

Proceedings of the

14th FDI-IDA

CONTINUING DENTAL EDUCATION PROGRAMME

"Advancing Dentistry with Innovative Sciences and Technology"

Manado, 21-22 September 2018

LSKI



Proceeding of The 14th FDI-IDA Continuing Dental Education Programme

"Advancing Dentistry with Innovative Sciences and Technology"

Novotel Manado Convention Center, Manado September 20-22, 2018

editor :

Aurelia Steffanie Rachel Supit

Dinar Arum Wicaksono

Mirsarinda Anandia Leander

LSKI

Proceeding of The 14th FDI-IDA Continuing Dental Education Programme
"Advancing Dentistry with Innovative Sciences and Technology"
Novotel Manado Convention Center, Manado September 20-22, 2018

First published by Lembaga Studi Kesehatan Indonesia (LSKI) Bandung 2018
for 14th FDI-IDA Continuing Dental Education Programme Committee

Editor	Aurelia Steffanie Rachel Supit Dinar Arum Wicaksono Mirsarinda Anandia Leander
Reviewer	Iwan Dewanto Mita Juliawati Tri Erri Astoeti Paulus Januar Pritartha Sukatrini Anindita Paulina Novita Gunawan Mohammad Dharma Utama Rahmi Amtha Sri Hananto Seno Sudibyo Armelia Sari Widyarman
Setting, Layout	Heryanto
Cover Design	Jehuda Lontaan
Proofreader	Kosterman Usri
Copyright	© 2018 14 th FDI-IDA Continuing Dental Education Programme Committee
ISBN	978-602-60959-4-7

14th FDI-IDA Continuing Dental Education Programme Committee

Chairman Sanil Marentek

Vice Chairman Pritartha Sukatrini Anindita, Christine N. V. Munaiseche

Treasure Jenny N. Sumual, Irene F. Rompas

Secretary Merlin M. Liempepas, Grace B. S. Tawas, Grace H. S., Ollivia E. Supit

Scientific Dinar Wicaksono, Aurelia S. R. Supit, Mirsarinda A. Leander

Programme Catarina A. Kristanti

Exhibition Hendra Tandju, Cristianto T. Kowel

Registration Juliatri, Diah Puspitasari

Equipment Natanael Krones, Sri Pamungkas Sigit Nardiatmo

Information Technology Ryan I. Tunggal, Hendry C.R. Ulaen

Publication Lestari Pujirahayu, Carolina Monica Kere

Transportation Rahmat Labagow, Grandy Novariant, Handoyo

Accommodation Megawaty Y. Cornelesz, Hizkia R. Sembel

Consumption Vanda Ardanawari, Irene Hartanto

Lembaga Studi Kesehatan Indonesia (LSKI)
PO Box 7785 Bandung 40122 Indonesia e-Mail balecijulang@gmail.com
LSKI products can be purchased at <http://dentamedia.winmarket.id>

CONTENTS

Foreword	v
Contents	vi-x
Sandwich Technique with Allograft and Alloplastic Bone Graft for Periodontal Infrabony Pocket Treatment <i>Eka Pramudita Ramadhany, Sri Pramestri Lastianny</i>	1-5
Suturing on The Socket of The Dry Socket Can Immediately Reduce Pain and Improve The Healing Process <i>Ekasari Widyastoeti</i>	6-10
Management Patients Using Complete Denture <i>Fransiska Nuning Kusmawati</i>	11-15
Functional Crown Lengthening and Self Threading Post for Treatment in Premolar with Subgingival Caries <i>Ilma Yudistian</i>	16-21
An Endodontic Treatment of Acute Apical Periodontitis <i>Maria Tanumihardja, Nurhayati Natsir, Christine E Royani, Juni Jekti N, Rehatta Yongki, Indrya K Mattulada</i>	22-26
Obstructive Sleep Apnea (OSA) Therapy Using Oral Appliances <i>Elin Hertiana</i>	27-33
Hyperbaric Oxygen Therapy as Alternative Way to Combating Periodontal Pathogen <i>Ganesha Wandawa</i>	34-38
Oral Cancer Screening in Daily Dental Practice <i>Melania Utami Nirwan</i>	39-45
CBCT as a Standard in Root Canal Treatment for The Diver to Avoided Barodontalgia <i>Sophian Abdurrahman, Ali Thomas T</i>	46-51
The Impact of Habit Forming Methods on The Plaque Index of Primary School Students in Kecamatan Lasalinu Kabupaten Buton <i>Amanah Pertiwisari</i>	52-60
The Study of Medical Privilege on Economic Credentialing in OPD's Dental Clinic at Siloam Hospitals Manado <i>Dinar A Wicaksono</i>	61-70

Comparison Repeat and First Visit Patient's Satisfaction with Service Quality At Dental Health Centre Bantaeng District Indonesia 2018 <i>Fuad H Akbar, Burhanuddin D Pasiga, Rasmidar Samad, Rini Pratiwi, Ayub I Anwar, Nursyamsi Djamuluddin, Sridevianti</i>	71-78
Effect of 3% Chitosan Snail Shell Into The Number of Leukocytes and Blood Vessels on Wound Healing of Gingival <i>Rattus Norvegicus</i> <i>Kwartarini Murdiastuti, Rizky D Astrid, Bellia S Rengganis</i>	79-88
Microleakage Comparison of Various Bulk Fill Composite in Class I Restoration with Bulk Technique <i>M Mozartha, M.R. Alfarysy, D Anastasia</i>	89-95
The Effect of Betel Leaf Extract Toothpaste on Gingival Health <i>Nanda K Salim, Dientyah N Anggina, Retno I Kumalasari</i>	96-103
The Effectiveness of Soursop Leaf Extract Gel (<i>Annona Mucirata</i> Linn) on Bleeding Time And Number of Fibroblast Cells After Dental Extraction on Marmot (<i>Cavia Porcellus</i>) <i>Putu S Dewi</i>	104-110
Effect of Behavior and Knowledge Level About Oral Hygiene to The Halitosis in STIKES Siti Hajar Students at Siti Hajar Hospital Medan <i>Dinisya Camila, Natasya Soraya, Suci Erawati</i>	111-116
Effect of <i>Jengkol</i> Pericap Extract Gel Concentration to Number of Fibroblast on Incision Wound Healing Process <i>Mochammad T Ma'ruf, Setiawan, Oka R Putra</i>	117-123
Single File Root Canal Preparation Technique with Reciprocation Motion: a Fast and Efficient Root Canal Shaping <i>Asri R Putri</i>	124-130
Bicuspidization: a True Conservative Approach of Hopeless Molar Mandibular <i>Fadil Abdillah</i>	131-136
Attaching Tongue Crib at Lower Removable Orthodontic Appliance in Retention phase to Avoid Relapse <i>Ketut V Ayu</i>	137-142
Initial Treatment for Premolar Mobile Teeth in Periodontal Disease <i>Norman Hidajah</i>	143-145
Z-Plasty Frenectomy for Treatment in Patient with Thick Frenulum and Shallow Vestibulum <i>Setiawan</i>	146-150
Telemedicine in Dentistry (Teledentistry) and Its Legal Aspects <i>Aurelia S R Supit</i>	151-158

Treatment of Closing Maxillary Central Diastema Caused by Mesiodens <i>Eko S Y Astuti</i>	159-163
The Comparison of Porosity in Thermoplastic Root Canal Filling Technique Using MTA Sealer Plus (Ca(OH) ₂) and MTA Plus Nano Chitosan (SEM Test) <i>Wedagama D M, Tista G N, Irami E M</i>	164-167
Dimension Stability of Alginate Sprayed with Infusa Zingiber Officinale Concentrate 30% as Disinfectant <i>Dewi F Nurlitasari, P N Puspaninghyun, Ni Kadek D P Arini</i>	168-175
Comparison of Space Analysis Using Tanaka-Johnston, Moyers and Sitepu Analysis Methods on Balinese Students <i>Dwis Syahrul</i>	176-183
The Relationship Between Caries and Water's Fluoride Level to Students in Coastal Area Of Jember <i>Ismi I Yusha, Ari T W Handayani, Dyah Setyorini</i>	184-191
Correlation Mother's Knowledge About The Growth of Deciduous Teeth with Child's Dental Care <i>Hestieyonini Hadnyanawati, Kiswaluyo, Ristya W E Yani, Ari T W Handayani, Surartono Dwiatmoko, Elyda A A Misrohmasari</i>	192-197
Lemon Juice (Citrus Lemon) Can Whiten Discoloration Teeth <i>I Gusti A A Hartini, I Gede P Palguna</i>	198-204
The Effect of Lime Juice to Change Tobacco Stain Index at Permanent Maxillary Central Incisor <i>I Gusti K Armianti, Ni Nyoman Nurdeviyanti, Pande D Monika</i>	205-209
Mangosteen Peel Extract (<i>Garcinia mangostana</i> L.) Inhibited The Growth of Mutant streptococcus Bacteria (In Vitro) <i>I Gusti N B Tista, I Gusti A A Hartini, Eka A Sari</i>	210-216
The Effect of Tooth Immersion in Robusta Liquid With Different Temperature to Tooth Color Changing <i>Ni Nyoman Nurdeviyanti, Sumantri, I Made D Satriana</i>	217-222
Analysis of Anxiety Levels of Children and Adolescents on Dental Visit <i>Ni Putu W Astuti</i>	223-225
The Effect of Smoking to Enamel and Gingiva (Study at FKG UPDM(B), Jakarta <i>Poetry Oktanauli, Pinka Taher, Nisrina Q Heriawan, Nabilla P Andini</i>	226-232

-163	Green Betel Leaf Extract Concentration's Effect to The Growth of <i>Enterococcus Faecalis</i> in Root Canal Tooth	233-239
-167	Putu Rusmiany, Kadek L Ernawati, Mirah Kesumadewi S	
-175	Effectiveness of Extract Propolis Kelulut Bees (<i>Trigona</i> spp) on Growth of <i>Candida albicans</i>	240-248
-183	Putu Y Nugraha	
-191	Effectiveness of Immersion Acrylic Resin in Extracts of <i>Averrhoa blimbi</i> L Leaf to Oral Microorganism	249-254
	Ria Koesoemawati, Hendri Poernomo, Hervina	
	Associations Between Socioeconomic Status, Oral Health Behavior, and Dental Caries Among Schoolchildren in Sleman, Yogyakarta	255-259
	Sri Widiati	
	Effect of Temperature on Setting Time of Glass Ionomer Cement Type I (Luting Cement)	260-264
	Sumantri, Rusmiany, Ayu P Dina	
	Effectiveness of Purple Leaf Extract as Denture Cleanser Towards <i>S. mutans</i> Growth on Flexible Denture	265-270
	Tri Purnami Dewi R	
	Correlation Between Salivary Acidity Level to Gingival Inflammation in The Elderly People	271-276
	Vega R Fione	
	The Effect of Fluoride Varnish on Mutans Streptococci Counts: a Randomized Clinical Trial Study	277-281
	Yufitri Mayasari	
	Surgery Management for Impacted Central Incisor Blocked by Odontoma	282-286
	Felisa Bagaray, Sherly M Gosal, Victor T Pamolango	
	Age Estimation with Tooth Coronal Index (TCI) Method on Mandibular Second Molar at Age 11-25 Years Old	287-293
	Heni Jayanti, Masniari Novita, Zainul Cholid	
	Maxillary First Molar and Mandibular Canine Size of Female Student Faculty of Dentistry Universitas Jember	294-300
	Najla I Phasa, Dwi K Apriyono, Masniari Novita	
	Effectivity of Ethanol Extract of Miana Leaves (<i>Coleus Scutellarioides</i> [L] Benth.) Toward The Incision Wound Healing Process on <i>Rattus Norvegicus</i>	301-305
	Shalahuddin Al Amin, Masyhudi, Hadi Irawiraman	

The Oral Discomfort Frequency Distribution of The Electronic Cigarette (Vaporizer) Users <i>Syifa Sakinah, Dewi Priandini</i>	306-312
Analysis of Odontoblast-Like Cell Formation in Pulp Of Wistar Rat After Bioactive Glass Nano Silica Gel of Bagasse Ash Treatment <i>Yuniko D A Ansyah, Sri Lestari, Niken Probosari</i>	313-318
Effect of Lavender Aromatherapy on Patient Anxiety Levels in Dental Treatment (Study at The Executive Clinic of Dental Hospital Dentistry Faculty, Trisakti University) <i>Mita Juliawati, Bestra Chelsea</i>	319-323
Ethics and Effective Communication for Success in Dental Practice <i>Tri Erri Astoeti, Mita Juliawati</i>	324-329
Aging and Periodontal Disease <i>Abdul Gani Soulissa</i>	330-334
Oral Health Promotion for Parents as an Effective Tool to Maximize The Children's Oral Health <i>Paulina N Gunawan</i>	335-338

CASE REPORT

Management Patients Using Complete Denture

Fransiska Nuning Kusmawati

Faculty of Dentistry, Universitas Prof. Dr. Moestopo (Beragama), Jakarta

Abstract

Introduction: Rehabilitation using complete denture (GTL) has the purpose to achieve the aesthetic, phonetic, occlusal support, mastication, comfort and health of supporting tissues. In patients who have not had tooth for along time ago can occur several circumstances such as this: concave profile, muscle hipertonus occurs in the lower jaw and mastication is not balanced and diminish vertical dimensions. **Case:** A 75-year-old woman came to the hospital. The patient is unable to hear so they have difficult communication. The extra oral appearance is a concave profile and the face is not symmetrical. The intra oral of the patient shows that all the upper and lower teeth are absent. Residual ridge from the upper jaw are medium with high frenulumlabialis. Residual ridge from the lower jaw are medium at the anterior and low on the posterior. **Case management:** Patientare made Complete Denture of Acrylic Resins with extended lingual wings in the retromylohyoid area. **Conclusions:** Patients may wear full denture even though they are past a long adaptation period.

Keywords: rehabilitation, decrease vertical dimension, complete denture

Introduction

The main motivation of the patient to make a Complete Denture (GTL) first is usually for appearance and mastication. This motivation will strengthen and tends to improve patient adaptability. These functions include dexterity and denture comfort as well as the ability to eat effectively.¹

In elderly patients there has been little disruption in learning and memory skills. There was also a decline of denture support tissue. A decrease in the remaining alveolar bone tends to result in a decrease in face height and make the mandible progressively (prognation).²

In patients who want to be made full denture sometimes found low residual ridge. This is due to the presence of alveolar bone resorption. A high resorption level will cause the alveolar bone height to be low rapidly and the shape narrows. In addition, low and narrow alveolar bone will reduce the retention and stabilization of denture. We have to planning the requirement very carefull. The base of the full denture is cultivated as widely as possible without blocking muscle activity and is in close contact with the surrounding tissue mucosa. Preparation and careful planning and following appropriate procedures are expected to provide retention, stabilization, support, and non-resorption also result in good dentures.³

Case History and Findings

A 75-year-old woman came to the hospital with her daughter and daughter-in-law. The patient is unable to hear so they have difficult communication. The extra oral appearance is a concave profile and an asymmetrical face as shown in fig. 1. The intra oral of the patient shows that all the upper and lower teeth are absent. Medium left upper jaw with high labial frenulum. The lower left mandibular is at the anterior and low in the posterior (Fig. 2)

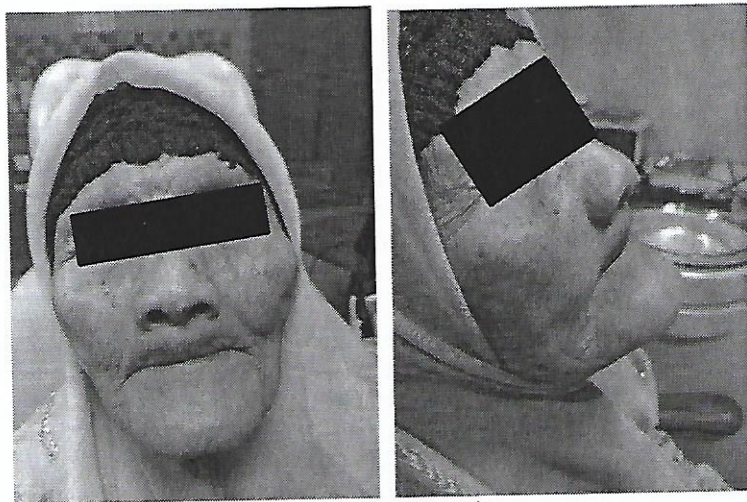


Fig 1. Extra oral patient

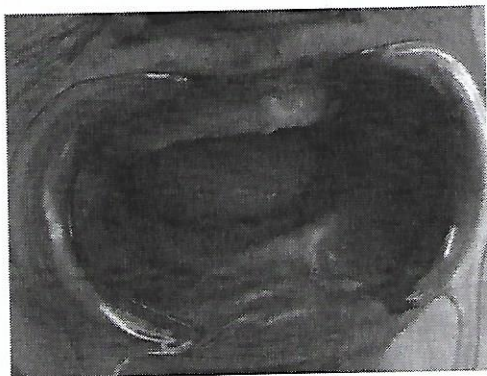


Fig 2. Intra oral patient

Case Management

On this first visit, we take an impression using alginate material (see figure 3) and casted using dental stone to obtain a model study. The study model is sent to the technician to make individual tray

The second visit is mucofunctional molding, which is taking an impression without removing a denture. The expansion is maximally obtained with edge closure and border molding. Closing the edges of the lingual section by making the horizontal expansion of the anterior lingual wings to the sublingual. The lingual wings are extended to the inferior to contact the highest part of the bottom of the mouth. The wing is then extended to the posterior to contact with the sublingual and will be obtained closing when the tongue is resting and the base of the mouth is located at the bottom. Added a bit of border molding material that has been softened to the inner surface of the anterior lingual area that has previously been molded and re-inserted an individual tray inside the mouth. The impressioened is done using a zinc oxide eugenol paste (see Figure 4).



Fig 3. Impression with alginate

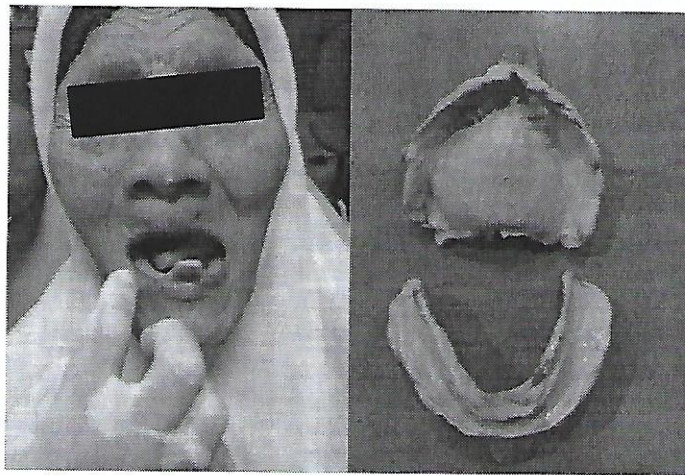


Fig 4. The impressed using zinc oxide eugenol paste

Third visit: already got bite rim made from wax and done making camper line from tragus to ala nasi. Occlusal posterior alignment with camper line and anterior alignment with the interpupillary. Determination of vertical dimension and centric relation is done. Perform fixation (see figure 5) and move the jaw connection to the articulator. Arrangement of anterior and posterior teeth is done on the articulator.



Fig 5. Bite rim fixed

The patient came back to try at the fourth visit. At this time, we check occlusion of patient. On the fifth visit was insertion the full denture into the patient's mouth (see figure 6). Patients are encouraged to use these denture as long as possible to speed up the adaptation process. Patients are asked to brush their denture as when brushing and cleaning by soaking in a denture cleansing solution.



Fig 6. Insertion of full denture

The sixth visit and the next is control process. The first control, the complaining patient can not wear the denture because loose when biting food. Denture is not worn because it is always released. When the denture comes wrapped neatly in the tissue. At that time, retention is checked again, there is sufficient denture retention. Then the patient is taught again how to get the right bite to get the correct way of occlusion. Patients can not use the denture because of the bite which always move forward the mandible so that no correct occlusion is obtained.

Second control, the patient came with pain complaints on the lower left area. When examined look a little redness in the left lower residual ridge. Checked by using Pasta Indicating Pressure (PIP) on the bottom surface. Seen there is a little part that is lost then do the grinding in that section. Retention is checked again, and adequate retention is seen. When checked the occlusion, still seen the patient moving forward the mandible so it is still released when closing the mouth. Patients are taught how to keep their mouths shut while looking at the mirrors. Patient is taught while reading the instructions to be done.

The third control, the patient still feel uncomfortable but no pain. Retention is checked and retention is sufficient. When closing the mouth, the patient still looks forward the mandible. The patient is again instructed to sit facing the mirror, read the instructions and do what is written on the instruction.

The fourth control, the patient comes with a feeling of comfort and asks if the bite is right. Checking is done on upper and lower left residual ridge, no redness area. Checks were performed on the patient's occlusion, not showing a severe occlusion lesion on the denture.

Discussion

In patients who have not had teeth for a long time many changes occur. Changes that may occur in oral tissue may include: (1) changes in oral and skin mucosa, (2) alveolar bone changes and intercostal relations, (3) tongue change and tasting, (4) salivary flow changes and nutritional disorders. A decrease in the remaining alveolar bone tends to result in a decrease in face height and make the mandible progressively (prognati). In this patient it occurs as the

remaining residual ridge is narrowed, although still with a moderate height. This patient is also used to move forward the mandible when it closes the mouth so as to interfere with the occlusion. Patients also have interference with the saliva that is getting less so that the mouth feels dry. Things like this are the same as Boucher said that in elderly patients will happen things mentioned above.²

Patients find it difficult to retention lower denture often come off when closing the mouth. The patient's adaptation process becomes somewhat longer due to the patient's habit of forward the mandible when closing the mouth. Therefore patients are accustomed to facing the mirror and trying to open the mouth while being told how the occlusion should be. The patient does not immediately feel able, but needs several visits to reach the situation. This is the same as Boucher says that in elderly patients there has been little disruption in learning and memory skills.²

To increase retention in the lower left mandibular ridge, widespread border molding is required. Closing the edges of the lingual section by making the horizontal expansion of the anterior lingual wings to the sublingual. The lingual wings are extended to the inferior to contact the highest part of the bottom of the mouth. The wing is then extended to the posterior to contact with the sublingual and will be obtained closing when the tongue is resting and the base of the mouth is located at the bottom. Added a bit of border molding material that has been softened to the inner surface of the anterior lingual area that has previously been molded and re-inserted an individual tray inside the mouth. This is the same as that done by Chang JJ, Gafoor MA, and Denizoglu about the expansion of lingual area and border molding in order to increase retention and stabilization.^{4,5,6}

Conclusion

Communication that is not understood by the patient causing of the patient has not heard must be followed by written instructions. Complete retention and stabilization of the patient's full denture can be achieved by the extension of the lingual region. Patients may use complete denture although patient adaptation is prolonged.

References

1. Basker, RM, Davenport JC, Thomason JM, *Prosthetic Treatment of The Edentulous Patient*, 5th ed Ingggris, Wiley-Blackwell, 2011, hal 1 – 19.
2. Zarb, GA, Bolender, CL, Hickey, JC, dan Carlson, GE, *Boucher's Prosthodontic Treatment for Edentulous Patients* (terj), cet I, Jakarta, EGC, 2001, hal 1 – 122
3. Rachmani R, Desain Basis Geligi Tiruan Lengkap Rahang Bawah Pada Resorpsi Tulang Alveolar Yang Berlebihan, *MjKedokteran Gigi*, 2003;(51): 23 -31
4. Chang JJ, dkk, Maximizing mandibular denture retention in the sublingual space, *Int J Prosthodont*, 2011;Sept-Oct; 24(5):460-4 .
5. Gafoor MADkk, Recording 'sublingual crescents' in lower complete denture : a technique so effective but still isoteric and arcane, *J. Contempt Dent Pract*, 2012; Mar, 1;13(2) 222-6.
6. Denizoglu S dkk, Effect of tongue movements on lingual sulcus depth while border molding in mandibular complete dentures, *Indian J Dent Res*, 2014,Juli-Agt, 25(4):439-44.

ISBN 978-602-60959-4-7 (0)



9

786026

095947