Aesthetic crown lengthening improves clinical crown height and gingival symmetry, while lip repositioning limits excessive upper lip elevation during smiling. Combining these periodontal plastic surgery procedures may provide a comprehensive approach to achieving a more harmonious smile. **Case Report:** A 22-year-old female patient presented to the Dental Hospital of Dentistry, Universitas Indonesia, with a chief complaint of excessive upper gingival display, short maxillary anterior teeth, and lack of confidence when smiling. The patient was undergoing fixed orthodontic treatment for approximately three years, had good oral hygiene, and denied any systemic disease. The initial treatment plan was aesthetic crown lengthening through gingivectomy and ostectomy to improve clinical crown proportion. The procedure was guided using a Chu aesthetic gauge to determine appropriate clinical crown dimensions and gingival margin position. One month after crown lengthening, residual gingival display was still observed; therefore, lip repositioning was performed as an additional procedure to reduce upper lip elevation and improve smile balance.

Discussion: Excessive gingival display may have multifactorial causes, including short clinical crowns and upper lip hypermobility. In this case, crown lengthening addressed the tooth- gingiva relationship by correcting the gingival margin position and supporting bone architecture. However, the persistence of gingival display after initial treatment indicated that lip dynamics also contributed to the condition. Lip repositioning was therefore selected to complement the crown lengthening procedure by restricting excessive upper lip movement during smiling. **Conclusion:** Aesthetic crown lengthening combined with lip repositioning can be an effective periodontal plastic surgery approach for managing excessive gingival display with multifactorial etiology. This sequential treatment improved tooth proportion, reduced gingival exposure, and helped rebuild a more balanced, confident, and harmonious smile

Keyword: aesthetic crown lengthening, lip repositioning, excessive gingival display, gummy smile, periodontal plastic surgery, smile harmony

KP-CR43 (Case Report)**MDPT-Based Overlay For Single Remaining Wall Tooth As A Conservative Alternative To Full Crowns**

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ABSTRACT

Introduction: The selection of a definitive restoration for posterior teeth with extensive structural loss must prioritize mechanical strength, preservation of biological tissue, and long-term prognosis. Following endodontic treatment, full crowns are traditionally preferred, however their preparation is highly invasive and significantly reduces tooth fracture resistance by sacrificing substantial tooth structure. Adhesive overlay restorations have emerged as a more conservative alternative, providing comparable cuspal protection to conventional crowns while maintaining structural integrity. **Case Report:** This report presents two clinical cases. The first involves a 19-year-old female with a fractured mandibular left first molar. The second involves a 21-year-old male with a partially dislodged temporary restoration on the mandibular right first molar. In both cases, only the buccal wall remained. After completing endodontic treatment, both patients were rehabilitated using indirect overlays following the MDPT. The chosen restoration material was lithium disilicate and cemented with adhesive protocol. **Discussion:** The choice of overlay restorations was aimed at preserving the post-endodontic tooth structure without the massive tissue reduction required for full crowns. MDPT preparation technique played a crucial role according to the tooth's specific geometry and structure, thereby optimizing tissue preservation and adhesive performance. Furthermore, cuspal coverage was integrated to enhance fracture resistance. Lithium disilicate was selected as the restorative material due to its excellent translucency, optimal adhesive properties, and high clinical success rates, up to 98.5% over a five-year period. **Conclusion:** Overlay restorations utilizing the MDPT approach prove to be a superior alternative to conventional crowns for molars with massive structural loss. This protocol not only provides adequate structural protection through cuspal coverage but also preserves biomechanical integrity through minimally invasive preparation and advanced ceramic adhesion.

Keywords: Crown, Lithium Disilicate, MDPT, Overlay, Post-endodontic restoration

KP-CR45 (Case Report)**Shovel-Shaped Incisors for Ancestry Assessment in Female Burn Victims: A Forensic Odontology Case Report***Jan Terrie¹*¹Universitas Indonesia

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ABSTRACT

Introduction: Human identification is a primary objective in forensic investigations, particularly in severely burned victims where fingerprints, facial features, and soft tissues are destroyed. In such cases, forensic odontology provides valuable biological information through postmortem dental profiling. Shovel-shaped incisors are genetically determined dental morphological traits that are highly resistant to thermal damage and may assist in determining Mongoloid ancestry.

Case Report: A young adult female victim of total-body burns was referred for medico-legal examination. Visual identification was impossible because of extensive thermal destruction. Forensic odontological examination revealed bilateral shovel-shaped maxillary central incisors characterized by prominent marginal ridges and a deep lingual fossa. These findings were incorporated into the postmortem dental profile to support biological identification. **Discussion:** Shovel-shaped incisors are among the most characteristic non-metric dental traits associated with Mongoloid populations. Their preservation despite severe heat exposure demonstrates their forensic value when conventional identification methods are unavailable. In this case, the dental findings contributed to the assessment of Mongoloid ancestry and complemented other forensic examinations in establishing the victim's biological profile. **Conclusion:** Shovel-shaped incisors remain recognizable in extensively burned remains and represent a valuable adjunctive marker for determining Mongoloid ancestry during forensic human identification. This case highlights the significance of dental morphological traits in forensic odontology, particularly in fire-related fatalities.

Keywords: forensic odontology; human identification; shovel-shaped incisors; burned body; dental morphology; Mongoloid ancestry

KP-CR46 (Case Report)

Dental Attrition for Age Estimation in Young Adult Female Decedents: A Forensic Odontology Case Report

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ABSTRACT

Introduction: Accurate age estimation is an essential component of forensic human identification, particularly when personal identification data are unavailable or require verification. Because dental tissues are highly resistant to postmortem decomposition and environmental changes, dental attrition provides a reliable biological indicator for adult age estimation. This report describes the application of the Lovejoy Dental Attrition Method and the Average Stage of Attrition (ASA) in estimating the age of a young adult female decedent. **Case Report:** A young adult female decedent underwent forensic examination following a medico-legal request. Although the victim's identity was documented, age estimation was performed to verify the recorded chronological age. Occlusal wear of the maxillary posterior teeth was evaluated using the Lovejoy Dental Attrition Method and the ASA scoring system. **Discussion:** The observed dental attrition was classified as Lovejoy Type D, corresponding to an estimated age of 20–24 years. The ASA score was 2.0, and application of the female regression equation yielded an estimated age of 24.06 ± 3.97 years (approximately 20–28 years). Both methods included the victim's documented chronological age of approximately 22 years, demonstrating good agreement between dental and chronological age and supporting the reliability of dental attrition for age estimation in young adults. **Conclusion:** The Lovejoy Dental Attrition Method and ASA provided age estimates consistent with the victim's chronological age. This case demonstrates that dental attrition analysis is a practical and reliable adjunct for forensic age estimation and human identification in young adult decedents.

Keywords: Forensic odontology; Age estimation; Dental attrition; Lovejoy method; Average Stage of Attrition (ASA); Human identification.

KP-CR47 (Case Report)**Forensic Odontological Identification In A Fire Victim: A Case Report**

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ABSTRACT

Introduction: Fire identification is challenging as thermal destruction limits conventional methods. In closed-space fires, fatal hypoxia from oxygen depletion, CO poisoning (COHb formation), and HCN inhalation (cytochrome oxidase inhibition) causes asphyxia, often preceding thermal injury. Forensic odontology serves as a primary identification modality due to teeth's high thermal resistance, as recognized by Interpol DVI Guidelines. **Case Report:** A male victim of a 03:20 electrical house fire (Grogol Petamburan Police) presented with generalized rigor mortis and blanchable posterior livor mortis (death interval: 8–12 hours). Physical profile: yellow-tan complexion, black hair (9 cm), 131 cm height, 26 kg weight. Mixed dentition revealed 11 permanent and 12 deciduous teeth, partially erupted 45, and 8 caries (54, 55, 16, 63, 64, 65, 75, 85). Forensic findings showed black soot on the dorsal tongue, oropharynx, and palate. Oral anomalies included a 0.5 cm midline discrepancy with high labial frenum attachment, and two lower-lip bite marks matching incisal edges of 11 and 21.

Discussion: The presence of soot extending from the tongue to the oropharynx and palate confirms vital burning, indicating the victim was alive and breathing during fire exposure consistent with hypoxic asphyxia from CO and HCN inhalation. Blanchable livor mortis with a red hue supported COHb-related discoloration. The mixed dentition pattern, particularly the partial eruption of tooth 45, placed the biological age estimate at 8–11 years, corroborated by anthropometric data. The documented carious lesion pattern and anatomic variants (high frenum, midline discrepancy) constitute a comprehensive post-mortem dental profile for comparative identification. Lip bite marks were interpreted as perimortem hypoxic convulsions. **Conclusion:** Forensic odontological examination of this fire victim confirmed vital breathing through soot deposition, established an age of 8–11 years via mixed dentition analysis, and documented a comprehensive post-mortem dental record. These findings underscore the indispensable role of forensic odontology as a primary identification modality in thermally compromised remains.

Keywords: forensic odontology; fire victim; vital burning; mixed dentition; age estimation; hypoxia; identification

KP-CR48 (Case Report)**Comparison of Dental Age Estimation and Chronological Age: A Forensic Odontology Case Report**

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ABSTRACT

Introduction: Age estimation is an essential component of forensic odontology and may provide valuable information for the identification of deceased individuals. Several dental age estimation methods have been developed based on age-related changes in teeth, including the Average Stage of Attrition (ASA) and Lovejoy methods. This case report aimed to compare age estimates obtained using these methods with the known chronological age of an identified decedent.

Case Report: A forensic dental examination was performed on a 27-year-old male decedent. External examination revealed a body length of 160 cm and complete permanent dentition. Intraoral examination and odontogram assessment identified multiple attrition lesions, dental caries, crown fractures, and retained root remnants. Age estimation was conducted using two methods. The ASA method was applied to the maxillary left first molar (tooth 26) and yielded an estimated age of 27.22 ± 3.97 years. The Lovejoy method, based on occlusal wear assessment in the left maxillary region, estimated the age range to be 24–30 years. Both estimates were subsequently compared with the known chronological age of the decedent. **Discussion:** The chronological age of the decedent was 27 years. The age estimated using the ASA method showed excellent agreement with the known age, differing by only 0.22 years. Similarly, the age range generated by the Lovejoy method encompassed the chronological age. These findings indicate that both methods provided age estimates consistent with the actual age in this case.

Conclusion: The ASA and Lovejoy methods produced age estimates that corresponded well with the chronological age of the identified decedent. This case highlights the usefulness of forensic dental examination and dental age estimation as supportive tools in postmortem human identification.

Keywords: forensic odontology, dental age estimation, dental attrition, ASA method, Lovejoy method, human identification

KP-CR49 (Case Report)

Forensic Odontological Analysis of Human Bite Mark in a Physical Assault Case: A Case Report

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ABSTRACT

Introduction: ABite mark analysis is a forensic odontology discipline used to document, compare, and interpret patterned injuries on human skin as physical evidence in assault cases. Due to the dynamic nature of biting and soft tissue susceptibility to distortion, accurate interpretation requires systematic methodology. This report presents a forensic odontological examination of a bite mark sustained during a physical assault. **Case Report:** A male victim presented for forensic examination approximately seven hours after an assault on Friday, February 20th, 2026, at hotel terrace, Kebunsirih area. The perpetrator, a 50-year-old male known to the victim, inflicted two bare-handed blows to the victim's face causing a fall onto a paved surface, followed by a single bite to the left abdomen. Examination conducted on Saturday, February 21st, 2026, at 01.50 am Western Indonesian Time, revealed elevated blood pressure (144/108 mmHg) with otherwise stable vital signs. Forensic odontological findings demonstrated multiple abrasions measuring 0.8 cm times 0.5 cm, the smallest punctiform, distributed over an area of 3 cm times 2.5 cm on the left abdomen approximately 5 cm from the anterior midline, surrounded by a reddish-purple contusion measuring 2.5 cm times 2.5 cm. The pattern suggested involvement of both maxillary and mandibular dental arches with tissue distortion attributed to movement during biting. **Discussion:** The bite mark exhibited arch morphology and individual tooth impressions consistent with human dentition. Positional movement during biting displaced the initial contact points along a trajectory to the final wound position, reflecting the dynamic nature of bite mark formation. Dental cast comparison from the suspect would be essential for definitive odontological identification. **Conclusion:** This case underscores the forensic significance of bite mark evidence in physical assault cases. Systematic documentation combined with suspect dental cast comparison is fundamental, with careful attention to tissue distortion dynamics to avoid pattern misinterpretation.

Keywords: bite mark, dental arch morphology, forensic odontology, physical assault, tissue distortion

KP-CR50 (Case Report)**Persistence Of Mamelons In Adult With Class Iii Malocclusion : A Forensic Odontology Case Report**

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ABSTRACT

Introduction: Mamelons are rounded enamel prominences located on the incisal edges of newly erupted permanent incisors. They are commonly observed in children and are uncommon in adults. Their gradual disappearance is attributed to physiological attrition resulting from repeated contact between opposing incisors during normal occlusal function and mastication. Persistence of mamelons into adulthood is an unusual finding and is often associated with altered occlusal relationships that reduce normal incisal wear. **Case Report:** A forensic dental examination was performed on a deceased male born on 25 December 1989 who was found in his rented room. Dental assessment revealed persistent and symmetrical mamelons on teeth 11, 21, 31, 41, and 42. The anterior occlusal relationship was consistent with Class III malocclusion. Additional findings included a root remnant of tooth 17, carious lesions on teeth 15, 16, 24, 25, and 26, generalized periodontitis with heavy calculus deposits, and bilateral loss of mandibular molars (teeth 36–38 and 46–48). Minimal incisal attrition was observed on the teeth exhibiting mamelons. **Discussion:** Mamelons are developmental enamel structures that normally disappear through physiological wear following tooth eruption. Their persistence in adulthood is uncommon because repeated contact between opposing incisors gradually smoothens the incisal edges. In this case, the altered anterior occlusal relationship associated with Class III malocclusion may have reduced effective incisal contact and limited physiological attrition, allowing the mamelons to remain visible. Persistent mamelons are generally considered a consequence of reduced functional wear rather than a developmental anomaly. **Conclusion:** Persistent mamelons may be encountered in adults when altered occlusal relationships limit normal physiological attrition. Recognition of this uncommon finding contributes to a better understanding of the relationship between occlusal function and the preservation of dental morphology.

Keywords: forensic odontology, dental age estimation, dental attrition, ASA method, Lovejoy method, human identification

KP-CR51 (Case Report)

Biological Profile Reconstruction of "Mr. X" Through Odontogram and Lamendin Method: A Case Report

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ABSTRACT

Introduction: Personal identification of unidentified remains is a primary pillar in the Disaster Victim Identification (DVI) framework. Forensic odontology provides high accuracy due to dental resilience against decomposition and mechanical trauma. This paper reports the successful reconstruction of a victim's biological profile through comprehensive dental examination. **Case Report:** An unidentified body at the RSCM mortuary, labeled "Mr. X" (PM No. 1424/SKV/VI/2026), was examined using INTERPOL DVI Forms 600 and 700. The odontogram revealed a permanent dentition with a 1/3 crown fracture on the maxillary right lateral incisor (tooth 12). Anthropological assessment showed shovel-shaped traits on the maxillary central incisors (teeth 11 and 21), indicating Mongoloid ancestry. Furthermore, sex determination via mesiodistal crown width measurements of the maxillary anterior teeth indicated a significant metric tendency toward the male sex. **Discussion:** Age estimation was performed via the Lamendin method on the maxillary right central incisor (tooth 11). Measured parameters (RH: 16 mm, PH: 1 mm, TH: 0.4 mm) yielded a periodontosis ratio (P) of 6.25 and a translucency ratio (T) of 2.5. Lamendin's formula estimated the biological age at 27.7 years (rounded to 28 years; SD +/- 10 years), providing a forensic age range of 18–38 years. While ancestral and metric data establish group traits, the localized crown fracture on tooth 12 transitions the profile from class characteristics to a unique individualizing feature essential for positive identification. **Conclusion:** Combining post-mortem dental findings, ancestral morphology, odontometric sex determination, and the Lamendin method successfully established a robust biological profile for "Mr. X". The specific crown fracture on tooth 12 serves as a critical individualizing marker for ante-mortem matching, ensuring legal certainty during DVI reconciliation.

Keywords: Forensic Odontology, INTERPOL DVI, Lamendin Method, Shovel-shaped Incisors, Mesiodistal Crown Width, Biological Profile.

KP-CR52 (Case Report)**Biological Profile Reconstruction of "Mr. X" Through Odontogram and Lamendin Method: A Case Report**

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ABSTRACT

Introduction: Personal identification of unidentified remains is a primary pillar in the Disaster Victim Identification (DVI) framework. Forensic odontology provides high accuracy due to dental resilience against decomposition and mechanical trauma. This paper reports the successful reconstruction of a victim's biological profile through comprehensive dental examination.

Case Report: An unidentified body at the RSCM mortuary, labeled "Mr. X" (PM No. 1424/SKV/VI/2026), was examined using INTERPOL DVI Forms 600 and 700. The odontogram revealed a permanent dentition with a 1/3 crown fracture on the maxillary right lateral incisor (tooth 12). Anthropological assessment showed shovel-shaped traits on the maxillary central incisors (teeth 11 and 21), indicating Mongoloid ancestry. Furthermore, sex determination via mesiodistal crown width measurements of the maxillary anterior teeth indicated a significant metric tendency toward the male sex. **Discussion:** Age estimation was performed via the Lamendin method on the maxillary right central incisor (tooth 11). Measured parameters (RH: 16 mm, PH: 1 mm, TH: 0.4 mm) yielded a periodontosis ratio (P) of 6.25 and a translucency ratio (T) of 2.5. Lamendin's formula estimated the biological age at 27.7 years (rounded to 28 years; SD +/- 10 years), providing a forensic age range of 18–38 years. While ancestral and metric data establish group traits, the localized crown fracture on tooth 12 transitions the profile from class characteristics to a unique individualizing feature essential for positive identification. **Conclusion:** Combining post-mortem dental findings, ancestral morphology, odontometric sex determination, and the Lamendin method successfully established a robust biological profile for "Mr. X". The specific crown fracture on tooth 12 serves as a critical individualizing marker for ante-mortem matching, ensuring legal certainty during DVI reconciliation.

Keywords: Forensic Odontology, INTERPOL DVI, Lamendin Method, Shovel-shaped Incisors, Mesiodistal Crown Width, Biological Profile.

KP-LR04 (Literature Review)

The Hidden Survivor Within: Emerging Phage Therapy Against Persistent *Enterococcus faecalis*

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ABSTRACT

Introduction: Post-Treatment Endodontic Disease (PTED) remains a major challenge in contemporary endodontics, with *Enterococcus faecalis* (*E. faecalis*) frequently associated with root canal treatment failure. Its ability to survive in nutrient-deprived conditions, penetrate dentinal tubules, and form resistant biofilms allows persistence within complex root canal systems despite conventional chemomechanical preparation and intracanal disinfection. Growing concerns regarding antimicrobial resistance and the limitations of traditional irrigants and medicaments have encouraged the exploration of alternative antibacterial strategies, including bacteriophage therapy. **Literature Review:** This literature review examines phage therapy as an emerging antimicrobial approach against *E. faecalis* infections in endodontics. Bacteriophages are viruses that specifically infect and lyse bacterial cells, providing targeted antibacterial activity with minimal disruption to the surrounding microbiota. Recent studies have demonstrated that lytic phages can penetrate dentinal tubules and disrupt *E. faecalis* biofilms within root canal systems. In addition, phage-derived enzymes, particularly endolysins, have shown promising antibiofilm properties. Evidence also suggests a synergistic effect between phage therapy and conventional irrigants, such as sodium hypochlorite and chlorhexidine, resulting in improved bacterial eradication. **Discussion:** Phage therapy offers several advantages over conventional antimicrobial strategies, including high specificity, self-replication at the infection site, and effectiveness against multidrug-resistant bacteria and biofilms. These properties make phages attractive for managing persistent endodontic infections. However, challenges remain regarding phage stability, delivery through complex root canal anatomy, narrow host specificity, and limited clinical evidence. Most available studies are confined to in vitro and ex vivo models, emphasizing the need for standardized protocols and further clinical investigations. **Conclusion:** Phage therapy represents a promising strategy for targeting persistent *E. faecalis* infections in endodontics. Its antibiofilm activity and ability to overcome limitations of conventional antimicrobial approaches suggest significant potential for root canal disinfection. Nevertheless, additional clinical studies are required to confirm its safety, effectiveness, and integration into routine endodontic practice.

Keywords: *Enterococcus faecalis*, bacteriophage therapy, biofilm, endodontic infection, root canal disinfection

KP-LR06 (Literature Review)**Navigating the Confluence: Advanced Diagnostic and Therapeutic Strategies for Vertucci Type II Configurations***Eganavra Ravinta Mundarang¹, Sylva Dinie Alinda^{2*}*¹Postgraduate Student, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia²Lecturer, Department of Conservative Dentistry, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia*Correspondence e-mail to: sylvaalinda@ui.ac.id**ABSTRACT**

Introduction: The Vertucci Type II configuration, common in mandibular molars, features two separate canals merging into a single apical foramen. This morphology complicates endodontic treatment due to the presence of narrow tissue ribbons and isthmuses that harbor pathogenic bacteria. Standard mechanical instrumentation struggles to debride these inter-canal communications, resulting in debris accumulation that compromises disinfection and subsequent obturation. This increases the risk of persistent apical periodontitis. Therefore, achieving a complete three-dimensional seal requires specific diagnostic and therapeutic approaches.

Literature Review: Diagnostic mapping of these complex root systems is more reliable with cone-beam computed tomography (CBCT), which demonstrates an 89% accuracy rate compared to 55% for conventional periapical radiography. Regarding canal preparation, adaptive file systems such as the XP-endo minimize canal transportation. Supplementary activation methods, notably passive ultrasonic irrigation (PUI) or the XP-endo Finisher, improve the removal of hard-tissue debris. For final obturation, combining bioceramic sealers with continuous wave condensation provides optimal sealing within these merged anatomies. **Discussion:** Managing confluent root canals requires mitigating procedural risks while maximizing disinfection. Using an Electronic Apex Locator (EAL) during the Vertucci technique helps prevent over-instrumentation and minimizes mechanical stress on rotary files at the confluence. However, mechanical preparation alone frequently leaves isthmuses packed with dentinal debris. Advanced irrigation activation utilizing the XP-endo Finisher or PUI is therefore necessary to clean these otherwise untouched areas. Following thorough disinfection, utilizing bioceramic sealers alongside appropriate obturation techniques improves the apical seal. **Conclusion:** Combining EAL-guided confluence detection, enhanced irrigation activation, and bioceramic sealers minimizes procedural errors and provides a more predictable hermetic seal in Vertucci Type II root canal configurations.

Key words: Vertucci Type II, confluent canals, Electronic Apex Locator, XP-endo Finisher, bioceramic sealer, root canal anatomy, mandibular molars, endodontic disinfection.

KP-LR08 (Literature Review)

Smoking-Induced Oral Dysbiosis And Its Impact On Cariogenic Bacterial Profiles

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ABSTRACT

Dental caries remains one of the most prevalent oral diseases worldwide including in Indonesia. As a multifactorial disease, its development is strongly influenced by microbial factors and lifestyle behaviors, including smoking. Cigarette smoke contains toxic substances that can disrupt the oral microbiome, potentially promoting a shift toward a cariogenic environment. This review aims to evaluate the effect of smoking habits on the composition and functional dynamics of cariogenic bacteria in the oral cavity and to assess its implications for caries development. Current evidence indicates that the oral microbiome consists of a complex and dynamic community, where dysbiosis plays a central role in caries development. Smoking has been shown to alter microbial composition by reducing beneficial commensal bacteria and promoting the growth of pathogenic and acidogenic species such as *Streptococcus mutans*, *Lactobacilli*, and *Actinomyces*. In addition, smoking affects salivary properties, including pH and buffering capacity, further enhancing cariogenic conditions. Functional disruptions, particularly in nitrate-reducing pathways mediated by oral nitrate-reducing bacteria, have also been reported, indicating that smoking influences not only microbial composition but also metabolic activity. The reviewed studies consistently demonstrate that smoking induces microbial dysbiosis characterized by increased anaerobic and acid-tolerant bacteria. However, inconsistencies exist regarding microbial diversity and specific taxa changes, likely due to methodological variations. Emerging evidence suggests that functional alterations, including impaired nitrate metabolism and increased acid production, may play a more critical role than compositional changes alone. Nevertheless, most studies rely on 16S rRNA sequencing, limiting insights into microbial function. Smoking significantly impacts the oral microbiome by promoting a dysbiotic and cariogenic environment. It enhances the virulence and metabolic activity of cariogenic bacteria while disrupting protective microbial functions. Further research using metagenomic approaches is needed to understand these mechanisms and support the development of personalized caries prevention and management.

Keywords: smoking; dental caries; oral microbiome

KP-LR09 (Literature Review)

Bacterial Microbiome Profiles In Enamel And Dentin Carious Lesions

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ABSTRACT

Dental caries is a multifactorial biofilm-disease influenced by the interaction of multiple factors between tooth structure, microorganisms, dietary carbohydrate patterns, and time.¹ The oral cavity represents a highly diverse ecosystem with distinct microbiome distributions across different oral sites. The understanding of caries etiology has evolved with advances in molecular biology, shifting from the concept of caries as a disease caused by a single specific pathogen to the concept caries results from dysbiosis of the microbial community within the oral cavity.^{2,3} Advances in molecular biology techniques have enabled more comprehensive identification of bacterial communities within carious lesions and supported the characterization of bacteria involved in caries across different tooth structure sites.^{2,3} Increased frequency and amount of carbohydrate exposure in the oral cavity enhance the metabolism of acid-producing bacteria, lower biofilm pH, and promote the growth of acidogenic and aciduric bacteria.¹⁻³ These conditions promote cariogenic biofilm, demineralization of dental hard tissues, allowing lesion initially confined to enamel to progress into dentin involvement and in advanced stages extend to the pulp. In addition to *Streptococcus mutans*, other bacteria such as *Lactobacillus*, *Actinomyces*, *Bifidobacterium*, and *Veillonella* have also been associated with the ecological shifts involved in caries initiation and progression.^{2,3} Various studies have investigated the relationship between the oral microbiome and dental caries; however, the reported findings vary due to differences in sampling sites and lesion types. Nevertheless, limited studies have specifically compared bacterial profiles in enamel and dentin carious lesions, and differences in sampling strategies and analytical approaches remain a major challenge in interpreting the literature. Therefore, more focused investigations are needed to understand how lesion depth influences bacterial profiles.¹ This literature review aims to examine variations in bacterial profiles at dental caries, focusing on how lesion depth and sampling site influence microbiome findings in in enamel and dentin carious lesions.

Key words: Caries, Bacterial Profile, Oral Microbiome

KP-LR10 (Literature Review)

Bacterial Extracellular Vesicles Drive Immunomodulation And Regeneration In Oral Wound Healing

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ABSTRACT

Introduction: Wound healing in the oral mucosa is a highly dynamic process that relies on a delicate balance between inflammation and tissue regeneration. In recent years, bacterial extracellular vesicles (BEVs) have gained attention as important mediators of host-microbe communication, with emerging roles in shaping immune responses and healing processes. **Literature Review:** This review identified relevant studies using the Elicit search engine and integrated data from the Semantic Scholar and OpenAlex databases. The included studies were published between 2014-2025. This literature review was conducted to evaluate the current evidence regarding the role of BEVs in immunomodulation and tissue regeneration during oral wound healing. The articles were screened based on their relevance to BEV-mediated immune and regenerative mechanisms. After title, abstract, and full-text screening, 18 studies were included and thematically analyzed according to inflammatory responses, pattern recognition receptor activation, cytokine modulation, and regenerative signaling pathways involved in oral wound healing. **Discussion:** Collectively, the literature indicates a context-dependent role for BEVs in oral wound healing. Vesicles from pathogenic bacteria are generally linked to increased production of pro-inflammatory cytokines, such as TNF- α , IL-6, and IL-1 β , which may contribute to tissue damage when uncontrolled. In contrast, BEVs from commensal species appear to support healing by promoting anti-inflammatory responses, enhancing epithelial cell proliferation and migration, and facilitating tissue remodeling. These contrasting effects are largely influenced by differences in vesicle composition, receptor engagement, and local cellular environment. **Conclusion:** BEVs represent a promising yet complex component in the regulation of oral wound healing. Their ability to amplify and resolve inflammation highlights their potential as therapeutic targets. Further studies, particularly in oral-specific models, are required to better understand their clinical relevance in oral cancers.

Keywords: bacterial extracellular vesicles; immunomodulation; oral microbiome; tissue regeneration; wound healing.

KP-LR11 (Literature Review)

The Role of Mitochondrial Dysfunction as the Central Axis Linking Periodontitis and Systemic Disease

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ABSTRACT

Introduction: Periodontitis is a chronic inflammatory disease associated with oxidative stress and destruction of periodontal tissue. Recent evidence suggest that mitochondrial dysfunction may contribute to relationship between periodontitis and several systemic disease through dysregulated inflammatory and metabolic pathways. **Literature Review:** This narrative review evaluates current evidence regarding the role of mitochondrial dysfunction in periodontitis and systemic diseases. Relevant studies from recent literature demonstrated that impaired mitochondrial activity increases reactive oxygen species production, inflammatory cytokine release, and cellular damage. Similar mitochondrial abnormalities have been reported in cardiovascular disease, diabetes mellitus, obesity and chronic kidney disease. **Discussion:** Mitochondrial dysfunction may serve as a biological link between periodontal and systemic diseases. Increased oxidative stress and mitochondrial DNA damage can aggravate inflammatory responses and tissue destruction in both local and systemic conditions. Shared molecular pathways support the bidirectional relationship between periodontitis and systemic disorders. However, limited clinical evidence and variations in study methodology remain important challenges. **Conclusion:** Mitochondrial dysfunction plays an important role in the interaction between periodontitis and systemic diseases. Understanding these mechanisms may support the development of targeted diagnostic and therapeutic strategies for periodontal and systemic health.

Keywords: mitochondrial dysfunction; periodontitis; systemic diseases; oxidative stress

KP-LR12 (Literature Review)

Comparing Ozone Therapy and Chlorhexidine in Non-Surgical Periodontal Treatment for Elderly Patients: A Systematic Review

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ABSTRACT

The increasing elderly population presents growing challenges in periodontal care, particularly because polypharmacy and xerostomia may increase discomfort associated with antiseptic agents. Chlorhexidine has long been used as an effective antimicrobial adjunct to scaling and root planing (SRP) in periodontal therapy. However, its clinical use is limited by side effects such as tooth staining, taste disturbance, and mucosal irritation. These limitations have encouraged the use of alternative treatments, including ozone therapy, which shows promising antimicrobial and anti-inflammatory effects. This systematic review aims to compare ozone therapy and chlorhexidine as adjuncts to SRP in patients with chronic periodontitis and Stage I-IV periodontitis based on the 2017 AAP/EFP classification. The review follows PRISMA 2020 guidelines and was registered in the PROSPERO database (CRD420251249755). A systematic search was conducted using PubMed, Scopus, and the Cochrane Library published within the last five years. Five studies met the inclusion criteria and were evaluated for probing pocket depth (PPD), clinical attachment level (CAL), and bleeding on probing (BoP), with risk of bias assessed using the Cochrane RoB-2 tool. Overall, both ozone therapy and chlorhexidine showed significant intragroup improvements after non-surgical periodontal treatment. Most studies found no significant intergroup differences in PPD, CAL, or BoP ($p > 0.05$). However, one study reported greater PPD reduction with ozonated olive oil, from 5.40 ± 0.50 mm to 5.28 ± 0.45 mm, compared with chlorhexidine ($p < 0.001$). Another study also showed significantly greater PPD reduction at 3 months ($p < 0.001$) and CAL gain at 1 month ($p = 0.03$) and 3 months ($p < 0.001$) in the ozone group. Despite heterogeneity among studies, ozone therapy demonstrated clinical outcomes comparable to chlorhexidine as an adjunct to SRP and may offer a more comfortable alternative for elderly patients, particularly those with xerostomia or sensitivity to conventional antiseptic agents.

Keywords: Anti-Infective Agents, Local; Chlorhexidine; Ozone; Periodontitis; Scaling and Root Planing

KP-LR13 (Literature Review)**Three Decades of Dental Education in Prosthodontics: a Bibliometric Analysis (1996–2026)**

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ABSTRACT

Introduction: Over the past three decades, dental education in prosthodontics has undergone substantial transformation, particularly through the integration of digital technologies and competency-based educational approaches. Despite these developments, comprehensive global evaluations of publication trends, thematic evolution, and research collaboration in prosthodontic education remain limited. **Literature review:** This bibliometric study reviewed scientific publications related to prosthodontic dental education indexed in the Scopus database from 1996–2026. Literature searching was conducted on April 9, 2026, using keywords associated with dental education and prosthodontics. English-language research articles within the Dentistry subject area were included. After systematic filtering, 367 articles were selected for analysis. Metadata were extracted in CSV format and analysed using OpenRefine, VOSviewer, and Microsoft Excel. The review evaluated publication trends, leading journals, citation patterns, geographical distribution, author productivity, and keyword co-occurrence networks. **Discussion:** Publication output increased markedly over the three decades, from 55 articles (15%) in 1996–2005 to 162 articles (44%) in 2016–2026. The Journal of Dental Education contributed the highest number of publications, while the United States was identified as the leading contributor globally. Keyword co-occurrence analysis demonstrated a transition from traditional curriculum and clinical outcome topics toward digital and technology-oriented educational themes. Emerging topics included digital dentistry, 3D printing, virtual reality, and technology-enhanced learning. Network visualization also revealed increasing complexity and stronger interconnections among educational and technological themes over time, indicating the growing integration of digital competencies within prosthodontic education. **Conclusion:** Research in prosthodontic dental education has shown considerable quantitative and thematic growth over the past three decades. Current trends demonstrate a shift toward digitalized, competency-based, and technology-integrated educational approaches, highlighting the increasing importance of digital competencies in future prosthodontic training

Keywords: bibliometric analysis, dental education, digital dentistry, prosthodontics, prosthodontic education

KP-LR14 (Literature Review)

Effectiveness of Silver Diamine Fluoride (SDF) for Treatment Rampant Caries in Children Aged 2-6 Years

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ABSTRACT

Introduction: Rampant caries is caries that progresses rapidly, spreads extensively, and involves the entire tooth structure, leading to quick pulpal involvement. Prevalence of rampant caries is very high, with 532 million children globally having untreated caries in their primary teeth, necessitating effective preventive measures. Children's oral hygiene maintenance behaviors and healthy dietary patterns are caries prevention actions in addition to fluoride use, such as in drinking water and toothpaste. Another fluoride intervention is the application of Silver Diamine Fluoride (SDF) to prevent and arrest caries due to its antibacterial properties and ease of application on primary teeth. **Literature Review:** An objective of in this study was to review the literature examining the effectiveness of SDF for treatment rampant caries in children aged 2-6 years. Identification process was conducted across five scientific databases (PubMed, ProQuest, Science Direct, Springer Link, and EBSCO) on publications from January 1, 2020, to April 2025. Selected studies reviewed literature related to the effectiveness of SDF on rampant caries in children aged 2-6 years. A total of 21 studies met the eligibility criteria and were included in the review. **Discussion:** The effectiveness of SDF in arresting caries ranges from approximately 72-98% and increases when applied every 6 months in children aged 2-6 years at a concentration of 38%. There was no significant difference between SDF and sealants or Atraumatic Restorative Treatment (ART) in caries prevention; however, SDF is more effective than Sodium Fluoride (NaF) varnish in treating dentin caries. Adverse effects include black staining of the treated teeth, but parental satisfaction with SDF treatment reaches 71-78%. Factors affecting SDF effectiveness include anterior caries location, application frequency every 6 months, application duration of approximately 16 seconds, and the child's oral hygiene behavior **Conclusion:** Silver Diamine Fluoride (SDF) is effective in treating rampant caries in children aged 2-6 years, particularly for dentin caries.

Keywords: Silver Diamine Fluoride, Rampant Caries, Effectiveness.

KP-LR15 (Literature Review)**Subgingival Biodiversity in Periodontitis Patients With Type 2 Diabetes Mellitus: A Systematic Review**

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ABSTRACT

Introduction: A bidirectional relationship exists between type 2 diabetes mellitus (T2DM) and periodontitis. Hyperglycaemia contributes to increased complexity in the composition of the oral microbiome. This systematic review aimed to identify oral microbiome markers in patients with periodontitis and T2DM in comparison with periodontitis patients without diabetes. **Literature Review:** The protocol for this systematic review was registered in PROSPERO (Registration Number: CRD420251240556 prior to data extraction. A comprehensive search was conducted in the Pubmed, ScienceDirect, and Scopus database. The review followed the PRISMA guidelines. Overall, 113 studies were identified; after full-text evaluation, four papers met the inclusion criteria. The risk of bias in the included studies was assessed using JBI Critical Appraisal Tool. Due to high heterogeneity across the studies, only qualitative assessment was performed. All four studies consistently suggested that the subgingival microbiome of diabetic periodontitis subjects showed a higher abundance of Porphyromonas species compared to those with periodontitis alone. Specific biomarkers, including *P. intermedia*, *P. pasteri*, and members of the genus *Saccharibacteria* were uniquely identified in the diabetic periodontitis subjects. Furthermore, diabetic periodontitis subjects exhibited the upregulation of specific virulence genes, such as *mgfE*, *feoB*, and *tamB*. **Discussion:** Poor glycaemic control was linked to more pronounced microbial dysbiosis. Chronic hyperglycaemia impairs innate immune function, alters cytokine profiles, and increases advanced glycation end product formation. Furthermore, these conditions promote the growth of proteolytic and pro-inflammatory subgingival microbiome, contributing to periodontal tissue destruction. **Conclusion:** To conclude, T2DM fundamentally reshapes the periodontal microbiome, creating an environment that favors pathogenic species and enhances periodontal disease severity. Understanding these microbiome markers provide the opportunity for targeted therapies addressing specific pathogenic species and pathways.

Keywords: Oral Microbiome; Periodontitis; Type 2 Diabetes Mellitus

KP-LR17 (Literature Review)

The Rankl/OPG Ratio As A Biomarker Of Periodontitis Severity: A Systematic Review

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ABSTRACT

Background: Periodontitis is a chronic inflammatory disease characterized by progressive destruction of periodontal tissues and alveolar bone. The receptor activator of nuclear factor- κ B ligand (RANKL) and osteoprotegerin (OPG) are key regulators of bone remodeling. An imbalance between these molecules, reflected by an increased RANKL/OPG ratio, has been associated with increased osteoclast activity and periodontal bone resorption. **Objective:** This systematic review aims to evaluate the role of the RANKL/OPG ratio as a biomarker of periodontitis severity and its relationship with clinical periodontal parameters. **Methods:** Article searches were conducted in PubMed and Scopus using predefined Boolean search strategies combining terms related to periodontitis, RANKL (Receptor Activator of Nuclear Factor- κ B Ligand), and osteoprotegerin (OPG). The search strategy also included clinical periodontal criteria, such as alveolar bone loss, bleeding on probing (BOP), clinical attachment loss (CAL), and probing pocket depth (PPD). Studies published between 2016 and 2026 were considered. Only randomized controlled trials involving human participants and available as free full-text articles were included. Eligible studies reported measurements of RANKL, OPG, or the RANKL/OPG ratio in biological samples, such as gingival crevicular fluid, saliva, serum, or gingival tissue, and evaluated the associations of these measurements with periodontal disease severity. **Results:** The selected studies were analyzed to assess the relationship between the RANKL/OPG ratio and clinical indicators of periodontal destruction as well as changes following periodontal therapy. **Conclusion:** The RANKL/OPG ratio may serve as a potential biomarker reflecting the balance between bone resorption and protective mechanisms in periodontal tissues and may assist in assessing periodontitis severity.

Keywords: RANKL, OPG, periodontitis, biomarker

KP-LR18 (Literature Review)**Primary Caregivers' Oral Health Knowledge, Attitude, and Practice Regarding Early Childhood Caries: A Systematic Review**

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ABSTRACT

Background: Early Childhood Caries (ECC) is a very common dental health problem in children under six years of age and has a significant impact on quality of life. The knowledge, attitudes, and practices of primary caregivers affect the prevention of ECC. **Objective:** A systematic review was conducted by searching five databases (PubMed, ProQuest, Scopus, Taylor & Francis, and EBSCO) for articles published from 2016 to 2026. Inclusion criteria included human clinical studies with cross-sectional, cohort, or case-control designs that assessed the knowledge, attitudes, and practices of primary caregivers related to ECC. Eight studies with a total of 6,154 respondents from seven countries met the criteria for analysis. **Results:** The prevalence of ECC varies across countries, with the lowest in Brazil (24%) and the highest in Indonesia (88.7%). Across studies, lower caregivers' knowledge, less supportive attitudes, suboptimal oral hygiene practice, frequent sugar intake, limited parental supervision during toothbrushing, and delayed dental visits were commonly reported as factors associated with higher ECC experience. Conversely, higher maternal education, supervised toothbrushing, and good hygiene practices were protective. Studies in Indonesia add a quality-of-life dimension, showing that high caries scores correlate with reduced comfort and daily function in children.. **Conclusion:** This findings suggest that caregivers' knowledge, attitudes, and practices are important factors associated with ECC. Family-based interventions that improve oral health literacy and preventive behaviors are essential to reduce the burden of ECC.

Keywords: caregiver, health knowledge attitude practice, early childhood caries, systematic review

KP-OR02 (Original Research)

Correlation Between Pharyngeal Airway Morphology And Vertical Skeletal Growth Pattern

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ABSTRACT

Introduction: The size of the respiratory tract is influenced by the growth of dentofacial structures and soft tissues around it. Physiologically, the size of the respiratory tract will increase at the age of 6-18 years, then there will be a narrowing at the non-growing age. In addition, the size of the pharyngeal airway differs in the type of malocclusion and the different vertical skeletal growth patterns. **Objectives:** To analyse the correlation between the pharyngeal airway morphology in class I and II malocclusions with vertical skeletal growth patterns. **Methods:** In this cross-sectional study, we examined 126 participants aged 20-40 years, categorized into class I and class II malocclusions based on the ANB angle. These groups were further subdivided into six test groups based on vertical skeletal growth patterns (hypodivergent, norm divergent, and hyperdivergent). We measured upper and lower pharyngeal airway widths using McNamara analysis and pharyngeal airway length from the PNS-Eb point. **Results:** Statistical analysis revealed no correlation between upper and lower pharyngeal airway widths in class I and II malocclusions with vertical skeletal growth patterns. Additionally, the length of the pharyngeal airway in class II malocclusion displayed no correlation with the vertical skeletal growth pattern. In contrast, class I malocclusion demonstrated a statistically significant correlation between pharyngeal airway length and vertical skeletal growth patterns. **Conclusion:** Despite the lack of a statistically significant correlation in the overall analysis, class II malocclusion showed a unique trend, a narrowing of the upper pharyngeal airway width with an increasingly vertical skeletal growth pattern.

Keywords: Pharyngeal airway width, Pharyngeal airway length, Vertical skeletal growth pattern, Class I malocclusion, Class II malocclusion.

KP-OR06 (Original Research)**Potential of Konjac Glucomannan Gel Against *Porphyromonas gingivalis* from Periodontitis Patients: An In Vitro Study**

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ABSTRACT

Introduction: Periodontitis is a chronic inflammatory disease affecting the supporting tissues of the teeth and is closely associated with the accumulation of pathogenic biofilm, particularly *Porphyromonas gingivalis* (*P. gingivalis*). Nonsurgical periodontal therapy, such as scaling and root planing, is often combined with local antibiotics like minocycline to enhance treatment outcomes. However, repeated antibiotic use may contribute to bacterial resistance, highlighting the need for alternative agents with antibacterial properties. Konjac glucomannan (KGM), a natural polysaccharide, has been reported to exhibit antibacterial potential and may be developed as a gel for adjunctive periodontal therapy. **Methods:** An in vitro experimental study was conducted using *P. gingivalis* biofilm established for 24 hours prior to treatment. KGM gel was applied at concentrations of 0.8%, 1%, and 1.2%. A negative control group received no treatment, while a positive control group was treated with minocycline gel. Antibacterial activity was assessed using optical density measurements and quantitative polymerase chain reaction (qPCR) after 24, 48, and 72 hours of exposure. **Results:** Optical density analysis demonstrated a trend toward reduced biofilm biomass in KGM-treated groups compared to the negative control, with the most pronounced effect at 1.2% concentration after 48 hours. Increasing KGM concentrations showed a tendency toward greater inhibition. qPCR results revealed a significant reduction in bacterial quantity only at 1.2% concentration at 24 and 48 hours, while other groups and time points showed no significant differences. The minocycline group consistently exhibited the strongest antibacterial effect across all evaluations. **Conclusion:** KGM gel exhibits antibacterial activity against *P. gingivalis* in vitro, with the best effect observed at the 1.2% concentration and 48-hour incubation. However, its effectiveness remains lower than minocycline and appears to be primarily bacteriostatic, suggesting that KGM may be more suitable as a preventive agent rather than a primary therapeutic option.

Keywords: konjac, glucomannan, *Porphyromonas gingivalis*, periodontitis, in vitro, local antibiotic

KP-OR07 (Original Research)

Lactobacillus Plantarum As A Probiotic Against Porphyromonas Gingivalis In Periodontitis With Type 2 Diabetes

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ABSTRACT

Introduction: Periodontitis is a chronic inflammatory disease affecting the supporting tissues of the teeth and is closely associated with dysbiosis of the oral microbiota. The condition may be aggravated by systemic disorders such as Type 2 Diabetes Mellitus, which can alter the composition of subgingival biofilms and increase the prevalence of periodontal pathogens, particularly Porphyromonas gingivalis. Lactobacillus plantarum has demonstrated probiotic potential in modulating oral microbial balance and influencing periodontal biofilm development.

Objectives: To evaluate the effect of Lactobacillus plantarum at a concentration of 10^7 CFU/mL on biofilm optical density and the quantity of Porphyromonas gingivalis in subgingival biofilms of patients with periodontitis associated with Type 2 Diabetes Mellitus in vitro. **Methods:** This study was an in vitro experimental laboratory study. Subgingival biofilms were obtained from patients with periodontitis and type 2 diabetes mellitus. Biofilm optical density was measured using a microplate reader, while the quantities of P. gingivalis were analyzed using real-time polymerase chain reaction (qPCR) at incubation periods of 24, 48, and 72 hours. Results: Administration of Lactobacillus plantarum showed an increasing trend in biofilm optical density; however, qPCR analysis demonstrated a significant reduction in the quantity of Porphyromonas gingivalis. These findings suggest that changes in optical density may reflect alterations in total biofilm biomass rather than the abundance of specific bacterial species. **Conclusion:** Lactobacillus plantarum was effective in reducing the quantity of Porphyromonas gingivalis without decreasing overall biofilm biomass. The findings indicate the probiotic potential of Lactobacillus plantarum in modulating subgingival microbiota associated with periodontitis and Type 2 Diabetes Mellitus in vitro.

Key words: Periodontitis, type 2 diabetes mellitus, Lactobacillus plantarum, Porphyromonas gingivalis, optical density, qPCR

KP-OR08 (Original Research)**Konjac Glucomannan Gel Effects On Fibroblast Cell Viability And Migration: An In Vitro Study**

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ABSTRACT

Introduction: Periodontitis is a chronic inflammatory disease characterized by the destruction of periodontal tissues. Fibroblasts play an important role in periodontal wound healing through cellular proliferation and migration. Host modulation therapy has been developed as an adjunctive approach to regulate inflammatory responses and enhance tissue repair. Konjac glucomannan (KGM), a natural polysaccharide biomaterial, has shown potential in supporting wound healing and cellular activity. **Objectives:** To analyze the effect of various konjac glucomannan gel concentrations on fibroblast viability and migration in vitro. **Methods:** This in vitro experimental study evaluated KGM gels at concentrations of 0.8%, 1.0%, and 1.2%. Fibroblasts were treated with KGM gels and compared with control groups. Cell viability was assessed using the MTT assay at 0, 24, 48, and 72 hours. Cell migration was analyzed using a wound scratch assay at 0, 6, and 24 hours. Statistical analysis was performed using Shapiro–Wilk normality testing followed by one-way ANOVA and Tukey post hoc tests. **Results:** KGM gels were able to maintain fibroblast viability up to 48 hours, with no significant cytotoxic effects observed during the evaluation period. All treatment groups demonstrated progressive wound closure over time, indicating increased fibroblast migration from 6 to 24 hours. KGM gel groups exhibited greater wound closure percentages compared with the negative control and minocycline gel groups, with the 1.2% KGM gel demonstrating the highest migratory activity at both observation periods. Statistical analysis revealed significant differences among treatment groups, particularly at 24 hours, where the 1.2% KGM gel showed significantly enhanced fibroblast migration compared with lower KGM concentrations and control groups. **Conclusion:** KGM gel has the potential for intraoral application, supports fibroblast viability, and enhances cell migration, suggesting its potential application as a biomaterial in host modulation therapy for periodontitis, as an adjunct to scaling and root planing.

Key words: Konjac glucomannan, fibroblast, cell viability, cell migration, periodontitis.

KP-OR09 (Original Research)

Antibacterial And Anti-Inflammatory Effect Of *Hylocereus Polyrhizus* In In Vitro And In Vivo Periodontitis Models

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ABSTRACT

Introduction: Periodontitis is a common oral disease affecting approximately 1.07 billion people worldwide in 2021. The disease is associated with dysbiosis of oral biofilm and excessive inflammatory responses, particularly involving *Porphyromonas gingivalis* (*P. gingivalis*). Red dragon fruit (*Hylocereus polyrhizus*) peel is rich in bioactive compounds with potential antibacterial and anti-inflammatory properties. This study evaluated the potential of *H. polyrhizus* peel extract as an adjunctive agent for periodontitis management. **Objectives:** To investigate the antibacterial and anti-inflammatory effects of *H. polyrhizus* peel extract in *P. gingivalis*-induced periodontitis models. **Methods:** In the in vitro study, RAW 264.7 macrophages were pretreated with different concentrations of *H. polyrhizus* peel extract before being induced with *P. gingivalis*. The mRNA expression of proinflammatory cytokines (IL-6 and TNF- α) and anti-inflammatory cytokines (IL-4 and IL-10) was analyzed. In the in vivo study, fifty 7-week-old male Swiss Webster mice were randomly divided into five groups: 0.5% carboxymethylcellulose (CMC) as negative control, *H. polyrhizus* extract, *P. gingivalis*, *H. polyrhizus* + *P. gingivalis*, and *P. gingivalis* + azithromycin. Mice received daily oral gavage of the extract or CMC for 14 days. Experimental periodontitis was induced on day 7 using ligature placement between the maxillary first and second molars, followed by oral administration of *P. gingivalis* every three days. Alveolar bone destruction, gingival *P. gingivalis* expression, and serum antibody responses were subsequently evaluated. Results: In vitro, pretreatment with *H. polyrhizus* peel extract significantly reduced IL-6 and TNF- α gene expression in *P. gingivalis*-stimulated RAW 264.7 macrophages in a dose-dependent manner, while IL-4 and IL-10 expression remained unchanged. In vivo, administration of the extract alleviated alveolar bone destruction, lowered gingival *P. gingivalis* expression, and influenced systemic antibody responses in the experimental periodontitis model. Conclusion: *H. polyrhizus* peel extract showed antibacterial and anti-inflammatory effects in experimental periodontitis, suggesting its potential as a host modulatory agent.

Keywords: Periodontitis, *Hylocereus polyrhizus*, HMT, antibacterial, anti-inflammatory.

KP-OR10 (Original Research)**Papaya Effective Eco-Produce (P-EEP) as Potential Denture Cleanser: Antifungal Activity, Metabolite Profiling, and Material Effects**

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ABSTRACT

Introduction: Commercial denture cleansers may adversely affect the properties of acrylic dentures, warranting investigation of safer natural alternatives. Papaya Effective Eco-Produce (P-EEP) has been proposed due to its antimicrobial potential. Hence, this study aims to evaluate the antifungal activity of P-EEP fermented for three and six months against *Candida albicans*, identify metabolites in the most potent preparation, and assess its effect on acrylic denture surface roughness. **Methods:** Antifungal susceptibility testing was performed in triplicate using broth microdilution to determine the minimum inhibitory concentration (MIC) and minimum fungicidal concentration (MFC). Metabolites were characterised using liquid chromatography–mass spectrometry (LC–MS). Based on MIC/MFC findings, twenty-one acrylic resin specimens were randomly allocated into three groups and immersed in six-month fermented P-EEP (100%), Polident®, or distilled water. Surface roughness parameters (Ra, Rq, Rt) were measured at Day 0 and Day 90 using atomic force microscopy (AFM) and analysed using Generalised Estimating Equations (GEE). **Results:** Three-month fermented P-EEP showed no antifungal activity. Six-month fermented P-EEP exhibited fungistatic activity at 50% concentration and fungicidal activity at 100%. LC–MS analysis revealed metabolites including phenolic compounds and organic acids. GEE analysis showed no significant effects of immersion solution or time on Ra and Rt ($p>0.05$). In contrast, Rq was significantly influenced by immersion solution ($p=0.018$) and time ($p=0.029$), with no significant interaction effect ($p=0.201$). **Conclusion:** Six-month fermented P-EEP demonstrated concentration-dependent antifungal activity against *Candida albicans* and showed minimal effects on acrylic resin surface roughness, with no significant changes in Ra and Rt. Although Rq was significantly influenced by immersion solution and time, no interaction effect was observed. Overall, six-month fermented P-EEP appears to be a promising natural denture cleanser candidate; however, further studies are required to confirm its long-term safety and clinical applicability.

Keywords: Pharyngeal airway width, Pharyngeal airway length, Vertical skeletal growth pattern, Class I malocclusion, Class II malocclusion.

KP-OR11 (Original Research)

Effect of primer coating number on shear bond strength of repaired resin-matrix ceramic

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ABSTRACT

Introduction: Dental ceramics, including resin-matrix ceramics, are widely used for restoring damaged structures like crowns and veneers. Shofu Block HC, a zirconia-silica resin-matrix ceramic, is favored for tooth-colored restorations due to its high translucency, excellent shade matching, and superior mechanical properties. Despite their high strength, clinical fractures can occur, often requiring resin composite repairs. Prabritputaloong et al. reported that applying HC primer before Scotchbond Universal Plus adhesive enhances the repair bond strength of Shofu Block HC. While Klaisiri et al. found that three applications of a phosphate-containing primer maximized shear bond strength between zirconia and resin composite, the effects of multiple HC primer applications on resin-matrix ceramic repair strength remain unstudied. **Methods:** Fifty pieces of resin matrix ceramics (Shofublock HC) were randomly divided into five groups of ten specimens for each number of HC primer applications; group 1: no application (control group), group 2: one application, group 3: two applications, group 4: three applications, and group 5: four applications. Subsequently, the adhesive was applied, followed by the bonding of the resin composite. Shear bond strength (SBS) was measured using a universal testing device. To evaluate the failure modes, the debonded surfaces were examined under a stereomicroscope. **Results:** The highest SBS was obtained in group 3 (23.04 plus or minus 1.51 MPa) with no significant difference compared to group 4 and 5 with 30% mixed failure mode, whereas group 1 and 2 exhibited 100% adhesive failure mode. **Conclusion:** The application of HC primer two times prior to the adhesive agent can maximize shear bond strength between resin-matrix ceramic and resin composite interfaces.

Keywords: HC primer, number of applications, resin-matrix ceramic, resin composite, shear bond strength

AP-CR01 (Case Report)**Why Did Oral Candidiasis Present as Erythematous Form in an NGT-Fed Patient: A Case Report**

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ABSTRACT

Introduction: Oral candidiasis may present with different clinical phenotypes, depending on interactions among mucosal, environmental, and host-related factors. In hospitalized patients receiving nasogastric tube (NGT) feeding, these factors often coexist, making the clinical presentation more difficult to interpret. This case report presents a medically compromised patient who developed an erythematous form of oral candidiasis instead of the pseudomembranous form. **Case Report:** A 62-year-old woman at the Universitas Indonesia Hospital was bedridden with sepsis secondary to pneumonia, anemia, type 2 diabetes mellitus, hypoalbuminemia, frailty, and cognitive impairment. She was referred by an internist due to oral pain interfering with oral intake. She was receiving oxygen via a nasal cannula and NGT feeding. Examination showed diffuse erythematous lesions, dry mouth with severe xerostomia and a high Clinical Oral Dryness Score (CODS) of 9, and poor oral hygiene. She also had angular cheilitis and atrophic glossitis based on clinical phenotype. Management consisted of oral health care maintenance, cleaning of the teeth and wiping of the oral mucosa; administration of nystatin oral suspension; and demonstration of oral care to the caregiver, leading to improved mucosal condition and greater comfort. **Discussion:** Host-related factors may have contributed to the erythematous form. Reduced salivary flow impairs oral homeostasis and reduces pseudomembrane formation; anemia damages epithelial integrity and increases mucosal susceptibility; and severe illness without significant immunosuppression restricts the progression of pseudomembranous lesions. In this situation, *Candida* may have remained on the dry, weakened mucosal surface rather than forming a pseudomembrane. Biofilm and retained secretions may have sustained inflammation rather than promoting pseudomembrane formation. **Conclusion:** Integrating host factors and the oral environment is important in determining lesion phenotype, supporting diagnosis, and guiding optimal treatment for bedridden patients with NGT.

Keywords: Erythematous candidiasis; Nasogastric tube feeding; Oral candidiasis; Oral dryness

AP-CR02 (Case Report)

Comprehensive Management for Oral Conditions Revealing Systemic Sclerosis Following Antibiotic-Induced Erythema Multiforme in Wetland-Geriatric Woman

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ABSTRACT

Introduction: Rapidly increasing elderly-women populations are susceptible to autoimmune and hypersensitivity disorders, including systemic sclerosis (SSc), which quarterly prevalence is associated with high morbidity and mortality in elderly-onset cases. Xerostomia, a common orofacial SSc manifestation, may be misinterpreted as aging-related or dehydration in tropical wetlands, while immune-triggering hypersensitivity delaying recognition yet paradoxically facilitate earlier diagnosis. Current recommendation focuses in extraoral and systemic symptoms and management of advanced conditions, therefore we reported the first case of very-early diagnosis of SSc (VEDOSS) with antibiotic-induced erythema multiforme (EM) in a wetland-geriatric woman, highlighting comprehensive management algorithm by its oral conditions to improve quality of life (QoL) and mitigate disease progression. **Case report:** A 60-year-old female resident of Banjarmasin, South-Kalimantan, complained of persistent oral dryness following antibiotic-induced EM. Initial evaluation demonstrated dehydration-induced mild xerostomia with unilateral burning sensation, which severity increased to moderate with ocular dryness on follow-up that raise suspicion of an underlying autoimmune condition. Initial low-dose corticosteroid was prescribed and supporting examination confirmed very-early SSc with mild dehydration. Saliva substitutes and lubricating eye drops improved xerostomia-related complaints to a mild level presenting better QoL. Potential inflammatory and environmental factors that could accelerate disease progression were minimized through medical-dental care. **Discussion:** Persistent xerostomia may serve as an accessible gateway for early recognition in SSc since targeting exocrine glands that are rich of immune-interacting cells and dehydration in tropical-wetland climate may overlook or aggravate the symptoms. Antibiotic-induced EM, hormonal changes, aging, and heat/physical/emotional stress suggest emerging inflammation that may accelerate fibrotic progression in KLF5 dysregulation, unmasking underlying autoimmune condition. Low-dose corticosteroid therapy was to control disease progression while supportive care addressed functional impairment and QoL concerns. **Conclusion:** Concurrent oral conditions with systemic changes in this study may aid prompt diagnosis. Comprehensive management including xerostomic symptoms relief may enhance QoL while control of contributing factors may mitigate disease progression.

Keywords: antibiotic-induced erythema multiforme, comprehensive management, diffuse SSc, oral conditions, wetland-geriatric woman

AP-CR05 (Case Report)**Modified Suction Denture and Neutral Zone Technique for Severely Resorbed Mandibular Ridge: A Case Report***Astrya Fitryanur¹, Lindawati S. Kusdhany², Tri Ardi Mahendra²*¹Prosthodontics Residency Program, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia²Department of Prosthodontics, Faculty of Dentistry, Universitas Indonesia, Jakarta, Indonesia

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ABSTRACT

Introduction: Complete dentures remain one of the most demanding challenges in clinical prosthodontics. Severe alveolar resorption accompanied by a prominent genial tubercle compromises conventional denture retention and stability, potentially reducing masticatory function. Masticatory performance is an important clinical parameter for evaluating denture quality, and chewing gum tests have been used as a simple and reliable method to assess it. Such conditions often necessitate modifications to standard fabrication protocols, making careful treatment planning critical to achieve clinically acceptable outcomes. **Case Report:** A 68-year-old man presented with complete edentulism, a severely atrophic mandibular ridge, a prominent genial tubercle, and a Class II maxillomandibular relationship. Nutritional screening using the Mini Nutritional Assessment yielded a score of 17, indicating a risk of malnutrition. **Treatment:** A physiological impression was obtained using a modified suction-effective denture technique to improve peripheral seal. Tooth arrangement was performed using the neutral zone technique so that the denture is held in place by the perioral musculature, and a lingualized occlusion was used to reduce lateral and occlusal forces and minimize denture displacement during function. The patient reported satisfaction with denture retention, stability, and esthetic outcome.

Discussion: Decreased masticatory function and edentulism are known contributors to dietary restriction and nutritional decline in older adults. Masticatory performance was evaluated using a colour-changeable chewing gum test at one day and one month post-insertion and showed an increase in score with the patient's adaptation. Restoring masticatory function may allow patients to eat a more varied diet, which can positively influence nutritional intake over time; although direct nutritional outcomes were not assessed in this report, improved masticatory performance following prosthetic rehabilitation is expected to support better nutritional status. **Conclusion:** Integrating the neutral zone concept, lingualized occlusion, and a modified suction-effective denture technique in severely resorbed ridges may improve masticatory function and support nutritional intake.

Keywords: complete denture; mandibular atrophy; suction-effective denture; neutral zone; malnutrition

AP-CR09 (Case Report)

From Questionable Prognosis to 5-Year Survival: Preserving A Compromised Mandibular Molar In An Older Adult

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ABSTRACT

Introduction: Preservation of strategically important teeth is a key objective in geriatric dentistry, as tooth loss may adversely affect masticatory function, prosthodontic rehabilitation, and quality of life. Pulpal floor perforation associated with advanced furcation involvement presents a challenging clinical scenario and is often associated with a questionable prognosis. This case report describes the successful five-year survival of a compromised mandibular first molar managed using a multidisciplinary tooth-preserving approach. **Case Report:** A 65-year-old systemically healthy female was referred for crown construction of a root canal-treated mandibular first molar (tooth 36). Clinical examination revealed probing depths of 6–7 mm and Grade III furcation involvement. Radiographic assessment demonstrated furcation radiolucency associated with a pulpal floor perforation that had been previously repaired non-surgically. The tooth was diagnosed as an endodontic-periodontal lesion secondary to pulpal floor perforation with a questionable prognosis. Following comprehensive assessment, a decision was made to preserve the tooth. Surgical exploration under dental operating microscope confirmed the perforation defect. The pulpal floor was repaired using mineral trioxide aggregate (MTA), followed by regenerative periodontal therapy using a synthetic bone graft substitute (EthOss®). The tooth was subsequently restored with a full-coverage metal-ceramic crown. Clinical and radiographic evaluations were performed periodically over a five-year period. **Discussion:** Despite the presence of pulpal floor perforation and Grade III furcation involvement, favourable healing was achieved through a multidisciplinary approach involving endodontic, periodontal, and restorative management. At the five-year review, the tooth remained asymptomatic and functional, with reduced probing depths (4 mm) and radiographic evidence of stable periodontal support. Preservation of strategically important teeth may help older adults maintain oral function while avoiding more extensive prosthodontic treatment. **Conclusion:** This case demonstrates that compromised teeth with a questionable prognosis may achieve long-term survival and function when managed through a multidisciplinary tooth-preserving approach.

Keywords: Tooth preservation, Pulpal floor perforation, Grade III furcation involvement, older adult, Endodontic-periodontal lesion

AP-CR10 (Case Report)**Forensic Identification of A Deceased Crew Member Through Dental Age Estimation: A Case Report**

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ABSTRACT

Introduction: Human identification is a vital part of forensic investigations when personal documents or antemortem records are missing. Dental age estimation provides key biological data to help narrow down an unknown individual's identity. This case report specifically details how dental attrition (tooth wear) was used to estimate the age and aid in the identification of a deceased crew member. **Case Report:** Following a death aboard a fishing vessel in the Java Sea on June 10, 2026, the body of a male crew member from KM Bintang Jaya I was recovered intact and brought to Muara Baru Port for identification. Due to a lack of antemortem records and radiographic data, forensic odontologists used the Average Stage of Attrition (ASA) method on the mandibular left second molar (tooth 37). By evaluating the degree of occlusal wear, investigators were able to estimate the individual's dental age, helping construct his biological profile and support the official identification process. **Discussion:** In forensic investigations, age estimation is crucial for building a biological profile to identify individuals. Due to a lack of radiographic equipment in a maritime case, the Average Stage of Attrition (ASA) method was applied to the mandibular left second molar (tooth 37) of a deceased crew member. Although tooth wear can be influenced by diet, occupation, and masticatory habits, the estimated age range (59–67 years) closely matched the individual's actual age (60 years). This case demonstrates that the ASA method is a simple, cost-effective, and reliable approach for forensic age estimation, especially in resource-limited settings. **Conclusion:** Dental age estimation using the ASA method can provide valuable support in forensic identification, particularly when radiographic examinations are unavailable. In this case, the estimated age closely corresponded to the chronological age of the deceased, demonstrating the usefulness of dental attrition assessment as an adjunctive tool in forensic human identification.

Keywords: forensic odontology; age estimation; dental attrition; ASA method; human identification; crew member; case report

AP-CR11 (Case Report)

CADCAM Guided Surgical Management of Maxillary Infection Using 3r Concept Rejuvenation, Regeneration, and Rehabilitation

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ABSTRACT

Introduction: Persistent periapical pathology associated with previously treated teeth may lead to chronic infection, sinus tract formation, alveolar bone destruction, and significant patient discomfort. Advances in digital dentistry and regenerative techniques have enabled predictable rehabilitation with improved precision and reduced morbidity. The 3R concept—Rejuvenation, Regeneration, and Rehabilitation—provides a structured framework for managing such complex cases. This report describes the successful application of this concept in conjunction with CAD/CAM-guided surgery for the management of chronic infection in the maxillary posterior region.

Case Report: A 50-year-old male with radiating pain on the upper right side of the face, with history of endodontic treatment in teeth #15 and #16, 15 years earlier. Clinical examination revealed a discharging sinus tract in relation to the maxillary right posterior region associated with acute pain and swelling. Radiographic and CBCT evaluation demonstrated extensive periapical pathology and compromised bone architecture around affected teeth. Based on the clinical and radiographic findings, a diagnosis of chronic apical periodontitis with acute exacerbation associated with previously treated teeth #15 and #16 was established.

Discussion: Photodynamic therapy offers a minimally invasive adjunct for reducing microbial burden without contributing to antimicrobial resistance. PRF combined with bone augmentation procedures, it enhances ridge preservation and improves the predictability of implant therapy. The integration of CBCT imaging, digital impressions, and CAD/CAM surgical guides allows prosthetically driven implant placement with high accuracy. Flapless guided surgery further reduces patient morbidity while maintaining surgical precision. **Conclusion:** The 3R concept of Rejuvenation, Regeneration, and Rehabilitation provides a comprehensive treatment strategy for managing chronic endodontic infections with associated bone loss. The use of photodynamic therapy, PRF-assisted regeneration, and CAD/CAM-guided implant placement resulted in successful infection control, predictable bone regeneration, precise implant positioning, and functional prosthetic rehabilitation. This multidisciplinary approach represents a valuable treatment option for complex implant rehabilitation cases.

Keywords: CAD/CAM, photodynamic therapy, PRF, socket preservation, rehabilitation.

AP-CR12 (Case Report) Dental Dilemma: Decision Making Art

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ABSTRACT

Introduction: Geriatric population is increasing exponentially, and many elderly patients now retain more natural teeth than before, creating the need for flexible and customised dental care, emphasizing on the art of decision making in geriatric dental treatment plans. **Case Report:** This Poster presentation is based on various challenges that we face during consultation, planning and management in a routine dental OP. Each circle is significant as a risk assessment tool from oral examination, systemic comorbidities, drug history, functional capacity, treatment tolerance, duration for treatment and the need for treatment. The plans are modified, flexible, patient-centred tailored for their systemic and functional limitations. The final treatment decision was guided by need of the hour, safety, prognosis, patient compliance, oral hygiene maintenance and future need for dental treatment. **Discussion:** Treatment planning in older adults is a dynamic process, without any set template. It is based not only on the dental diagnosis, but also on systemic disease, drug history, dependency status, timing of the treatment plan, prognosis and expected quality of life goals. There has to be more emphasis on minimally invasive and medically holistic care than traditional interventional dental treatments in medically compromised older adults. **Conclusion:** In geriatric dentistry, the best treatment plan may not be the conventional text book option but the one that is safest, acceptable and sustainable for that patient's medical reality. These strategies underline such safe, customised, flexibility in clinical judgement and integration of good oral health into patient's overall well-being.

Keywords: patient-centred, medically compromised, interdisciplinary, customised dental plan

AP-LR01 (Literature Review)

Microscopic Plasticity of *Candida albicans* in Geriatric Oral Health: Morphological Insights and Antifungal Resistance Challenges

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ABSTRACT

Oral candidiasis is the most prevalent opportunistic fungal infection of the oral mucosa (24, 32, 35), and is particularly common in older adults (32, 33, 36, 37), especially complete denture wearers and patients with xerostomia or multiple comorbidities. *Candida albicans* remains the principal etiological agent (7, 8, 22), characterized by marked morphological plasticity (yeast, pseudohyphae, and true hyphae) (8, 7), robust biofilm formation on oral surfaces and prostheses, and increasingly important antifungal resistance. In geriatric populations, local factors such as denture wearing and salivary hypofunction interact with systemic conditions—including diabetes, malignancy, immunosuppression, and polypharmacy—to favour persistent colonization and recurrent disease. This narrative review synthesizes current evidence on oral candidiasis in older adults, with specific emphasis on denture-associated biofilms, xerostomia, immunosenescence, and the contribution of advanced microscopic techniques to diagnosis and understanding of pathogenesis. We searched PubMed/MEDLINE, Scopus, and Google Scholar up to March 2026 for English-language clinical and experimental studies using combinations of keywords related to “oral candidiasis”, “elderly”, “older adults”, “denture stomatitis”, “xerostomia”, “immunosenescence”, “biofilm”, and “microscopy”. The objectives are to: (i) describe the epidemiology and clinical manifestations of oral candidiasis in older adults; (ii) critically examine geriatric-specific risk factors such as denture wearing, salivary hypofunction, immune compromise, and advanced age; (iii) appraise the strengths and limitations of optical microscopy, transmission electron microscopy (TEM), and scanning electron microscopy (SEM) (12, 13, 14, 15, 18, 19, 16), in characterizing oral *Candida* and denture biofilms; and (iv) discuss emerging antifungal resistance patterns in oral isolates and their implications for management in geriatric dentistry and oral and maxillofacial surgery. Rather than cataloguing mechanisms in isolation, we highlight areas of consensus and controversy and identify key gaps that require targeted research in geriatric oral health.

Keywords: *Candida albicans*, Candidiasis, Microscopy, Cellular Architecture, Oral Pathogenesis

AP-LR01 (Literature Review)**Microscopic Plasticity of *Candida albicans* in Geriatric Oral Health: Morphological Insights and Antifungal Resistance Challenges**

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ABSTRACT

Oral candidiasis is the most prevalent opportunistic fungal infection of the oral mucosa (24, 32, 35), and is particularly common in older adults (32, 33, 36, 37), especially complete denture wearers and patients with xerostomia or multiple comorbidities. *Candida albicans* remains the principal etiological agent (7, 8, 22), characterized by marked morphological plasticity (yeast, pseudohyphae, and true hyphae) (8, 7), robust biofilm formation on oral surfaces and prostheses, and increasingly important antifungal resistance. In geriatric populations, local factors such as denture wearing and salivary hypofunction interact with systemic conditions—including diabetes, malignancy, immunosuppression, and polypharmacy—to favour persistent colonization and recurrent disease. This narrative review synthesizes current evidence on oral candidiasis in older adults, with specific emphasis on denture-associated biofilms, xerostomia, immunosenescence, and the contribution of advanced microscopic techniques to diagnosis and understanding of pathogenesis. We searched PubMed/MEDLINE, Scopus, and Google Scholar up to March 2026 for English-language clinical and experimental studies using combinations of keywords related to "oral candidiasis", "elderly", "older adults", "denture stomatitis", "xerostomia", "immunosenescence", "biofilm", and "microscopy". The objectives are to: (i) describe the epidemiology and clinical manifestations of oral candidiasis in older adults; (ii) critically examine geriatric-specific risk factors such as denture wearing, salivary hypofunction, immune compromise, and advanced age; (iii) appraise the strengths and limitations of optical microscopy, transmission electron microscopy (TEM), and scanning electron microscopy (SEM) (12, 13, 14, 15, 18, 19, 16), in characterizing oral *Candida* and denture biofilms; and (iv) discuss emerging antifungal resistance patterns in oral isolates and their implications for management in geriatric dentistry and oral and maxillofacial surgery. Rather than cataloguing mechanisms in isolation, we highlight areas of consensus and controversy and identify key gaps that require targeted research in geriatric oral health.

Keywords: *Candida albicans*, Candidiasis, Microscopy, Cellular Architecture, Oral Pathogenesis

AP-LR03 (Literature Review)

Periodontitis CRP and Ischemic Stroke Axis for Digital Biomarkers and Global Oral Health Prevention

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ABSTRACT

Introduction: Ischemic stroke remains a major cause of death and long-term disability, while periodontitis is a highly prevalent chronic inflammatory disease that may increase systemic inflammatory burden. C-reactive protein (CRP), particularly high-sensitivity CRP (hs-CRP), is an important inflammatory biomarker that may link periodontal inflammation, endothelial dysfunction, atherosclerosis, prothrombotic activity, and cerebrovascular risk. **Literature Review:** This literature review synthesizes evidence from 2021 to 2026 on the periodontitis-CRP-ischemic stroke axis and expands the discussion to CRP digital biomarkers, point-of-care technologies, salivary diagnostics, wearable biosensors, artificial intelligence, and human-centered prevention in global oral health.

Discussion: Evidence indicates that periodontitis is associated with elevated serum CRP, periodontal therapy can reduce CRP levels, and higher CRP is related to worse ischemic stroke prognosis. Emerging electrochemical biosensors, optical sensors, field-effect transistor platforms, microfluidic immuno-biosensors, microfluidic lateral-flow immunoassays, wireless sweat patches, and saliva-based platforms may transform CRP from a laboratory biomarker into a rapid, portable, digitally integrated biomarker. **Conclusion:** CRP appears to be a clinically meaningful component of the biological axis connecting periodontitis and ischemic stroke. Although causality has not been fully established, periodontitis should be considered a modifiable inflammatory condition with potential relevance to cerebrovascular prevention.

Keywords: C-reactive protein; hs-CRP; digital biomarker; periodontitis; ischemic stroke; biosensor; salivary diagnostics; wearable sensor; artificial intelligence; global oral health; human-centered prevention.

AP-LR06 (Literature Review)

Management of Odontogenic Focal Infection in Frail Older Adults: A Review of Clinical Considerations

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ABSTRACT

Introduction: Older adults frequently present with odontogenic foci, including root remnants, unrestorable teeth, pulp necrosis, and periodontal diseases. Ideally, these conditions are managed through extraction, endodontic treatment, or periodontal therapy to prevent pain, inflammation, and local or systemic complications. However, in frail or medically compromised older adults, multimorbidity, functional limitations, and treatment-related risks may complicate the decision to perform definitive dental care. **Literature Review:** This literature review discusses clinical considerations for managing odontogenic focal infections in frail older adults, with emphasis on clinical decision-making regarding whether to retain, treat, or intervene, particularly with invasive procedures. The review also highlights patient-related factors, including frailty, systemic disease, cooperation, life expectancy, and treatment-related risks, as well as minimally invasive strategies to reduce complications when an invasive procedure is required. **Discussion:** Evidence suggests that exposed root remnants and unrestorable teeth in frail older adults may contribute to plaque retention, caries, pulpal exposure, periapical or periodontal inflammation, mucosal trauma, and the progression of infection. However, invasive treatment, such as extraction, is not always immediately indicated, particularly in patients with limited life expectancy, severe systemic contraindications, poor cooperation, or high surgical risk. In such cases, risk-based conservative or palliative management may be appropriate when no pain or acute inflammation is present. When invasive treatment is required, careful preoperative assessment, infection control, medical consultation, and minimally invasive techniques may help reduce surgical trauma, preserve the alveolar bone, support wound healing, and lower the risk of complications. **Conclusion:** Management of focal infections in frail older adults should balance infection control with procedural safety. Minimally invasive and protocol-based approaches may improve treatment safety in medically vulnerable older adults.

Keywords: geriatric dentistry; focal infection; frail elderly

AP-LR09 (Literature Review)

Efficacy of NSPT in Older Adults With T2DM and Periodontitis: Systematic Review and Meta-Analysis

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ABSTRACT

Introduction: Diabetes mellitus (DM) is a metabolic disorder characterized by chronic hyperglycemia, with the highest prevalence among older adults aged ≥ 60 years. Periodontitis is a major oral complication of DM and exhibits a bidirectional relationship with Type 2 DM (T2DM). Non-surgical periodontal therapy (NSPT), the gold-standard treatment for periodontitis, may improve glycemic, periodontal, and inflammatory parameters; however, evidence in older populations remains limited. The aim of this study is to evaluate the effects of NSPT on periodontal parameters in older adults with T2DM and periodontitis. **Literature Review:** This systematic review and meta-analysis followed PRISMA 2020 and was registered in PROSPERO (CRD420251071477). PubMed, Cochrane Library, ClinicalTrials.gov, Scopus, ProQuest, ScienceDirect, EBSCOHost, and PubMed Central were searched for randomized controlled trials (RCTs) enrolling older adults (mean age ≥ 60 years). Risk of bias was assessed using Cochrane RoB 2. Random-effects meta-analyses were conducted, reporting mean differences (MDs) with 95% confidence intervals (CIs); $P < 0.05$ was considered statistically significant. Seven low-risk-of-bias RCTs ($n = 345$) were included. **Discussion:** At 3 months, NSPT significantly improved PPD -0.35 mm (95% CI: $[-0.57, -0.13]$), CAL -0.28 mm [95% CI: $[-0.46, -0.10]$], and PII -1.06 (95% CI: $[-1.94, -0.19]$). At 6 months, significant between-group differences persisted for PPD -0.33 mm (95% CI: $[-0.57, 0.10]$), CAL -0.42 mm (95% CI: $[-0.58, -0.25]$), BOP -24.62% (95% CI: $[-46.09, -3.15]$), PII -1.39 (95% CI: $[-2.24, -0.55]$), and plaque score (%) -28.62% (95% CI: $[-50.76, 6.47]$). **Conclusion:** In older adults with T2DM and periodontitis, NSPT significantly improves periodontal parameters.

Keywords: non-surgical periodontal therapy; type 2 diabetes mellitus; periodontitis; older adults; periodontal parameters

AP-LR10 (Literature Review)**Potential 1.2% Statin Gel as an Adjunctive Host Modulator in Non-Surgical Therapy for Chronic Periodontitis**

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ABSTRACT

Introduction: Chronic periodontitis is a long-term multifactorial inflammatory disease that causes destruction of tooth-supporting tissues, periodontal attachment loss, alveolar bone resorption, and possible tooth loss. Scaling and root planing (SRP) remains the basic non-surgical periodontal therapy, but its regenerative effect may be limited in deep periodontal pockets and intrabony defects; therefore, adjunctive host-modulatory therapy is needed. **Literature Review:** This narrative review evaluates the potential of locally delivered 1.2% statin gel, particularly rosuvastatin, atorvastatin, and simvastatin, as an adjunct to SRP in the management of chronic periodontitis. Literature was synthesized from PubMed/MEDLINE, Scopus, and Google Scholar, focusing on randomized or controlled clinical trials, systematic reviews, meta-analyses, and relevant mechanistic studies published mainly from 2015 to December 2025. Studies involving smokers and patients with type 2 diabetes mellitus were excluded to reduce major confounding factors. **Discussion:** Available clinical evidence shows that adjunctive 1.2% statin gels generally provide additional improvements in probing depth reduction, clinical attachment level gain, bleeding reduction, and radiographic intrabony defect fill compared with SRP alone or SRP plus placebo. Statins may support periodontal healing by inhibiting pro-inflammatory cytokines, reducing matrix metalloproteinase activity, modulating the OPG/RANKL pathway, enhancing osteoblast activity, and increasing bone morphogenetic protein-2 expression. Among the evaluated agents, rosuvastatin shows more consistent and superior clinico-radiographic outcomes in several studies, although direct comparisons remain limited and require further independent validation. **Conclusion:** Locally delivered 1.2% statin gel or hydrogel appears to be a promising, safe, and effective adjunctive host modulator for non-surgical periodontal therapy in chronic periodontitis, especially in deep pockets associated with intrabony defects. Although the evidence supports additional clinical and regenerative benefits, standardized delivery protocols, longer follow-up, and high-quality multicenter trials are still required before routine widespread clinical adoption can be recommended.

Keywords: Adjuvant therapy; chronic periodontitis; host modulator; non-surgical periodontal therapy; statin gel; scaling and root planing.

AP-LR11 (Literature Review)

Geriatric Dentistry in India — Challenges and The Role of AGeD in Geriatric Oral Healthcare

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ABSTRACT

Introduction: With India's elderly population projected to reach 15% of the total population by 2036, geriatric dentistry has become an immediate clinical imperative. This specialty addresses the complex intersection of age-related oral alterations and systemic co-morbidities. As a new generation of older adults emerges, Indian dental practitioners face distinct, compounding challenges across multiple domains: Oral Health Status: Physiological structural changes leave the elderly highly vulnerable. National data reveals that partial edentulism affects up to 61.9% of adults over 45, while complete edentulism averages 7.2%, alongside severe periodontitis, xerostomia, and root caries. Socioeconomic Barriers: Over 40% of India's elderly fall into the poorest wealth quintile, and 75% are financially dependent. Escalating per capita healthcare costs push the majority to rely on underfunded government facilities. Systemic & Neuropsychological Health: Patient management is heavily complicated by chronic systemic disorders, cognitive decline, and physical disabilities. Furthermore, dependent elders frequently rely on primary caregivers who lack formal training in oral hygiene. Academic Limitations: Professionally, a critical gap exists because geriatric dentistry curriculum is not yet integrated into standard undergraduate dental training. **Discussion:** The Role of AGeD: Operating under the philosophy of "Samavaya" (uniting dental, medical, and allied sciences), the Association of Geriatric Dentistry (AGeD) champions interdisciplinary collaboration to systematically resolve these crises. Vision & Mission: AGeD envisions a future where comprehensive geriatric care is a fully recognized, universally accessible specialty. Its mission centers on raising public awareness, empowering clinicians with specialized knowledge, and executing targeted oral healthcare projects. Strategic Pillars: AGeD actively fosters national and international partnerships to share best practices, enhance clinical research, and safeguard the academic growth of the specialty. **Conclusion:** Geriatric care demands that Indian clinicians transition from traditional restorative protocols toward an empathetic, multidisciplinary framework that protects the rights, preserves the functional abilities, and honors the lived experiences of older adults.

Keywords: Geriatric Dentistry, AGeD, India

AP-LR12 (Literature Review)
Dry Mouth Trends Among the Older Adults in India

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ABSTRACT

Introduction: Dry mouth (xerostomia) is an escalating public health concern among the rapidly expanding elderly population in India. Affecting approximately 30% and above of older adults, this condition severely compromises oral function, nutritional intake, and overall quality of life. It significantly increases the risk of dental caries, fungal infections, and denture instability. dentistry curriculum is not yet integrated into standard undergraduate dental training. **Literature Review:** The demographic shift in India has led to a burgeoning geriatric population, bringing heightened attention to age-associated oral health challenges. Epidemiological studies estimate that xerostomia prevalence ranges from 15% to over 30% among older Indian adults. While physiological aging itself does not directly cause dry mouth, salivary hypofunction in the elderly is heavily driven by extrinsic and pathological factors. The primary trigger is polypharmacy; the simultaneous use of multiple prescription and over-the-counter medications. Elderly patients frequently consume xerogenic drugs, such as antihypertensives, antidepressants, antihistamines, and diuretics. Furthermore, the high prevalence of chronic systemic comorbidities in India, particularly diabetes mellitus and autoimmune conditions like Sjögren's syndrome, exacerbates salivary gland dysfunction. **Discussion:** Persistent oral dryness results in severe physical and psychological discomfort. Reduced salivary flow impairs chewing, swallowing, and speaking. The lack of protective lubrication accelerates tooth decay specifically root caries and leads to mucosal ulcerations, burning mouth syndrome, and increased susceptibility to oral candidiasis. **Management and Future Implications** Current management strategies in India primarily rely on palliative care, including the use of artificial saliva substitutes, sialogogues, and rigorous hydration. **Conclusion:** There is a critical need for integrated geriatric care models to review systemic medication regimens, manage underlying diseases, and implement preventive oral hygiene routines. Raising awareness among healthcare providers is essential to mitigate the debilitating impacts of dry mouth on India's aging demographic.

Keywords: Xerostomia, dry mouth, geriatric health

AP-LR13 (Literature Review)

Silver Smiles, Skilled Graduates: Strengthening Dental Public Health Competencies for Older Persons

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ABSTRACT

Introduction: The global population is ageing rapidly, increasing the need for healthy and active ageing. As older adults face unique oral health challenges, preparing future dentists to deliver compassionate, age-friendly care requires the integration of geriatric oral health competencies into the dental public health curriculum. The review seeks to identify existing competency frameworks, evaluate educational strategies used to develop these competencies, and highlight gaps and future directions for curriculum enhancement. **Literature Review:** Hogue et al. (2016) conducted a Delphi study to identify core competencies required in geriatric dentistry fellowship programs. Vasthare et al. (2018) presented a narrative review of major geriatric oral health concerns from a dental public health perspective. Tahani et al. (2019) evaluated the status of geriatric education and the availability of educational facilities in dental schools by a cross sectional study. Tabrizi and Lee (2021), assessed geriatric oral health competency among dental providers and identified gaps in competency levels by an online survey. Singh et al. (2024) investigated the perceptions and attitudes of dental students toward geriatric care using a questionnaire-based survey. Jenifer et al. (2026) explored the role of interprofessional education in strengthening geriatric oral healthcare by a narrative policy review. **Discussion:** The reviewed studies emphasize the need to strengthen geriatric oral health competencies within the dental public health curriculum to meet the needs of an ageing population. While competency frameworks and positive student attitudes have been reported, gaps remain in curriculum content, clinical exposure, interprofessional education, and competency-based training. **Conclusion:** The literature highlights the need to strengthen and enhance dental public health curricula by aligning to WHO's healthy aging framework to better prepare graduates for delivering age-friendly oral healthcare to older adults.

Keywords: dental care for older persons, public health dentistry, competency based education

AP-LR14 (Literature Review)**Evidence-Based Digital Innovations In Geriatric Oral Health: A Literature Review Of Teledentistry And Ai-Assisted Monitoring**

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ABSTRACT

Introduction: As the global population ages, traditional oral care models struggle with mobility and cognitive barriers, necessitating a shift toward evidence-based digital interventions to ensure health equity. **Literature Review:** Recent evidence highlights the efficacy of non-AI teledentistry, such as WhatsApp and mobile augmented reality (AR), which improve oral health knowledge and attitudes with over 80% acceptability. AI-enabled tools, specifically smart toothbrushes and remote monitoring apps, have demonstrated significant clinical improvements, including a 7.9% additional reduction in inflamed periodontal pockets when used as adjunctive supports. **Discussion:** Critical analysis reveals that technology is most effective as "Augmented Intelligence"—an adjunct to professional judgment rather than a stand-alone diagnostic tool. While AI screening shows high sensitivity, its moderate specificity requires human oversight to avoid misdiagnosis. Successful implementation relies on simplicity, personalization, and caregiver involvement, especially for seniors with cognitive decline. **Conclusion:** Integrating teledentistry and AI monitoring as supportive tools within a human-centered care model offers the most promising path for enhancing geriatric oral health outcomes.

Keywords: geriatric dentistry; teledentistry; artificial intelligence; oral hygiene; evidence-based practice.

AP-OR05 (Original Research)

Association Between Masticatory Performance and Physio-Cognitive Decline Syndrome in Community-Dwelling Older Adults

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ABSTRACT

Introduction: Physio-Cognitive Decline Syndrome (PCDS), defined by the coexistence of mobility impairment no disability (MIND) and mild cognitive impairment no dementia (CIND), is given special attention due to its potentially reversible nature. Masticatory function has been reported to be associated with cognitive impairment and functional decline; however, its role in PCDS remains unclear. Understanding this relationship may support clinical screening and preventive strategies to promote healthy aging. **Objectives:** This study aimed to analyze the association between masticatory performance and PCDS in community-dwelling older adults. **Methods:** A cross-sectional study was conducted among 176 participants aged 60–83 years, using convenience sampling. Masticatory performance was evaluated based on a standardized gummy jelly test. PCDS were defined by the presence of both MIND (slow gait speed and/or low handgrip strength) and CIND (Montreal Cognitive Assessment Indonesian Version [MoCA-Inda] score <23 but >18). Data were analyzed using chi-square tests and binary logistic regression. Results: PCDS were identified in 21,6% of participants, among whom 37,8% had decreased masticatory function. Multivariate logistic regression showed that poor masticatory performance was associated with higher odds of PCDS (OR = 7.07; 95% CI: 2.24–22.35; $p < 0.05$). Lower economic status (OR = 4.02; 95% CI: 1.53–10.55; $p < 0.05$) and poor nutritional status (OR = 3.09; 95% CI: 1.29–7.37; $p < 0.05$) were also significant predictors. **Conclusion:** Decreased masticatory function is associated with PCDS, supporting its role as a modifiable factor at a potentially reversible stage of physio-cognitive decline.

Keywords: Physio-cognitive decline syndrome; masticatory performance; cognitive impairment; frailty; oral health

AP-OR07 (Original Research)

Loneliness as a Determinant of Oral Health Status and Behavior among Jakarta's Elderly

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ABSTRACT

Introduction: Social connection is a fundamental human need, yet loneliness has emerged as a global public health epidemic. Loneliness triggers chronic psychosocial stress and immune dysregulation, with significant implications for oral health. In Indonesia, research exploring the link between loneliness and oral health parameters is still limited. **Objectives:** This study aimed to analyze the relationship between loneliness levels and oral health status and behavior among institutionalized and non-institutionalized elderly populations in Jakarta. **Methods:** An observational analytic study with a cross-sectional design was conducted on 150 elderly divided into two equal groups of 75 institutionalized and 75 non-institutionalized participants. Loneliness was measured using the Indonesian version of the De Jong Gierveld Loneliness Scale (DJGLS). Oral health parameters assessed included the Decayed, Missing, and Filled Teeth (DMFT) index, the Simplified Oral Hygiene Index (OHI-S), the Gingival Index (GI), the Clinical Oral Dryness Score (CODS), and the Mucosal Plaque Score (MPS). Additionally, oral mucosal lesions data were recorded without statistical comparison. Data were analyzed using Mann-Whitney U, Spearman's Rho, and Multiple Logistic Regression ($\alpha = 0.05$). **Results:** Institutionalized elderly reported significantly higher loneliness scores (5.89 ± 2.52) compared to the non-institutionalized group (3.29 ± 2.38 ; $p < 0.05$). Institutionalization was the strongest predictor of loneliness ($OR = 4.81$). Loneliness significantly correlated with poor health behaviors (reduced brushing frequency, smoking, and lack of dental visits) and all clinical oral parameters ($p < 0.05$). Oral health status was poor in the institutionalized group across all parameters. Regression analysis revealed that loneliness contributed most significantly to dynamic physiological variables, explaining 18.2% of the variance in MPS and 16.8% in CODS. **Conclusion:** Loneliness is a critical psychosocial determinant of oral health behavior and physiological function among the elderly. Holistic geriatric care must integrate psychosocial support into clinical oral medicine to mitigate the biological impacts of social isolation.

Key words: loneliness, elderly, oral health status, oral health behavior.

AP-OR09 (Original Research)**Relationship Between Mandibular Residual Ridge Morphology, Masticatory Performance, and the Clinical Success of Conventional Complete Denture Treatment***Chika Astarsari Hadi¹, Muslita Indrasari², Lindawati Kusdhany²*¹Postgraduate Program in Prosthodontics, Faculty of Dentistry, Universitas Indonesia, Indonesia²Department of Prosthodontics, Faculty of Dentistry, Universitas Indonesia, Indonesia

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ABSTRACT

Introduction: Complete edentulism impairs masticatory function and quality of life. Conventional complete dentures are the primary rehabilitation for edentulous patients, yet success depends on anatomical factors. Mandibular residual ridge morphology — including ridge height, form, and bone density — influences denture retention, stability, and masticatory force distribution. Although masticatory performance and subjective treatment success are key of prosthodontic outcome indicators, existing studies have reported inconsistent findings on their relationship with residual ridge morphology. Few studies have simultaneously examined both objective masticatory performance and subjective treatment outcomes in relation to ridge morphology. **Objectives:** This study aimed to evaluate the relationship between mandibular residual ridge morphology and masticatory performance and treatment success of conventional complete dentures in edentulous patients and may serve as a guideline in planning an effective treatment plan for creating suitable and successful conventional complete denture. **Methods:** Eighty-five subjects (48 men, 37 women) aged ≥ 45 years with complete dentures participated, selected using a consecutive sampling technique. Masticatory performance was assessed using color-changeable chewing gum and treatment success using a subjective measurement tool of removable denture treatment success. Residual ridge form (square, oval, triangle) was obtained from patient medical records. Residual ridge height and bone density (Mandibular Cortical Width (MCW), Mandibular Cortical Index (MCI), Panoramic Mandibular Index (PMI)) were evaluated from panoramic radiographs. Bivariate analysis with Chi-square and multivariate analysis with logistic regression were performed. **Results:** Residual ridge morphology parameters showed no significant association with masticatory performance or treatment success ($p > 0.05$). Prior denture experience was the only variable significantly associated with masticatory performance ($OR = 4.42$ (95% CI 1.71–11.43)). No variable was a significant independent predictor of treatment success ($p > 0.05$). **Conclusion:** Mandibular residual ridge morphology was not significantly associated with masticatory performance or complete denture treatment success. Prior denture experience was the only significant predictor, suggesting patient adaptation plays a greater role than anatomical factors in prosthodontic outcomes.

Keywords: complete denture; masticatory performance; clinical success; residual ridge morphology

AP-OR10 (Original Research)**Carotid Artery Calcifications On Panoramic Radiographs As Stroke Risk Indicator In Indonesian Patients***Agya Nanda Prasetya^{1*}, Andry Sentosa¹*¹Faculty of Dentistry, Petra Christian University, Surabaya, Indonesia

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ABSTRACT

Introduction: Stroke remains a leading cause of mortality and long-term disability worldwide. Carotid artery atherosclerosis is a major modifiable risk factor for ischemic stroke, and carotid artery calcifications (CACs) may indicate advanced vascular disease. Panoramic radiographs, routinely used in dentistry, may incidentally reveal CACs and provide an opportunity for early identification of high-risk individuals. However, limited data are available in Indonesian elderly populations. This study aimed to determine the prevalence of CACs on panoramic radiographs in Indonesian patients aged 60 years and older, a population at increased risk of carotid atherosclerosis and stroke, and to evaluate their relevance for stroke risk screening. **Methods:** A retrospective cross-sectional study was conducted using 1,086 panoramic radiographs obtained from the Radiology Department of Premier Surabaya Hospital between March 2022 and March 2026. Patients aged ≥ 60 years with diagnostically acceptable images were included. Radiographs were independently evaluated by trained examiners for radiopaque nodular or irregular calcifications adjacent to the C3–C4 cervical vertebral level suggestive of CACs. Laterality and demographic distribution were analyzed descriptively. **Results:** CACs were identified in 223 of 1,086 radiographs (20.5%). Prevalence increased with age, from 15.2% in patients aged 60–69 years to 25.7% in those aged ≥ 80 years. Bilateral calcifications were observed in 143 CAC-positive patients (64.1%). Female patients showed a slightly higher prevalence than males (21.3% vs. 17.8%). Differences according to age group and sex were statistically significant ($p < 0.05$). **Conclusion:** Panoramic radiographs may serve as a valuable opportunistic screening tool for detecting carotid artery calcifications in older Indonesian patients. Recognition of these findings by dentists may facilitate timely medical referral for vascular assessment, potentially contributing to earlier stroke risk identification and prevention, while supporting the role of dentists in multidisciplinary stroke prevention.

Keywords: carotid artery calcification, panoramic radiography, stroke risk, elderly patients, early detection

AP-OR11 (Original Research)

Wisecare Project: Integrating Oral Health, Exergame, And Self-Hypnosis For Seniors And Their Caregivers

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ABSTRACT

Introduction: Older adults and their caregivers often face multiple health challenges, including poor oral hygiene, reduced physical function, and caregiver burnout. Integrated community-based interventions that address physical, oral, and psychological well-being may contribute to healthier ageing and improved quality of care. **Methods:** WISECARE (Wellness Integration for Seniors and Caregivers) was implemented among elderly residents and caregivers in PJ Senior Care Centres. Oral and denture hygiene education with hands-on demonstrations using mannequin was delivered to 20 participants. Exergame-based physical activity intervention was conducted among 20 participants to improve functional performance and handgrip strength. Self-hypnosis training was provided to 24 caregivers to enhance stress management and reduce burnout. Pre- and post-intervention assessments were performed using plaque scores, handgrip strength measurements, and burnout scores. Descriptive statistical analyses were used to compare mean values before and after the intervention. **Results:** Following the interventions, the mean plaque score decreased from 25.29% to 17.31%, and mean handgrip strength increased from 11.50 kg to 12.33 kg; however, both changes were not statistically significant. Caregiver burnout scores decreased from 2.584 to 0.817 following the self-hypnosis intervention. Statistical analysis demonstrated a highly significant reduction in burnout levels ($p < 0.001$). **Conclusion:** The WISECARE project demonstrated that a multidisciplinary intervention integrating oral health education, Exergame-based physical activity, and self-hypnosis training can positively influence oral health, physical function, and psychological well-being among older adults and caregivers. The significant reduction in caregiver burnout highlights the potential of self-hypnosis as an effective stress management strategy for caregivers. The project shows promise as a sustainable model for promoting holistic healthy ageing and caregiver empowerment.

Keywords: Older adults, Oral hygiene, Exergame, Self-hypnosis, Caregiver burnout

AP-OR12 (Original Research)

Lessons from Delivering Mobile Oral Healthcare to Palliative Care Patients Across Home and Hospice

Anitha Narayanan

Association of Geriatric Dentistry AGeD

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ABSTRACT

Introduction: Palliative care aims to relieve suffering and enhance quality of life for patients with life-limiting illnesses. While significant emphasis is placed on pain and symptom management, oral health often remains an overlooked component of holistic care. Oral conditions can adversely affect comfort, nutrition, communication, social interaction, and dignity, particularly among patients who are home-bound, institutionalised, or medically compromised. Limited access to conventional dental services further contributes to unmet oral healthcare needs in this population. **Methods:** EA retrospective review of clinical experiences from approximately 300 palliative care patients managed through a mobile dental service over a period of one to three years was undertaken. Care was provided across diverse settings, including private homes, hospices, and long-term care institutions. Clinical observations, patient-reported concerns, caregiver interactions, and oral healthcare interventions were reviewed to identify recurring oral health challenges and care needs within this population. **Results:** Several recurring oral health concerns were consistently encountered during care delivery. The most common challenges included difficulty eating, poor oral hygiene, xerostomia, dysphagia-related oral complications, and mucositis. These conditions frequently affected patient comfort, nutritional intake, communication, and overall well-being. Mobile dental interventions included oral hygiene support, caregiver education, symptom-focused management, preventive strategies, and individualised care recommendations. Improvements were commonly observed in oral cleanliness, comfort, ease of eating, symptom relief, and caregiver confidence in providing daily oral care. **Conclusion:** Oral health represents a frequently neglected aspect of palliative care despite its significant impact on patient comfort and dignity. Mobile dental services can help to identify unmet oral health care needs and allow for timely interventions in vulnerable populations. Increased integration of oral health care into multidisciplinary palliative care teams may improve quality of life and promote person-centred care.

Keywords: Palliative Dentistry, Mobile Dentistry, Unmet Oral Needs, Collaboration

AP-OR13 (Original Research)

Impact of Creative Engagement on Dental Anxiety in Geriatric Patients : A Pre-Post Interventional Study

Dr. Shefali s Bhiwapurkar

Association of Geriatric Dentistry AGeD/ Dr GD Pol Dental College and Hospital Navi Mumbai
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ABSTRACT

Introduction: Dental anxiety and stress can negatively affect treatment acceptance and patient experience in older adults. Creative engagement activities have been shown to reduce stress and promote well-being in healthcare settings. This study aims to evaluate the impact of pre-treatment creative engagement sessions on dental anxiety, treatment cooperation, and patient experience during geriatric dental care. **Methods:** A prospective pre-post interventional study was conducted among 35 [A power analysis was established by G*Power version 3.0.1(Franz Faul universitat , Kiel, Germany)] older adults aged ≥ 60 years attending a geriatric clinic in dental institute. Participants underwent a 15-minute creative engagement session prior to dental treatment. Dental anxiety (MDAS), pulse rate, and blood pressure were assessed before and after the intervention. Treatment cooperation was evaluated by the treating dentist, while patient experience and satisfaction were assessed immediately after treatment. **Results:** Pre-treatment creative engagement sessions reduce dental anxiety and physiological stress indicators while improving treatment cooperation and overall patient experience. **Conclusion:** Creative engagement sessions may represent a simple, low-cost, non-pharmacological strategy to enhance patient-centred geriatric dental care and improve the overall dental experience of older adults thus positively influencing Quality of Life.

Keywords: Gerodontology, Behavioral Intervention, Non-Pharmacological Intervention, Anxiety Management

AP-OR14 (Original Research)
Age Friendly Kochi - A True Reflection of Intention

George Puthenpurayil John

Association Of Geriatric Dentistry AGeD

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ABSTRACT

Introduction: Kochi, a vibrant city in Kerala, India, is taking proactive steps toward becoming an age-friendly urban space that fosters inclusivity, accessibility, and well-being for its aging population.

Methods: "Age Friendly Kochi – A True Reflection of Intention" explores the city's commitment to creating an environment where senior citizens can lead independent, healthy, and fulfilling lives. Grounded in the World Health Organization's (WHO) Age-Friendly Cities and Communities (GNAFCC) framework, this initiative emphasizes key domains such as transportation, housing, social participation, and healthcare services. **Results:** This depiction revolves around policy interventions, infrastructural advancements, and community-driven efforts aimed at enhancing the quality of life for older adults. It examines the role of local governance, urban planners, and civil society in fostering an ecosystem that prioritizes senior citizens' needs while promoting intergenerational harmony. Special attention is given to public spaces, mobility solutions, and digital literacy programs tailored for elderly residents. Furthermore, this sheds light on the challenges encountered in implementing age-friendly strategies, including financial constraints, societal attitudes, and the need for multi-sectoral collaboration. By showcasing successful case studies and best practices, this dynamism underscores the transformative potential of well-executed age-friendly policies in urban India. **Conclusion:** "Age Friendly Kochi" serves as a model for other parts of India and around the Globe, striving to build equitable and compassionate environments for their aging populations. This ingenuity is not merely a policy endeavour but a true reflection of intention—a testament to Kochi's dedication to inclusivity, dignity, and sustainable urban living for all generations.

Keywords: Kochi, Age-Friendly, WHO GNAFCC, Older Adult

AP-OR15 (Original Research)

Beyond Teeth: Empathy-Driven Development Of An Ai-Powered Assistive Smart Glass For Healthy Aging

Rahmath Shameem S.^{1*}

Sri Venkateswara Dental College, Chennai. Association of Geriatric Dentistry, India.

*Corresponding author: Rahmath Shameem S. (bornforvictory@gmail.com)

ABSTRACT

Introduction: Contemporary geriatric dentistry extends beyond the management of oral disease and embraces a holistic understanding of factors that influence healthy aging. Visual impairment is a common challenge among older adults and is associated with reduced independence, medication errors, impaired oral hygiene, difficulty maintaining dentures, increased fall risk, social isolation, and poorer quality of life. These challenges are often identified through empathetic patient interactions rather than routine clinical examination alone. Integrating empathy training into dental education can help future dentists recognize functional limitations and unmet needs that affect overall health and well-being. The aim of the study was to develop and evaluate a prototype Artificial Intelligence (AI)-based smart wearable navigation system for real-time environmental hazard detection in geriatric patients. **Methods:** A lightweight smart glasses-based wearable device integrating a camera module, microprocessor, and audio/haptic feedback system was developed using a Raspberry Pi platform. A deep learning object detection model was trained with a custom-labeled dataset of common environmental hazards, including stairs, uneven surfaces, edges, and static obstacles. Functional testing was conducted in controlled indoor and outdoor settings to assess detection accuracy and response time. **Results:** The prototype successfully detected predefined hazards and delivered immediate auditory or vibratory alerts. Preliminary testing demonstrated satisfactory detection accuracy and real-time responsiveness, supporting its feasibility as an assistive navigation aid. Improved confidence, perceived safety, and independence among users during daily activities. Potential oral health benefits included enhanced ability to identify medications, follow oral hygiene instructions, manage dentures, and maintain self-care routines. **Conclusion:** This project highlights how empathy-centered geriatric dental education can enable clinicians to recognize health challenges extending beyond oral disease and inspire innovative solutions that improve quality of life. AI-powered smart glasses may serve as a valuable assistive technology for older adults, supporting healthy aging, independence, and holistic healthcare delivery.

Keywords: Geriatric Dentistry; Artificial Intelligence; Quality of Life; Empathy; Healthy Aging

AP-OR16 (Original Research)**Enhancing Oral Discomfort In Older Adults: Herbal Versus Cmc Saliva Substitues**

Dewi Priandini^{1*}, Aprilia Puspita², Abrijanto³

¹Department Oral medicine, Faculty of Dentistry , Universitas Trisakti, Indonesia

²Dr.R.Hardjanto, Indonesia Military Hospital, East Kalimantan, Indonesia.

³Pt Deltomed Laboratories, Indonesia

*Corresponding author: Dewi Priandini (dewipriandini@trisakti.ac.id)

ABSTRACT

Introduction: Xerostomia is a common condition among older adults that negatively affects oral comfort and quality of life. Although saliva substitutes are recommended for symptom relief, their availability remains limited in many developing countries, including Indonesia. Herbal saliva substitutes may offer an accessible patient-centered alternative. This study compared the effectiveness of a standardized commercial herbal gel with a carboxymethyl cellulose (CMC)-based saliva substitute in reducing xerostomia-related oral discomfort among older adults. Methods: A comparative clinical study involved 22 older adults with xerostomia. Participants received either a standardized commercial herbal gel or a CMC-based saliva substitute and applied it before meals and at bedtime. Oral discomfort was assessed using the Visual Analogue Scale (VAS) before and after treatment. Data were analyzed using an independent t-test ($p < 0.05$). Results: Both interventions reduced xerostomia-related oral discomfort. The herbal gel significantly decreased VAS scores after treatment ($p < 0.05$), although the CMC-based saliva substitute demonstrated greater overall clinical effectiveness. Nevertheless, the herbal gel provided clinically meaningful symptom relief. **Conclusion:** A standardized commercial herbal gel may serve as an accessible patient-centered alternative for managing xerostomia among older adults. Improving oral comfort through accessible saliva substitutes may contribute to healthy ageing, particularly in resource-limited settings.

Keywords: xerostomia; older adults; oral comfort; herbal saliva substitute; patient-centered care; gerodontology

AP-OR17 (Original Research)

Developing A Conceptual Oral Health Care Protocol For Caregivers Of Elderly In Malaysian Nursing Homes

Nur A'thirah binti Zulkifly^{1*}, Assoc. Prof. Dr Mas Suryalis Ahmad^{1*}, Dr Aminda Faizura Omar¹, Prof. Dr Budi Aslinie Md Sabri¹, Dr Muhammad Syafiq Asyraf Rosli²

¹Universiti Teknologi MARA Malaysia

²Universiti Kebangsaan Malaysia

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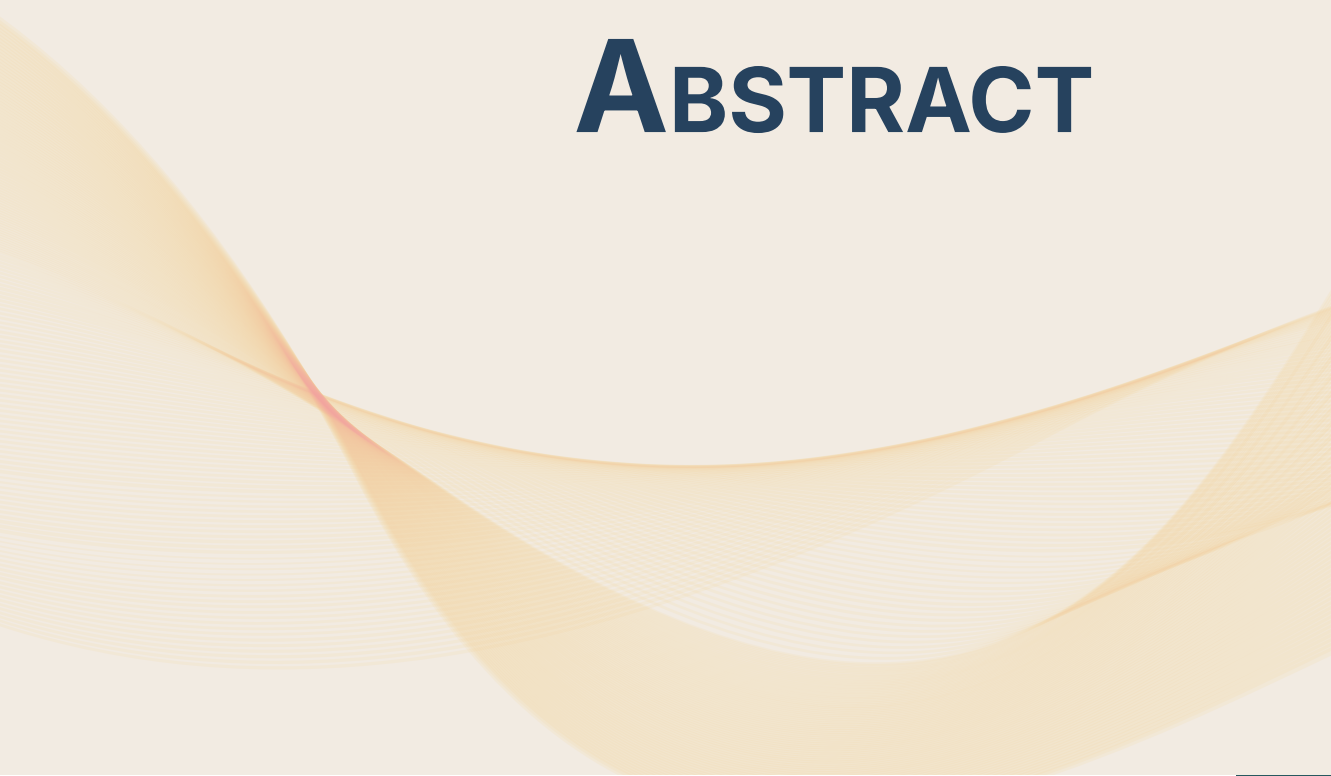
ABSTRACT

Introduction: Nursing home residents are among the most vulnerable populations globally in terms of oral health, yet the caregivers responsible for their daily oral hygiene often lack structured guidance. In Malaysia, there is no standardised oral health care protocol (OHCP) specifically designed for the caregivers of institutionalised older adults, a gap that persists despite the country's projected transition to an ageing nation by 2030. This study aimed to develop a conceptual OHCP for nursing home caregivers by identifying its essential components, usability recommendations, and suggestions to enhance its comprehensiveness. **Methods:** A three-phase sequential design was employed. Phase 1 comprised a systematic review of nine international oral health protocols, appraised using the AGREE II instrument. Phase 2 involved a three-round Classic Delphi study engaging all 16 practising Special Care Dentistry specialists in Malaysia, using semi-structured interviews in Round 1, a five-point Likert-scale questionnaire in Round 2 with a consensus threshold of $\geq 70\%$, and a focus group discussion with anonymous voting via Mentimeter in Round 3. Phase 3 integrated findings from both phases through a conceptualisation process to develop the final OHCP framework. **Results:** AGREE II appraisal classified seven of nine protocols as high quality. Delphi consensus identified seven domains comprising 26 items across three overarching dimensions, including proposed content, usability enhancements, and comprehensiveness recommendations. Notable findings included expert consensus on incorporating the Oral Frailty Index-8 and Activities of Daily Living assessment and the addition of behavioural and communication strategies as a standalone domain which were absent from existing international protocols. **Conclusion:** This study produced the first contextualised, evidence-based, caregiver-friendly OHCP framework for Malaysian nursing homes, representing a novel contribution to geriatric oral health care in the ASEAN region. Pilot testing and national policy integration are recommended as immediate next steps.

Keywords: elderly, protocol, systematic review, delphi study

SECTION D5

HANDS ON ABSTRACT





***Dr. Nurtami
Soedarsono***

***Dr. Andi Nur
Sakina Tri
Meilana***

Universitas Indonesia

DATE:

13th August 2026

VENUE:

KENARI

TIME:

13.00 – 16.00

NEXT GENERATION DIGITAL ODONTOLOGY: INTRODUCING DENTAL AND DNA DATABASE SYSTEM

Dental records are still commonly kept in scattered, inconsistent formats, making them difficult to store, retrieve, and share across clinics and institutions. This presentation introduces Biotrace, a digital dental and DNA database system that consolidates odontogram data, smile photographs, dental radiographs, and DNA profiles within a single platform. In its current form, Biotrace functions as a foundational database, allowing dental and genetic data to be recorded and managed in a structured, accessible way for routine clinical use. Its value, however, extends beyond everyday recordkeeping. Biotrace also has clear potential for forensic odontology, a field central to identification in cases such as mass disasters, fires, or advanced decomposition, where biological evidence is often scarce and antemortem documentation is essential. By uniting four types of dental and genetic data within one system, an integration still uncommon in Indonesia, Biotrace makes dental data easier to manage, strengthens collaboration between institutions, and provides a foundation for automated matching in future development.

Keywords: digital dental record, Biotrace, forensic odontology, odontogram, smile photograph, dental radiograph, DNA database



**Dr. Yudy Ardila
Utomo**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MURAI

TIME:

13.00 – 16.00

PIEZOSURGERY HAS BECOME AN IMPORTANT ADVANCEMENT IN MODERN ORAL SURGERY, OFFERING A PRECISE AND MINIMALLY INVASIVE APPROACH TO BONE CUTTING PROCEDURES. UNLIKE CONVENTIONAL ROTARY

Piezosurgery has become an important advancement in modern oral surgery, offering a precise and minimally invasive approach to bone cutting procedures. Unlike conventional rotary instruments, piezosurgery utilizes ultrasonic microvibrations that enable selective cutting of mineralized tissues while minimizing the risk of damage to adjacent soft tissues, nerves, blood vessels, and sinus membranes. This technology provides improved surgical control, reduced intraoperative bleeding, better visibility of the surgical field, and enhanced patient comfort during postoperative healing. This hands-on training is designed to introduce participants to the fundamental principles, clinical indications, and practical applications of piezosurgery in oral surgical procedures. The session will cover safe bone cutting techniques, proper instrument handling, tip selection, irrigation control, and clinical strategies to optimize surgical precision. Through supervised practical exercises, participants will gain direct experience in using piezosurgery devices for procedures relevant to daily oral surgery practice, such as osteotomy, tooth extraction assistance, bone window preparation, and other minor oral surgical applications. By the end of this workshop, participants are expected to understand the biological advantages of piezosurgery, recognize its appropriate clinical indications and limitations, and develop basic practical skills to perform safe, controlled, and precise bone surgery. This training aims to support dental practitioners in adopting advanced surgical technology to improve clinical outcomes, patient safety, and overall quality of oral surgical care.



***Prof. Laura Susanti
Himawan***

Prof. Ira Tanti

Dr. Pinta Marito

***Dr. Fakhрана Ariani
Ayub***

Dr. Astari Larasati

Dr. Ariyanti Rezeki

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MALEO

TIME:

13.00 – 16.00

PROSTHODONTIC APPROACH IN THE MANAGEMENT OF SLEEP

Obstructive sleep apnea (OSA) is increasingly recognized as a prevalent health condition worldwide and is among the most common sleep disorders, affecting nearly one billion individuals. Although the relationship between OSA and temporomandibular disorders (TMD) has not been fully elucidated, studies have shown that patients with OSA experienced TMD more frequently than healthy individuals. This association underscores the important role of dentists- particularly prosthodontists – in the screening and management of OSA.

OSA is classified as mild, moderate, or severe according to the Apnea-Hypopnea Index (AHI). Dentists and prosthodontists are primarily involved in the management of patients with mild to moderate OSA. One of the most effective treatment modalities for this patient group is the mandibular advancement device (MAD), which helps maintain upper airway patency during sleep.

This hands-on workshop will provide an overview of sleep physiology, OSA pathophysiology, and AHI-based classification, followed by practical instruction on patient selection, bite registration, and MAD fabrication procedures based on clinical indications. Participants will acquire essential knowledge and practical skills to support the effective dental management of OSA in daily clinical practice



**Dr. Ike Dwi
Maharti**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

KAKAK TUA

TIME:

13.00 – 16.00

PREDICTABLE ROOT CANAL SHAPING: PRECISION, EFFICIENCY, AND PRESERVATION OF CANAL ANATOMY

Root canal shaping is a fundamental step in endodontic treatment that directly influences the effectiveness of canal disinfection and the long-term prognosis of therapy. The ideal shaping procedure should provide sufficient enlargement to facilitate irrigation and obturation while preserving the original canal anatomy and minimizing unnecessary dentin removal. Contemporary heat-treated nickel–titanium (NiTi) rotary instruments with enhanced flexibility and resistance to cyclic fatigue have significantly improved clinicians' ability to achieve these objectives, particularly in curved and anatomically complex root canals.

This hands-on workshop is designed to provide participants with an evidence-based understanding and practical experience in modern root canal shaping techniques using a highly flexible rotary NiTi system with advanced thermal treatment technology. The course will emphasize the biological and mechanical principles of shaping, including glide path establishment, preservation of the original canal curvature, reduction of procedural errors, and creation of an optimal preparation that enhances irrigation efficacy and three-dimensional obturation.

Participants will perform a complete shaping sequence under expert supervision using simulated canals. Special emphasis will be placed on instrument control, tactile feedback, efficient debris removal, and minimally invasive shaping strategies that maximize treatment safety while conserving pericervical dentin and maintaining structural integrity.

By combining precision, efficiency, and anatomical preservation, this course aims to enhance clinicians' confidence in delivering predictable, safe, and biologically sound root canal treatment with improved long-term outcomes.



**Dr. Elham
Emami**

McGill University

DATE:
13th August 2026
VENUE:
NURI 2
TIME:
16.00 – 19.00

DESIGNING IMPACTFUL RANDOMIZED CONTROLLED TRIALS (RCTS) IN DENTISTRY: FROM CONCEPT TO CLINICAL EVIDENCE

Quantitative Research: Interventional Studies

Interventional studies are essential for evaluating the efficacy, effectiveness, and safety of healthcare interventions and are a cornerstone of evidence-based practice. Among these, randomized controlled trials are considered the gold standard for generating high-quality evidence on the effects of interventions on health outcomes. However, the design, conduct, interpretation, and reporting of interventional studies require careful attention to methodological rigor, ethical considerations, and reporting standards.

This three-hour workshop will provide participants with an introduction to the core principles of randomized controlled trials. The workshop combines a one-hour lecture with two hands-on exercises designed to reinforce key concepts through practical application. Participants will learn the fundamental elements of trial design, including formulating a research question, selecting outcomes, minimizing bias, and developing a trial protocol. The workshop will also introduce best practices for the analysis, interpretation, and reporting of trial findings in accordance with established guidelines.



Dr. Eva Fauziah

Universitas Indonesia

DATE:

14th August 2026

VENUE:

KENARI

TIME:

16.00 – 19.00

PEDIATRIC ENDODONTICS SIMPLIFIED: PRACTICAL SOLUTIONS FOR EVERYDAY CLINICAL CHALLENGES

Dental caries in children remains one of the most prevalent oral health problems worldwide. Pulp involvement resulting from untreated dental caries may lead to pain, infection, impaired masticatory function, and potential disturbances in the growth and development of the succeeding permanent dentition. Therefore, preserving primary teeth until their natural exfoliation is one of the primary goals of pediatric dentistry.

Advances in pediatric endodontics have introduced a wide range of treatment options, from vital pulp therapy to pulpectomy, with an increasingly evidence-based approach. A thorough understanding of treatment indications, material selection, clinical techniques, and factors influencing treatment outcomes is essential for dentists to provide optimal care for pediatric patients.

Through this workshop, participants are expected to gain updated knowledge and practical clinical skills in the management of endodontic treatment for primary teeth, ultimately enhancing the quality of pediatric dental care.



**Dr. Dimas. I
Hutomo**

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MURAI

TIME:

16.00 – 19.00

NONSURGICAL AND SIMPLE SURGICAL APPROACHES IN PERIODONTAL POCKET TREATMENT

Periodontal pocket management requires a thorough understanding of both nonsurgical and surgical treatment approaches to achieve predictable clinical outcomes. Successful treatment depends not only on eliminating inflammation and controlling infection but also on selecting the most appropriate intervention based on disease severity, anatomical considerations, and patient-specific factors.

This hands-on session provides a comprehensive overview of contemporary periodontal treatment strategies, ranging from Professional Mechanical Plaque Removal to simple surgical procedures commonly performed in daily clinical practice. Participants will learn the indications, limitations, and clinical decision-making processes associated with each approach while gaining practical experience with modern technologies, including piezosurgery and the dental microscope. Emphasis will be placed on improving treatment precision, minimizing patient morbidity, and optimizing long-term periodontal stability. Through the integration of evidence-based principles and practical applications, participants will develop a more structured and predictable approach to periodontal pocket management.



***Dr. Ratna Kumala
Indrastiti***

***Dr. Ambar
Kusuma Astuti***

***Dr. Anandina
Irmagita***

Universitas Indonesia

DATE:

13th August 2026

VENUE:

MALEO

TIME:

16.00 – 19.00

IDENTIFICATION AND MANAGEMENT OF ORAL MANIFESTATION OF SYSTEMIC DISEASE

Oral lesions are often the initial outward manifestations of underlying systemic illnesses. Early detection of these disorders in the oral cavity enables quicker diagnosis and interdisciplinary treatment because many of them resemble common conditions like canker sores. Dentists need to acknowledge signs and symptoms so that they can do timely management and referral. This hands-on workshop provides basic skills in the detection and management of hidden systemic illnesses manifested in the oral cavity for infectious or noninfectious diseases. Essential skills starting from history taking (including exploring relevant medical history), performing extra and intraoral clinical examinations, selecting adjunctive examinations, and establishing diagnosis and comprehensive management related to systemic diseases are being coached in this session. Early detection of oral manifestations of systemic diseases can improve treatment success rates, both for the systemic condition and oral lesions, and improve the patient's prognosis.



***Dr. Astrid
Khatalia***

Escalade Dental
Specialist Centre

DATE:
13th August 2026

VENUE:
KAKAK TUA

TIME:
16.00 – 19.00

APPLYING 10 MINUTES SMILE ANALYSIS TO PREDICTABLE VENEER CEMENTATION

This hands-on workshop presents a practical 10-minute smile analysis protocol to guide accurate diagnosis, case selection, and predictable veneer cementation. Between participants will learn and directly applying how to evaluate facial and dentolabial relationships, tooth proportions, design, restorative substrate, and ceramic selection, then translate these findings into appropriate isolation, surface treatment, adhesive, and resin cement protocols. Through step-by-step demonstrations and clinical exercises.

The workshop aims to improve treatment planning, reduce cementation errors, and enhance the esthetic quality and long-term success of ceramic veneers.



***Dr. Syurri I
Syahraini***

Dr. Bayu T Putra

Universitas Indonesia

DATE:

14th August 2026

VENUE:

MURAI

TIME:

09.00 - 12.00

INTEGRATING AI IN DAILY CBCT FOR GENERAL PRACTICE

Cone-beam computed tomography (CBCT) has become an indispensable imaging modality in modern dental practice, providing three-dimensional visualization and significantly enhancing diagnostic accuracy and treatment planning. Despite providing comprehensive three-dimensional imaging, CBCT interpretation remains highly dependent on the clinician's expertise and familiarity with CBCT software.

The integration of artificial intelligence (AI) into contemporary CBCT platforms has significantly expanded their diagnostic capabilities. Powered by deep learning algorithms, AI has emerged as a transformative tool in dentomaxillofacial radiology by facilitating automated image analysis, improving diagnostic accuracy, and enhancing clinical efficiency. Recent advancements in AI have enabled clinicians to streamline image interpretation, improve diagnostic confidence, and enhance workflow efficiency without replacing professional clinical judgment.

The practical integration of AI-assisted CBCT into the daily clinical workflow of general dental practitioners is becoming increasingly important as AI technologies continue to evolve. Through guided case-based learning, practical skills in incorporating AI-generated analyses into routine clinical decision-making can be developed, leading to more efficient image interpretation, improved patient communication, and more accurate diagnosis and treatment planning.



**Dr. Ahmed
Abdou**

Universiti Malaya



**Dr. Citra
Kusumasari**
Universitas Indonesia

DATE:
14th August 2026
VENUE:
MALEO
TIME:
09.00-12.00

STOP DRILLING, START BONDING: THE SCIENCE-BACKED PROTOCOL FOR INDIRECT BIOMIMETIC RESTORATIONS

Modern restorative dentistry is undergoing a paradigm shift from traditional aggressive mechanical retention toward additive, tooth-conserving strategies. This two-part hands-on workshop explores the clinical protocols for indirect biomimetic restorations in posterior endodontically treated teeth, emphasizing the preservation of intact tooth structure and the restoration of biomechanical function.

Central to this approach is the morphology-driven preparation technique, which utilizes the natural anatomical landmarks of the tooth to guide selective reduction. Unlike conventional indirect preparations that rely on geometric resistance forms, this technique prioritizes the maintenance of the peripheral enamel rim and the maximization of surface area for bonding. By respecting the biological substrate, clinicians can implement posterior indirect adhesive preparations (such as onlays and vonlays) that significantly reduce the risk of catastrophic tooth fracture.

The success of this new approach is critically dependent on rigorous adhesive cementation protocols. This involves advanced substrate management, including immediate dentin sealing (IDS) and resin coating, to optimize the hybrid layer and minimize polymerization stress. By utilizing high-performance composite resins or ceramics bonded with adhesive luting agents, the restorative complex achieves a stress-distribution profile similar to that of a natural, intact tooth. This science-backed hands-on workshop offers the secrets of predictable, minimally invasive biomimetic crowns, ensuring long-term structural integrity and aesthetic harmony.

This protocol shifts posterior restoration from mechanical retention to biomimetic adhesion, utilizing a Morphology-Driven Preparation Technique (MDPT) to preserve structural integrity. Posterior Indirect Adhesive Restorations (PIAR), such as onlays and overlays, prioritize the conservation of the BioRim and the Compression Dome, ensuring functional stress distribution rather than destructive reduction.

Key scientific considerations include:

- **Enamel Management:** Preparations must respect enamel rod orientation to optimize bond strength.
- **Geometry:** Clinicians must choose between bevels or butt joints based on structural needs, often applying the Rule of BULL (Buccal of Upper, Lingual of Lower) to guide occlusal reduction and cusp coverage.
- **Structural Thresholds:** Decisions regarding cusp thickness determine the transition from an onlay to an overlay to prevent fracture.
- **Adhesive Cementation:** Success relies on advanced bonding to create a unified tooth-restoration complex.



**Prof. Retno
Widayati**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

KAKAK TUA

TIME:

09.00-12.00

NEXT-GEN POST-ENDO RESTORATIONS: A DIGITAL HANDS- ON WORKFLOW FOR MODERN ESTHETIC ONLAYS

Currently, aesthetics in conservative dentistry have become a priority for patients. The notion of adhesive has the potential to enhance the bonding properties between enamel and dentine with composite materials. Every attribute yields varying outcomes in adhesive strength. Comprehending the protocol of adhesive techniques can enhance the durability of adhesive restorations, whether direct or indirect. For a posterior tooth with a substantial cavity, the process of incremental layering may prove to be laborious. Bulk-fill composite resin materials have gained prominence in dentistry due to their distinctive properties. In the incremental layering method, a 2 mm thickness of material must be applied prior to curing to attain optimal polymerization. In a different scenario, a 4 mm thickness of material could be utilized in the cavity prior to curing without compromising polymerization due to minimal shrinkage stress. Bulk-fill materials exhibit various consistencies, including packable and flowable types like SDR+. The present material includes supplementary opacity shades (A1, A2, and A3) to address the deficiency of opacity shades in the prior material. This technique may serve as a viable alternative for dental professionals to achieve rapid and reliable posterior restorations. To achieve a remarkable outcome in both anterior and posterior restorations, the utilization of appropriate finishing and polishing instruments, executed methodically, is essential. The incorporation of 3D intraoral scanners (IOS) in dentistry can enhance the effectiveness and efficiency of providing aesthetic indirect restorations. The multitude of preparation designs for post-endodontic cavities complicates the dentist's decision-making process in selecting the optimal concept for clinical practice before digital scanning. Comprehending the novel principle of preparatory design before aesthetic indirect onlay restoration can enhance the safeguarding of remaining hard tissue. The recent adhesive material can enhance the bonding properties between enamel and dentin with composite or ceramic indirect materials. Adhering to optimal procedures for adhesive application can enhance the durability of the adhesive, particularly in both direct and indirect onlay restorations. Bulk-fill composite resin (SDR+ Dentsply Sirona) possesses favorable attributes, including the capacity to cure at a thickness of up to 4 mm, and is suitable for occluding undercuts in cavities as well as for dentin hybridization applications. To attain a remarkable digital representation, the utilization of 3D IOS (Primescan - Dentsply Sirona) is essential for achieving superior precision and fidelity. In conclusion, both direct and indirect onlay aesthetic restorations on adhesive restorations can be accomplished if the practitioner employs the appropriate instruments for the specific case.



Prof. Ki Tae Koo

Seoul National
University

DATE:
14th August 2026

VENUE:

NURI 2

TIME:
13.00-16.00

IMMEDIATE PLACEMENT VS. ARP VS. ARI

- Immediate implant placement (Megagen implant)
- ARP+ FGG (free gingival graft) in the esthetic zone- Criss Cross suture
- iGBR in multiple sockets to avoid vertical augmentation- SPAN technique
- ARi implant placement



Prof. Su Jung Shin

Yonsei University

DATE:

14th August 2026

VENUE:

KENARI

TIME:

13.00 - 16.00

BIOCERAMIC REVOLUTION: REDEFINING ROOT CANAL SEALING AND HEALING

The development of ProRoot MTA (Mineral Trioxide Aggregate) marked a pivotal turning point in modern endodontics. Prior to its introduction, clinical procedures involving moisture- and blood-contaminated environments — such as periapical surgery, perforation repair, and apical plug placement in open apex cases — posed significant challenges with conventional materials. The inherent hydrophilicity and biocompatibility of MTA enabled predictable outcomes in these previously difficult scenarios, fundamentally expanding the scope of endodontic treatment.

Building upon the success of the original MTA, a new generation of bioceramic cements has since been developed, preserving its core advantages while addressing well-known limitations such as handling difficulty, discoloration potential, and extended setting time. Notably, several of these contemporary formulations are available as premixed, ready-to-use systems, eliminating the variability introduced by manual mixing and reducing technique sensitivity — thereby streamlining clinical workflow regardless of chairside assistance.

Beyond their role as repair materials, bioceramics have more recently been introduced as root canal sealers, enabling a more efficient and simplified obturation protocol. This bioceramic sealer-based approach has demonstrated clinical outcomes comparable to — and in some parameters superior to — those achieved with previously established obturation techniques, as supported by a growing body of clinical and laboratory evidence.

This lecture aims to provide a comprehensive overview of the bioceramic revolution in endodontics: tracing its origins from MTA development, examining the properties and clinical rationale of current bioceramic cements and sealers, reviewing the latest scientific evidence, and offering practical guidance for their integration into everyday clinical practice. Special emphasis will be placed on two areas of particular contemporary interest: the application of bioceramic cements in vital pulp therapy (VPT) — currently one of the most actively discussed topics in endodontics — and key clinical considerations for the use of bioceramic sealers during root canal obturation.



***Dr. Mohd.
Haikal Bin
Muhamad Halil***

International Islamic
University Malaysia

DATE:

14th August 2026

VENUE:

MURAI

TIME:

13.00 - 16.00

PRACTICAL STRATEGIES IN POSTERIOR COMPOSITE RESTORATIONS: FROM DIAGNOSIS TO DEFINITIVE CARE

This hands-on workshop is designed to provide participants with practical experience in posterior composite restorations using a step-by-step clinical approach. The session will cover caries assessment, conservative cavity preparation, matrix placement, isolation considerations, layering techniques, contact point management, occlusal anatomy build-up, and finishing and polishing procedures. Participants will have the opportunity to practice essential techniques and learn practical tips aimed at improving confidence, efficiency, and predictability in daily restorative procedures.



Dr. Saraventi



***Dr. Fakhrana
Ariani Ayub***

Universitas Indonesia

DATE:

14th August 2026

VENUE:

MALEO

TIME:

13.00 - 16.00

MASTERING PREDICTABLE FIBER POST PLACEMENT AND COMPOSITE CORE BUILD-UP IN ANTERIOR TEETH - FROM PLANNING TO PREPARATION

Esthetics represents a critical determinant of successful prosthodontic therapy in the anterior region, directly impacting smile harmony and patient quality of life. Significant coronal tooth loss resulting from caries, trauma, or failed restorations frequently requires post-and-core foundation systems prior to definitive crown placement. Fiber-reinforced posts offer clear mechanical and esthetic advantages over traditional metallic systems due to an elastic modulus comparable to dentin, which fosters physiological stress distribution and minimizes root fracture risk. Furthermore, their optical translucency provides superior esthetic integration beneath composite core build-ups and all-ceramic restorations. This hands-on workshop outlines a comprehensive framework for anterior esthetic restoration, detailing systematic case selection—evaluating root canal geometry, remaining dentin thickness, and periodontal health—alongside core principles of smile analysis. Additionally, it details a step-by-step clinical protocol encompassing post-space preparation, adhesive surface treatment, fiber post luting, and anatomical composite core reconstruction to ensure long-term clinical predictability.



Dr. Sylva Dinie

Universitas Indonesia

DATE:
14th August 2026
VENUE:
KAKAK TUA
TIME:
13.00 – 16.00

FROM GLIDE PATH TO 3D SEAL: SIMPLIFYING THE MODERN ROOT CANAL

Endodontics in general practice requires a reliable, step-by-step workflow to be both efficient and predictable. Without a standardized system, root canals can easily become frustrating and disrupt the daily schedule. This hands-on course is built specifically for the general dentist looking to gain more confidence in their endodontic skills and implement a straightforward, repeatable process for everyday cases.

During this session, we will walk through the clinical sequence from shaping to final obturation. Participants will practice a crown-down preparation technique using the ProTaper Ultimate rotary system, focusing on how to safely achieve ideal canal geometry with minimal file fatigue.

Because files alone cannot physically touch every surface of the root canal system, the course places heavy emphasis on irrigation. You will learn how to actively clean the remaining complex anatomy using the EndoActivator for sonic irrigation, effectively clearing out debris and the smear layer. Finally, the workshop covers a highly practical and efficient obturation method using modern resin-based sealers alongside gutta-percha to achieve a dense, stable three-dimensional fill.

Learning Objectives:

- Execute a systematic crown-down preparation using the ProTaper Ultimate rotary system to safely shape canals.
- Integrate sonic activation into your standard irrigation protocol to improve overall disinfection.
- Obturate straightforward cases efficiently using modern resin-based sealers.
- Apply a standardized, start-to-finish endodontic workflow that reduces chair time, minimizes procedural errors, and lowers clinical stress.



**Dr. Aryo
Megantoro**

Universitas Indonesia

DATE:

14th August 2026

VENUE:

Nuri 2

TIME:

16.00 - 19.00

HARMONIZE LAYERING TECHNIQUE FOR CLASS IV ANTERIOR TOOTH RESTORATION

Anterior teeth can be restored using either direct or indirect restorative approaches. Direct anterior restorations have become a predictable treatment option, providing excellent functional, occlusal, masticatory, and esthetic outcomes through the use of contemporary resin composite materials. A variety of restorative techniques are available for anterior teeth, among which the layering technique is widely recognized for its ability to reproduce the natural appearance of the dentition. Successful implementation of this technique requires careful consideration of adhesive bonding, shade selection, optical properties, and tooth morphology to achieve optimal esthetic and functional results.

Keywords: direct restoration, anterior teeth, resin composite, layering technique



Dr. Teng Peng Hui

Universitas Kebangsaan
Malaysia

DATE:

14th August 2026

VENUE:

KENARI

TIME:

16.00 - 19.00

PREDICTABLE INSTRUMENTATION AND OBTURATION OF CURVED ROOT CANALS

Complex root canal anatomy such as acute multiplanar curvature often poses a major challenge to many clinicians due to the increased risk of separated instruments, ledge formation, apical transportation, and zipping. Advances in instrument design and the invention of new-generation heat-treated alloys have resulted in the emergence of many reliable and safe rotary files. This allows us to perform root canal treatment (RCT) safely on curved root canals without complications. In this workshop, predictable curved canal instrumentation and obturation techniques will be demonstrated by using modern devices and instruments, aiming to equip the participants with valuable tips and tricks during daily RCT procedures.



Dr. Nadhia Harsas

Universitas Indonesia

DATE:
14th August 2026
VENUE:
MURAI
TIME:
16.00 - 19.00

PINK ESTHETICS PERFECTED: THE EMERGING ROLE OF LASERS IN SMILE DESIGN

Excessive gingival display, commonly known as a gummy smile, is a frequent esthetic concern that may negatively affect patients' confidence and overall facial appearance. The etiology of gummy smile is multifactorial, including altered passive eruption, gingival overgrowth, hyperactive upper lip, vertical maxillary excess, or a combination of these factors. Therefore, accurate diagnosis is essential for selecting the most appropriate treatment approach.

Advances in laser technology have transformed the management of soft-tissue esthetic concerns in contemporary dental practice. Compared with conventional surgical techniques, laser-assisted procedures offer enhanced precision, excellent hemostasis, reduced postoperative discomfort, and accelerated healing.

This hands-on is designed to provide participants with both the theoretical foundation and practical skills required for the management of excessive gingival display using laser technology. Participants also will learn the principles of smile analysis and smile design, diagnostic protocols, case selection, and treatment planning for gummy smile correction. In addition, the workshop will demonstrate the clinical application of lasers for gingivectomy, gingival recontouring, and esthetic crown lengthening through step-by-step protocols and case-based discussions.



***Dr. Muhammad
Sulaiman
Kusumah
Adiwirya***

***Dr. Ivan Anthony
Halim***

Universitas Indonesia

DATE:

14th August 2026

VENUE:

MALEO

TIME:

16.00 - 19.00

BLENDING THE DIGITAL CEPHALOMETRIC TRACING INTO ORTHODONTIC DIAGNOSIS

This course provides essential training on integrating digital cephalometric tracing into everyday clinical practice, guiding participants from basic setup to reaching a comprehensive cephalometric diagnosis. It is designed to improve the precision of orthodontic diagnosis through understanding and application of the following topics: the importance of transitioning from conventional to digital methods; review of radiographic anatomy, including cephalometric landmarks, planes, and angles; step-by-step digital cephalometric workflow using the WinCeph application; and accurate cephalometric interpretation and its role in orthodontic diagnosis and treatment planning.



**Dr. Leonard C.
Nelwan**

Petra Christian
University

DATE:
14th August 2026

VENUE:
KAKAK TUA

TIME:
16.00 - 19.00

RESOLVING THE CONTROVERSY: A PRACTICAL WORKFLOW FOR ESTABLISHING VERTICAL DIMENSION OF OCCLUSION

Vertical Dimension of Occlusion (VDO) is one of the most widely debated concepts in prosthodontics. For many years, the loss of tooth structure was considered synonymous with the loss of VDO, and increasing the VDO was believed to carry a significant risk of functional impairment and temporomandibular disorders (TMD). However, recent evidence suggests that the stomatognathic system possesses a remarkable capacity for adaptation, allowing changes in VDO within certain biological limits to be well tolerated.

This presentation reviews the latest scientific evidence addressing whether VDO is truly lost in patients with tooth wear, when modification of VDO is indicated, the extent to which VDO can be increased within biologically acceptable limits, and current controversies surrounding TMD, esthetics, function, implant dentistry, and digital technology.

A thorough understanding of these concepts is essential for clinicians to make evidence-based decisions in prosthodontic treatment involving oral rehabilitation.



**Dr. Robert
Lessang**

**Dr. Dewi
Ayuningtyas**

**Dr. Rieska
Rachmasari**

Universitas Indonesia

DATE:

15th August 2026

VENUE:

NURI 2

TIME:

09.00 - 12.00

FIBER-REINFORCED SPLINTING IN PERIODONTAL CASES: FROM CASE SELECTION TO PRACTICAL APPLICATION

Periodontitis is a chronic multifactorial inflammatory disease associated with dysbiotic plaque biofilms and progressive destruction of the tooth-supporting tissues. The loss of periodontal attachment and alveolar bone support may lead to tooth mobility, which can affect masticatory function, patient comfort, and oral health-related quality of life. In selected periodontal cases, splinting may be considered as an adjunctive therapy to improve tooth stability, support function, facilitate plaque control, and enhance patient comfort during periodontal maintenance. Fiber-reinforced composite splinting has gained increasing attention as a minimally invasive, esthetic, and practical chairside technique in periodontal treatment. However, the success of splinting is not determined solely by the material used, but also by appropriate case selection, comprehensive treatment planning, proper clinical execution, and long-term maintenance. Factors such as periodontal stability, degree of tooth mobility, occlusal condition, plaque control, and the overall prognosis of the involved teeth must be carefully evaluated to achieve predictable outcomes. This workshop is designed to enhance participants' understanding and clinical skills in the application of fiber-reinforced splinting for periodontal cases. The session will combine lectures, interactive case discussions, clinical demonstrations, and hands-on practice on models. Participants will learn the relationship between periodontitis and tooth mobility, the principles and indications of periodontal splinting, appropriate case selection, treatment planning, material handling, and step-by-step clinical application of fiber-reinforced composite splints. By the end of this workshop, participants are expected to be able to identify suitable periodontal cases for splinting, formulate appropriate treatment strategies, and perform basic fiber-reinforced splinting techniques with improved clinical confidence. This workshop aims to provide practical and clinically relevant skills that can be applied in daily periodontal practice to support patient-centered and predictable treatment outcomes.



***Prof. Yuniardini S
Wimardhani***

***Prof. Linda
Kusdhany***

***Dr. Melissa
Adiatman***

Universitas Indonesia

DATE:

15th August 2026

VENUE:

KENARI

TIME:

09.00 - 12.00

FROM ASSESSMENT TO CARE: COMPREHENSIVE GERIATRIC ORAL HEALTH SCREENING AND PREVENTIVE HYGIENE PRACTICE

The growing elderly population necessitates that oral healthcare professionals possess the skills to perform oral health screening, prioritize treatment needs, and develop preventive care strategies tailored to the medical condition, functional status, and self-care abilities of older adults. This hands-on workshop is designed to provide participants with practical experience in conducting comprehensive oral health assessments for geriatric patients, from identifying risk factors to formulating individualized preventive care recommendations.

Through station-based demonstrations and practical exercises, participants will learn how to use the P3GB assessment and the Oral Health Assessment Tool (OHAT), including the evaluation of the lips, tongue, oral tissues, saliva, natural teeth, dentures, oral hygiene, and oral pain. Participants will also practice safe and adaptive oral hygiene techniques, including toothbrushing, interdental and tongue cleaning, denture care, and simple management strategies for xerostomia. By the end of the session, participants are expected to be able to interpret screening results, determine the need for patient education, preventive interventions, consultation or referral, and formulate individualized care plans that consider caregiver involvement and the level of independence of older adults.



***Dr. Mohammad
Farid Ratman***

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MURAI

TIME:

09.00-12.00

PAINLESS LOCAL ANESTHESIA IN DENTISTRY: STRATEGIES TO IMPROVE PATIENT COMFORT AND CLINICAL CONFIDENCE

Pain and anxiety related to local anesthesia remain among the most common concerns in dental practice and may influence patient cooperation, treatment acceptance, and overall clinical experience; although achieving completely painless anesthesia may not always be possible, various evidence-based techniques can significantly reduce discomfort during injection and improve patient confidence. This lecture discusses practical strategies to minimize pain during local anesthetic administration in dentistry, including patient communication and behavioral preparation, proper tissue handling, the use of topical anesthesia, slow and controlled injection techniques, selection of appropriate needle size, anesthetic buffering and warming, and the role of computer-controlled local anesthetic delivery systems, as well as anatomical considerations, site-specific techniques, and common clinical errors that may contribute to painful injections or inadequate anesthesia. By integrating scientific principles with simple chairside approaches, clinicians can provide a more comfortable anesthesia experience, especially for anxious patients, children, and individuals with previous negative dental experiences, strengthening dentists' understanding of painless or minimally painful local anesthesia techniques and supporting the delivery of safer, more patient-centered dental care.



***Prof. Lindawati
Kusdhany***

***Prof. Muslita
Indrasari***

Dr. Pinta Marito

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MALEO

TIME:

09.00 - 12.00

JB TRAY AS A SIMPLE AND PRACTICAL SOLUTION FOR EDENTULOUS IMPRESSION PROCEDURES

Accurate impression procedures are fundamental to the success of complete denture treatment, as they directly affect denture retention, stability, and support; however, conventional impression techniques for edentulous patients often require multiple trays and extended chairside time, which may present practical challenges in clinical settings, increasing the need for simplified and efficient clinical approaches. This hands-on session introduces the use of the JB Tray as a practical and clinically efficient solution for edentulous impression procedures, specifically designed to facilitate functional impressions with greater ease of manipulation while minimizing clinical steps. The session covers the fundamental principles of edentulous impression techniques, including tray selection, border extension considerations, and material application using the JB Tray system. By the end of this session, participants are expected to develop a clearer understanding of simplified impression concepts and enhance their clinical confidence in managing edentulous cases.



***Dr. Tri Ardi
Mahendra***



***Dr. Adityo
Widaryono***

Universitas Indonesia

DATE:

14th August 2026

VENUE:

KAKAKTUA

TIME:

09.00 - 12.00

GUIDED IMPLANT SURGERY: FROM INDEPENDENT DIGITAL PLANNING TO CLINICAL IMPLEMENTATION

The Implant Surgical Guide Design and Application Workshop is an applied learning program designed to enhance participants' understanding of the digital workflow in implant dentistry, from treatment planning to implant placement. The session introduces the principles of prosthetically driven implant placement, digital data acquisition using cone beam computed tomography (CBCT) and intraoral or model scanning, implant position planning with dedicated implant planning software, and the fabrication and evaluation of surgical guides.

During the hands-on session, participants will practice guided implant placement using surgical guides on simulation models. The training emphasizes guide stability, sequential drilling protocols, depth control, and the accuracy of osteotomy positioning according to the digital treatment plan. Through this practical experience, participants will gain a comprehensive understanding of integrating digital workflows into implant procedures, improve the precision of implant positioning, and strengthen their clinical readiness to perform guided implant surgery.



**Dr. Mohamad
El-Zaafarani**

Style Italiano
Endodontics Member

DATE:

15th August 2026

VENUE:

NURI 2

TIME:

13.00 - 16.00

FROM GLIDE PATH TO FULL SHAPING: HANDS-ON MASTERY OF COMPLEX ROOT CANAL ANATOMY

Complex root canal anatomy demands more than a routine shaping sequence; narrow canals, severe curvatures, calcifications, long roots, double curvatures, and restricted access can challenge even experienced clinicians, increasing the risk of ledge formation, transportation, blockage, perforation, or instrument separation. This hands-on workshop is designed to guide participants through a structured and clinically applicable approach to managing difficult canals safely and predictably, focusing on the complete shaping journey, beginning with coronal access optimization, canal scouting, negotiation, and glide path creation, then progressing toward full mechanical shaping using smart, conservative, and anatomy-respecting protocols. Participants will learn how to select the appropriate instruments, modify shaping strategies according to canal difficulty, understand the role of file design and heat treatment, and choose suitable kinematics for restricted anatomy, with special attention given to reducing procedural errors, preserving dentin, maintaining the original canal trajectory, and improving shaping efficiency without compromising safety. Through demonstrations and hands-on training, clinicians will practice step-by-step protocols for glide path preparation and shaping in complex root canal systems, and by the end of the workshop, participants will be able to approach challenging anatomy with greater confidence, better clinical judgment, and a clear strategy for transforming difficult canals into manageable and predictable cases.



**Dr. Nieka
Adhara
Wahono**

Universitas Indonesia

DATE:
15th August 2026
VENUE:
KENARI
TIME:
13.00 - 16.00

SPACE MAINTAINER IN PREMATURE LOSS OF PRIMARY TEETH

Premature loss of primary teeth is a common condition encountered in pediatric dental practice and may lead to disturbances in the growth and development of the stomatognathic system, including masticatory function, speech, esthetics, and occlusal development in children. The use of space maintainers is an important preventive measure to preserve the space required for the eruption of permanent successor teeth and to support optimal occlusal development. Selecting the appropriate type of space maintainer requires a thorough understanding of its indications, contraindications, the child's dental age, and the patient's clinical condition.

In this hands-on session, participants will learn the clinical assessment of premature loss of primary teeth, the fundamental principles of space management, the different types of space maintainers, the indications for each type, appliance design selection, and the clinical and laboratory procedures involved in their fabrication and placement. These concepts will serve as the basis for evidence-based treatment planning in cases of premature loss of primary teeth. By the end of the session, participants are expected to be able to perform a holistic and comprehensive evaluation of such cases and select the most appropriate space maintainer to prevent the development of occlusal disturbances during a child's growth and development.



Prof. Park Ji Woon

Seoul National
University

DATE:

15th August 2026

VENUE:

MURAI

TIME:

13.00 – 16.00

DENTAL SLEEP MEDICINE ESSENTIALS: A PRACTICAL WORKSHOP ON DIAGNOSIS AND MANAGEMENT

Obstructive sleep apnea (OSA) is caused by repetitive obstruction of the upper airway that results in complete or partial cessation of airflow. OSA is known to afflict 3-20% of the general population and is showing a dramatic increase along with its socioeconomic burden over the last years. OSA is associated with various clinical symptoms such as snoring, excessive daytime sleepiness, fatigue, neurocognitive impairment, cardiovascular disease, endocrinological problems, and psychological problems.



***Prof. Ratna Sari
Dewi***

***Dr. Fakhrana
Ariani Ayub***

Universitas Indonesia

DATE:

15th August 2026

VENUE:

MALEO

TIME:

13.00 – 16.00

PRECISION AND ESTHETIC EXCELLENCE IN INDIRECT RESTORATIONS: INTEGRATING DIGITAL AND CONVENTIONAL WORKFLOWS

The development of digital technology has brought significant changes to the field of restorative dentistry, particularly in the fabrication of indirect restorations. Although digital workflows are increasingly used due to their increased efficiency, accuracy, and predictability, conventional techniques still play a vital role in various clinical situations. Therefore, a comprehensive understanding of the integration of digital and conventional workflows is key to achieving optimal restorative success.

This seminar and hands-on session will cover the basic principles and latest developments in indirect restorations, from diagnosis and treatment planning, material selection, tooth preparation design, conventional and digital impression techniques, to definitive cementation procedures. Various types of indirect restorations, including inlays, onlays, veneers, and all-ceramic crowns, will be discussed based on biological, mechanical, and aesthetic considerations. Furthermore, participants will gain an understanding of the advantages, limitations, and indications for each workflow to support informed clinical decision-making.

Through hands-on sessions, participants will gain practical experience in applying the concepts they have learned, including preparation design appropriate to the type of restorative material, the use of digital technology in the restorative process, and clinical steps that contribute to the long-term success of indirect restorations. By integrating digital and conventional approaches appropriately, it is hoped that participants will be able to improve treatment precision, achieve optimal aesthetic results, and increase the predictability and durability of restorations in daily clinical practice.



Dr. Yeoh Oon Take

Universitas Indonesia

DATE:

15th August 2026

VENUE:

Kakaktua

TIME:

13.00 - 16.00

IMPLANT PLACEMENT PROTOCOL UTILIZING AGGRESSIVE VS ACTIVE IMPLANT THREAD

Activities:

- Hands-on experience on placing X-line and C-line implants
- Demonstration of scan body scanning and design workflow in Exocad

SECTION E

EXHIBITION



FLOOR PLAN

Main Lobby



Main Lobby EXHIBITION



Booth No. 1



Booth No.2




Booth No. 3



Booth No. 4



Booth No. 5



Booth No. 6



Booth No. 7



Booth No. 8



Booth No. 9



Booth No. 10



Booth No. 11



Booth No. 12

Main Lobby EXHIBITION



Booth No. 13



DENTAL



Booth No. 14



Booth No. 15



Booth No. 16



Booth No. 17



Booth No. 18



Booth No. 19



Booth No. 20



Booth No. 21



Booth No. 22



Booth No. 23



Booth No. 24

Main Lobby EXHIBITION



Booth No. 25



Booth No. 26



Booth No. 27



Booth No. 28



Booth No. 29



Booth No. 30



Booth No. 31



Booth No. 32



Booth No. 33



Booth No. 34



Booth No. 35



Booth No. 36

Main Lobby EXHIBITION



Booth No. 37



Booth No. 38



Booth No. 39



Booth No. 40



Booth No. 41



Booth No. 42



Booth No. 43



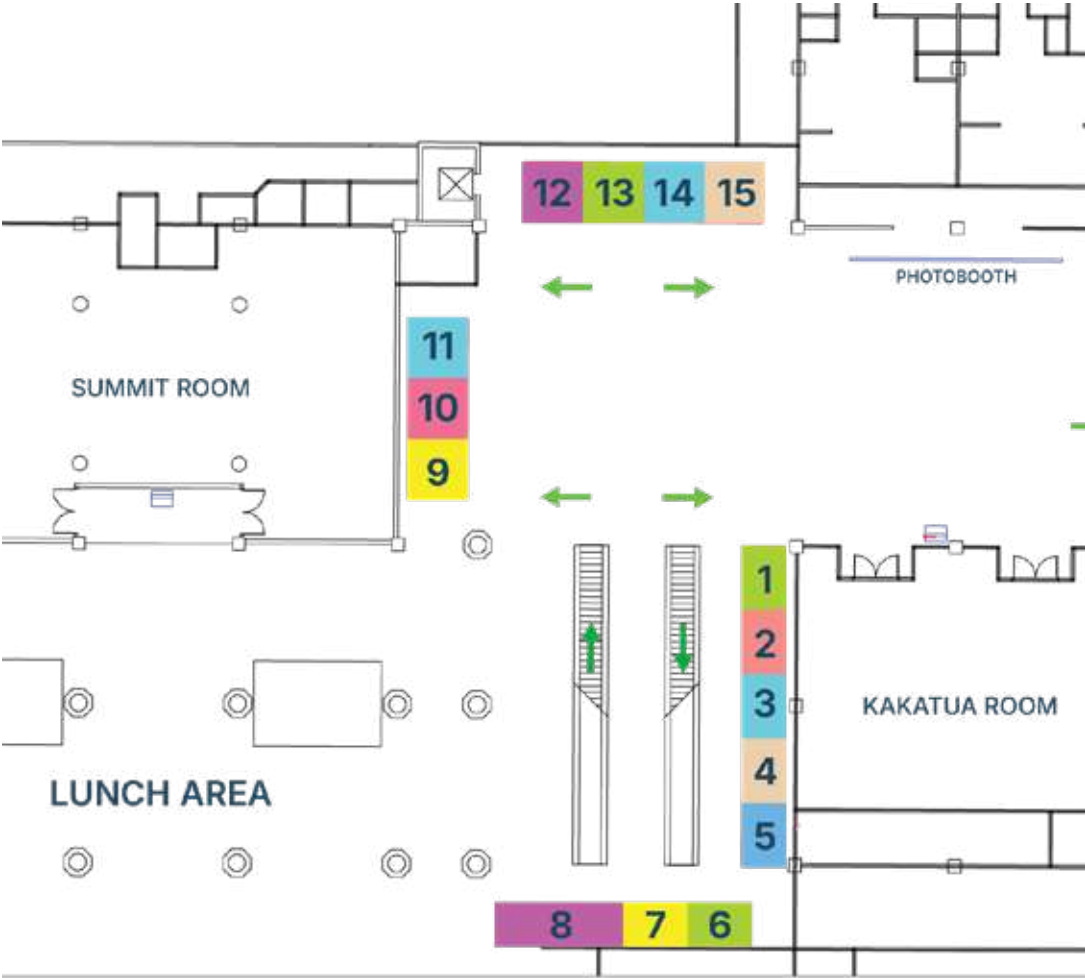
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Booth No. 45

FLOOR PLAN

Lower Lobby



Lower Lobby EXHIBITION



Booth No. 1



Booth No. 2



Booth No. 3

**PAGUYUBAN
DOSEN
PURNABAKTI
FKG UI**

Booth No. 4



Booth No. 5



Booth No. 6



Booth No. 7



Booth No. 8



Booth No. 9

Lower Lobby **EXHIBITION**



Booth No. 10



Booth No. 11



Booth No. 12



Booth No. 13



Booth No. 14

KAHR

Booth No. 15

F&B BOOTH





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