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# THE 58TH CONGRESS OF THE KOREAN ASSOCIATION OF MAXILLOFACIAL PLASTIC AND RECONSTRUCTIVE SURGEONS

Theme : Respect for Knowledge



## 제58차 대한악안면성형재건외과학회 종합학술대회 및 정기총회

일시 : 2019년 10월 31일(목) ~ 11월 2일(토)

장소 : 부산항 국제전시컨벤션센터

주최 : 대한악안면성형재건외과학회

주관 : 부산대학교 치의학전문대학원 구강악안면외과학교실

“이 발표논문집은 2019년도 정부재원(교육과학기술부)으로 한국과학기술단체총연합회의 지원을 받아 발간되었음”

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## 학술대회장 인사말



대한악안면성형재건외과학회 회원 여러분 안녕하십니까?

노력한 만큼 큰 수확을 거둘 수 있는 풍요로운 계절 가을입니다. 한 해 동안 학회 회원들의 학문적인 결실을 정리하고 폭넓은 지식을 교류할 수 있는 가을 축제인 “제58차 대한악안면성형재건외과학회 종합학술대회”를 부산대학교 치전원 구강악면외과학교실의 주관 하에, 부산항 국제컨벤션센터에서 개최하게 되어 매우 영광스럽게 생각합니다.

대한악안면성형재건외과학회는 1962년에 창립된 이후 지금까지 악안면성형재건외과 분야에 대한 활발한 교육과 연구는 물론이고 다양한 학술행사와 봉사활동 등을 통해 학회 발전에 힘써왔습니다. 매년 개최되고 있는 종합학술대회는 회원들 간의 학술교류와 최신 경향을 소개하는 강의 등을 마련하여 세계적인 학문적 흐름을 함께 공유하는 자리로써 회원분들에게 유익한 시간이 되리라 믿습니다.

이번 학술대회는 “RESPECT for Knowledge”라는 주제로 교육 강연 및 초청 강연, 심포지엄을 통해 국내외 저명한 석학들을 모시고 심도 있는 토론과 강연이 준비되어 있습니다. 또한 회원님들의 소중한 임상경험과 연구 자료들이 Oral Presentation을 통하여 여러 심화된 주제에 대한 폭넓은 지식의 교류가 일어나기를 기대합니다.

Invited Lecture에는 Dr. Farhad Naini가 초청되어 “Clinical diagnosis of the orthognathic patients: current concepts and perspectives”라는 주제로 강연이 진행되며, 저자와의 만남도 준비되어 있습니다.

이번 학술대회 행사 2일차에는 "Healthcare Insurance Seminar"와 3일차 Memorial Lecture에서 Dr. Pil Hoon Choung의 강연이 진행됩니다.

끝으로 바쁘신 와중에도 시간을 내어 훌륭한 강의를 해주시는 국내외의 초청 연자분들과 적극적으로 참여해주신 회원분들께 깊은 감사의 인사를 드립니다.

더불어 성공적인 학술대회가 개최될 수 있도록 준비해주신 조직위원회 위원분들, 부산대학교 치전원 구강악안면외과학교실원 및 동문 여러분들께 지면을 빌어 감사의 마음을 전합니다.

여러분 모두의 가정에 건강과 행복이 함께 하시길 기원합니다.  
감사합니다.

제58차 대한악안면성형재건외과학회 학술대회장 신 상 훈 *Shin Sang-hoon*



## Welcome Message from the Chairman of KAMPRS

Hello to all members of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons (KAMPRS).

You reap the efforts you sow in this prosperous season of fall. A festival of academic achievements and sharing vast knowledge accumulated over the year - I take it as my great honor to see the Pusan National University Dental School hosting the "58<sup>th</sup> Congress of Korean Association of Maxill of acial Plastic and Reconstructive Surgeons" at the International Convention Center, Busan Port.

KAMPRS, since its foundation in 1962, has been making strenuous education and research efforts in maxillofacial plastic and reconstructive surgery, on top of various symposiums and volunteer activities to develop our association. The annual congress provides a platform for the members' academic and latest trend exchange via lectures. I am confident you will enjoy your time during the congress as the world academic trends are shared throughout our events.

Under the theme "RESPECT for Knowledge" the lecture, invited lecture, and symposium will bring prominent scholars to you for in-depth discussions and lecture sessions. I also look forward to the oral presentations many members will deliver based on their precious clinical experience and research data. Your sharing of thoughts will engage us in broad exchange of knowledge for many in-depth topics.

Dr. Farhad Naini will deliver his invited lecture on "Clinical diagnosis of the orthognathic patients: current concepts and perspectives", followed by a meeting session.

On the second and third day of the congress, "Healthcare Insurance Seminar" and Memorial Lecture will be presented respectively by Dr. Pil Hoon Choung.

As I end my greetings, I sincerely appreciate all of our guest speakers from Korea and Overseas, as well as all of the KAMPRS members for their participation despite their busy schedule.

I would also like to extend my gratitude to the council members, Pusan National University Dental School's Maxillofacial Plastic and Reconstructive Surgeons, and my alumnus for all their hard work in successfully hosting this year's congress.

I wish the best for your family, good health, and happiness.  
Thank you.

Congress Chairman of the 58th Congress of Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Shin, Sang-hun



## 학회장 인사말



존경하는 대한악안면성형재건외과학회 회원 여러분!

청명한 가을에 유서 깊은 대한악안면성형재건외과학회 종합학술대회가 제58차를 맞아 부산대학교 치의학전문대학원 주관하에 개최됨을 축하드립니다. 우리 대한악안면성형재건외과학회는 1962년 원로 선배님들의 선견지명으로 창립된 이후, 지금까지 턱얼굴 영역의 재건수술과 미용수술 분야에서 끊임없는 발전을 이루어 왔습니다. 회원 여러분의 적극적인 노력에 힘입어 턱교정 연구소(Orthognathic Institute)를 설립하였고, 턱얼굴 미용수술 연수회를 정기적으로 개최함으로써 회원 및 치과의사들에게 미용수술의 가이드라인을 제시하고 있습니다. 또한 학회지 “Maxillofacial Plastic and Reconstructive Surgery”는 국제적 인지도가 고무적으로 상승하고 있습니다.

금번 종합학술대회는 10월 31일부터 11월 2일까지 부산항 국제 컨벤션센터에서 개최됩니다. 학술대회의 테마는 “Respect for Knowledge”로 최근 우리 회원분들의 관심 분야에 초점을 맞추었습니다. 국외 초청 연자로는 Dr Bryan Bell, Dr George Sandor, Dr Farhad Naini, Dr Lian Ma, 그리고 국내의 김재승, 이종호 교수님을 모시고 턱교정 수술과 두경부 종양/재건을 중심으로 최신 진단기법과 수술개념에 대해 지견을 나누고자 합니다. 항상 그래왔듯이 우리 학회와 자매결연 관계에 있는 일본 악변형증학회와 대만 구강악안면외과학회, 그리고 하노이 국립구강병원에서 심포지움 연자분들과 함께 사절단이 함께 하십니다.

턱교정 연구소에서는 하악전들을 중심으로 심포지움을 개최합니다. 또한 정년을 맞으신 정필훈 교수님의 기념강연도 마련되어 있사오니 회원 여러분의 많은 관심 바랍니다. 이 모든 일들이 의미있지만 무엇보다도 귀중한 것은 우리 회원들 전체가 함께하면서 심포지움과 구연, 포스터를 통한 학술교류와 함께 친목의 시간을 가질 수 있는 장이 마련되었다는 것이라고 생각합니다. 또 쏘록 많은 회원분들이 함께 하시어 학문적인 축제의 장을 마음껏 즐기시길 바랍니다.

바쁘신 중에도 흔쾌히 강연을 수락해 주신 국내의 초청연자 분들과 심포지움 연자분들, 그리고 적극적으로 참여해 주신 회원 여러분들께 진심으로 감사의 말씀을 드립니다. 아울러 금번 학술대회를 주관하여 주신 신상훈 학술대회장님과 부산대학교 구강악안면외과 교실원 분들께 수고하셨습니다. 말씀을 드리고 싶습니다. 마지막으로 항상 수고하여 주시는 학회 임원분들과 전시에 참가해 주신 업체 관계자 분들께도 심심한 감사의 말씀을 드립니다.

금번 제58차 대한악안면성형재건외과학회 종합학술대회가 성황리에 유종의 미를 거둘 것을 믿어 의심치 않으며, 참가하신 여러분들 모두에게 건강과 행복이 늘 함께 하시길 바랍니다.

대한악안면성형재건외과학회 회장 박영욱 *parkyew*

## Welcome Message from the President of KAMPRS

Dear Members of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons!

I sincerely congratulate the hosting of the 58<sup>th</sup> congress of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons by Pusan National University Dental School in this bright season of autumn. Our senior surgeons, with their gifted foresight, founded the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons (KAMPRS) in 1962. Since its founding, KAMPRS has continued to develop the field of maxillofacial plastic and reconstructive surgery. Thanks to dedicated efforts from our members, we founded the Orthognathic Institute, and we have been hosting maxillofacial plastic workshops regularly to provide plastic surgery guidelines for the members as well as the dentists. Our association's journal "Maxillofacial Plastic and Reconstructive Surgery" is gaining wide popularity around the globe.

This year's congress will be hosted from 31 October to 2 November at Busan Port International Convention Center. The theme for this year's congress is "Respect for Knowledge" - focused on our members' recent areas of interests. Overseas guest speakers include Dr. Bryan Bell, Dr. George Sandor, Dr. Farhad Naini, and Dr. Lian Ma. Korean speakers are Professor Kim, Jae-seung and Professor Lee, Jong-ho. Our guest speakers will share their insight on advanced diagnosis methods and operation with emphasis on orthognathic surgery and head and neck tumor/reconstruction. As always, we are joined by symposium speakers and delegations of organizations that have sister relationship with KAMPRS - Japanese Society for Jaw Deformity, Taiwanese Association of Oral and Maxillofacial Surgery, and National Hospital of Odontostomatology in Hanoi.

Orthognathic Institute hosts a symposium oriented towards mandibular protrusion. Also, Professor Jeong, Pil-hun is delivering a special lecture commemorating his retirement - all interested members may join the special lecture. Each and every segment of the entire itinerary are significant, but what I find most meaningful is that this congress provides a venue for all members to get together and engage in academic exchange while sharing friendship. I hope all the members enjoy their time to the fullest during this academic festival.

I wholeheartedly appreciate all guest speakers and symposium speakers for accepting this invitation despite their busy schedules. I also thank all the members who have taken their time to be here. Dr. Shin, Sang-hoon and the staff from Pusan National University Dental School's members of Maxillofacial Surgery - thank you for all your hard work in successfully hosting this year's congress. I also want to convey my gratitude to the executive members of our association, as well as all members of organizations that took part in this year's exhibition.

I have no doubt that the 58<sup>th</sup> congress of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons will be successful. I wish good health and happiness to all participants.

President, Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Park, Young-wook 

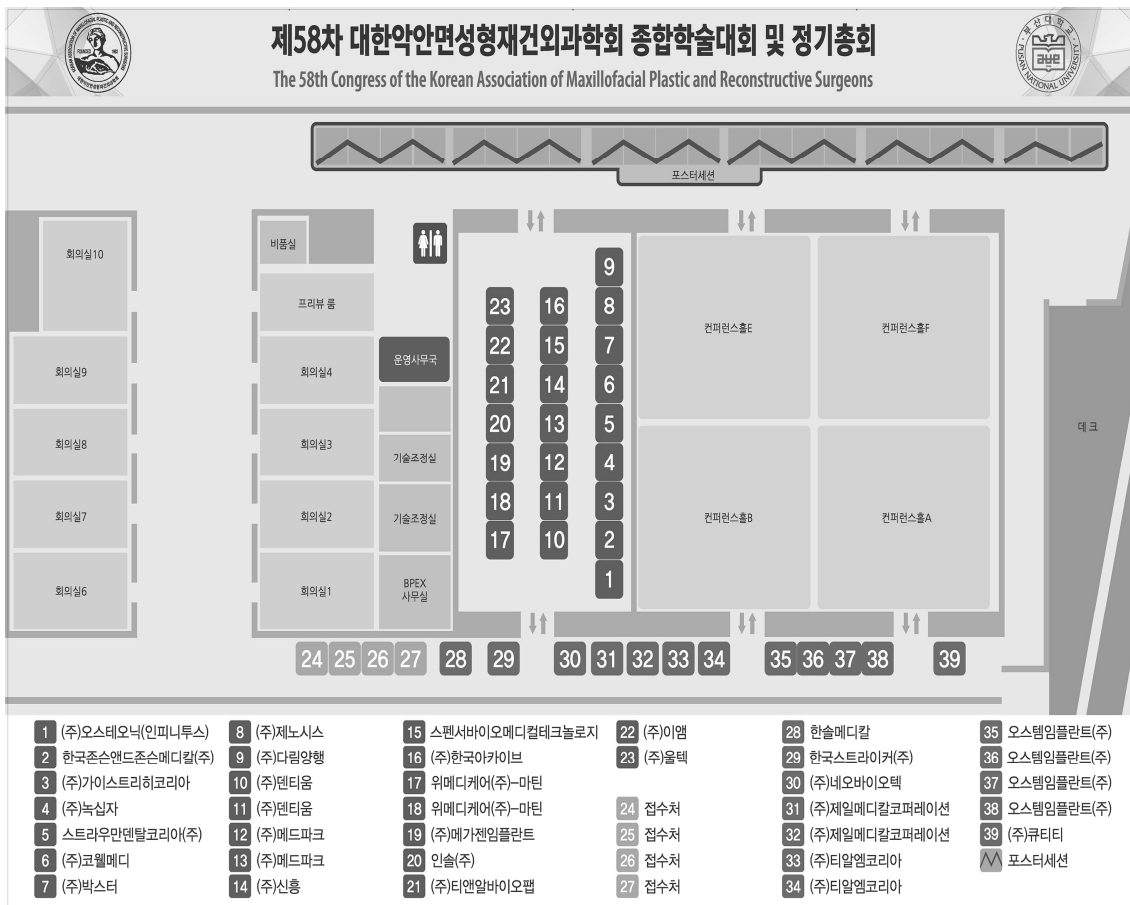
## Program at a Glance

Time	31, October (Thu)		
13:00-14:00	Registration		
14:00-14:30	Educational Lecture I		
14:30-15:00	<i>Clinical diagnosis of the Orthognathic patient - Current concepts and perspectives</i> Farhad Naini A,B,E,F Conference Hall		
15:00-15:30	Educational Lecture II		
15:30-16:00	<i>Surgical Correction of Anterior Open bites in Koreans</i> Jae Seung Kim A,B,E,F Conference Hall		
16:00-16:30	Coffee Break		
16:30-17:00	Educational Lecture III		
17:00-17:30	<i>Custom Solution in Craniomaxillofacial Surgery</i> Bryan Bell A,B,E,F Conference Hall		
18:00~	Welcome Banquet A,B,E,F Conference Hall		
Time	1, November (Fri)		
09:00-09:30	Invited Lecture I (Reconstruction)		
09:30-10:00	<i>1. Advances in Head and Neck Oncologic Surgery</i> Bryan Bell		
10:00-10:30	<i>2. Risk factors for flap failure and complications in microvascular free flaps</i> Jong Ho Lee A,B,E,F Conference Hall		
10:30-11:00	Coffee Break		
11:00-11:30	Symposium I (Reconstruction)		Symposium II (Implant surgery)
	<i>1. Mandibular reconstruction with patient-specific 3D printed titanium implants</i> Jin-Wook Kim		<i>1. Digital Art : aesthetic view point from the layperson's eyes</i> Jun Hyouk Shin
11:30-12:00	<i>2. VR &amp; AR application in oral cancer surgery</i> Seong Yong Moon		<i>2. Implant Overloading and Parafunctions: Avoiding and Managing Complications</i> Umberto Garagiola
12:00-12:30	<i>3. The options of recipient vessels in patients with vessel-depleted neck</i> Yu-Cheng Cheng A,B Conference Hall		<i>3. Bone Defect Management Before Implant surgery</i> Chih-Yuan Fang E,F Conference Hall
12:30-13:30	Luncheon		Healthcare Insurance Seminar Jae-Young Kim, Chung Seung-Won
13:30-14:00	Invited Lecture II (Deformities and Clefts)		
14:00-14:30	<i>1. Anterior open bites: treatment planning and postoperative considerations</i> Farhad Naini		
14:30-15:00	<i>2. Stem Cell Based Tissue Engineering in the Craniomaxillofacial Skeleton: Aspirations and Experience</i> George Sandor		
15:00-15:30	<i>3. Cleft palate repair based on hard palate plate deformity</i> Lian Ma A,B,E,F Conference Hall		
15:30-16:00	Coffee Break		
16:00-16:30	Symposium III (Cleft)		Symposium IV (턱교정연구소 주관)
	<i>1. Unilateral cleft lip repair using modified Milard Method : procedure and esthetic evaluation(movie)</i> Dae Seok Hwang		<i>1. Clinical application of 3D image in the orthognathic surgery</i> Min-Suk Kook
16:30-17:00	<i>2. Prevention and management of palatal fistula formation after palatoplasty</i> Hyun Seok		<i>2. Condyle positioning and fixation after SSRO</i> Sejin Han
17:00-17:30	<i>3. Vertical Correction in Short face Cases with Cleft Lip and Palate</i> Naoto Suda A,B Conference Hall		<i>3. Pyramidal and Posterior Osseous Release Technique Using Ultrasonic Bone Cutting Devise with Long-Tips.</i> Kensuke Yamauchi E,F Conference Hall
18:00~	Presidential Dinner Ramada Encore Hotel 3F		
Time	2, November (Sat)		
08:30-09:45	Oral Presentation A Orthognathic Surgery A,B Conference Hall	Oral presentation B Implant & dentoalveolar surgery Meeting room 6	Oral presentation C Research Meeting room 7
09:45-11:00	Oral presentation D Tumor & Reconstruction A,B Conference Hall	Oral presentation E Trauma & TMJ Meeting room 6	Oral presentation F Deformity Meeting room 7
11:00-11:30	Memorial Lecture		
11:30-12:00	Pil Hoon Chung A,B Conference Hall		
12:00-12:30	Regular General Meeting of KAMPRS A,B Conference Hall		

Council Meeting

Poster

# 학회장 안내도



## 좌장 일람표(Moderators)

Date	Room	Time	Program	Moderator
31, October (Thu)	A,B,E,F Conference Hall	14:00~16:00	Educational Lecture I , II	박재역(가톨릭의대)
				오희균(전남치대)
		16:30~17:30	Educational Lecture III	김옥규(부산치대)
				박상준(부산백병원)
1, November (Fri)	A,B,E,F Conference Hall	09:00~10:30	Invited Lecture I	차인호(연세치대)
				안강민(서울아산병원)
	A,B Conference Hall	11:00~12:30	Symposium I	박홍주(전남치대)
				명 훈(서울치대)
	E,F Conference Hall	11:00~12:30	Symposium II	표성운(가톨릭의대)
				김성곤(강릉원주대)
	E,F Conference Hall	12:30~13:30	Luncheon Seminar	허종기(연세대)
				권경환(원광대)
	A,B,E,F Conference Hall	13:30~15:30	Invited Lecture II	정영수(연세치대)
				고승오(전북치대)
A,B Conference Hall	16:00~17:30	Symposium III	이정근(아주대)	
			서병무(서울치대)	
E,F Conference Hall	16:00~17:30	Symposium IV	김재승(건국대)	
			박영욱(강릉원주대)	
2, November (Sat)	A,B Conference Hall	11:10~12:00	Memorial Lecture	이 원(카톨릭대)

## 일반연제 구연발표(Oral Presentation)

Date	Room	Time	Program	Moderator	
2, November (Sat)	A,B Conference Hall	08:30-09:45	Oral Presentation A (Orthognathic Surgery)	문성용(조선치대) 권경환(원광대)	
	Meeting room 6		Oral Presentation B (Implant & dentoalveolar surgery)	송승일(아주대) 김봉철(원광대 대전치과병원)	
	Meeting room 7		Oral Presentation C (Research)	변준호(경상의대) 이 준(원광대 대전치과병원)	
	A,B Conference Hall		09:45-11:00	Oral Presentation D (Tumor & Reconstruction)	남 웅(연세치대) 조영철(울산대)
	Meeting room 6			Oral Presentation E (Trauma & TMJ)	손장호(울산대) 전상호(고려대 안암병원)
	Meeting room 7			Oral Presentation F (Deformity)	김선종(이화여대) 박관수(상계백병원)

## 포스터 심사위원 명단(Poster Examiners)

Category	Name (Affiliation)
Examiners	백진아(전북치대)
	류재영(가천대 길병원)
	최소영(경북대)
	한정준(전남치대)
	김민근(강릉원주대)
	이정우(경희대)
	이재열(부산치대)

## 등록 및 연제 발표 안내

### 1. 종합학술대회 참가 등록 안내

- 1) 현장등록은 10월 31일(목) 13:00부터 학술대회장 등록대(부산항 국제전시컨벤션센터, 5F 로비)에서 하실 수 있습니다.
- 2) 사전등록을 하신 분은 사전등록 창구에서 명찰(일정표 포함), 프로그램 북, 기념품이 배부됩니다.
- 3) 대한악안면성형재건외과학회 신규입회(입회비 및 연회비)나 과년도 연회비를 납부하고자 하시는 회원께서는 등록대의 회원전용창구를 이용해 주십시오. 전공의 1년차 분들은 반드시 입회비를 납부하셔야 합니다.
- 4) 학회 기간 중 반드시 교부된 명찰을 착용해 주시고, 분실 시 등록대에서 재발급 받으시기 바랍니다.

### 2. 일반연제 구연 및 포스터 발표 안내

#### ◆ 구연 발표(Oral Presentation)

- 1) 일반 구연발표는 약 9분으로 세부적으로는 7분 발표, 2분의 질의응답으로 구성되어 있습니다.
- 2) 슬라이드 매수에는 제한이 없으며, 빔 프로젝터 1대를 이용하여 제한된 시간 내에 발표를 하셔야 합니다.
- 3) 슬라이드 및 기타 발표 자료는 반드시 발표 1시간 전까지 USB 등 저장매체를 이용하여 파일 접수대에 제출하시기 바랍니다.
- 4) 우수 발표자에게는 심사 후 학술상 시상 예정입니다.

#### ◆ 포스터 발표(Poster Presentation)

- 1) 포스터 발표 시간 : 2018년 11월 1일(금) 13:00
- 2) 포스터 운영 장소 : 부산항 국제전시컨벤션센터, 5F 로비
- 3) 포스터 심사는 두 차례 진행될 예정이며, 1차 심사 후 우수 선정자에 한해 포스터 구연 발표가 진행될 예정입니다.
- 4) 포스터 발표 선정자는 개별 통보할 예정이며, 총 발표 시간은 5분으로 3분 발표, 2분 질의응답으로 구성되어 있습니다.
- 5) 우수 발표자에게는 학술상 시상 예정입니다.



### 3. 일반연제 발표에 대한 심사 및 시상 요강

- 1) 본 학회에서 우수 발표 연제를 선정하여 최우수 논문상 및 우수논문상을 선정할 예정입니다.
- 2) 우수 논문상에 대한 시상은 학술대회 '정기총회'에서 진행이 될 예정입니다.
- 3) 심사 항목은 총 100점 만점으로 논문의 창의성(30), 논리 전개의 합리성(30), 결과의 중요성(30), 발표능력(10)에 대해 좌장(포스터 심사위원)이 심사합니다.

### 4. 구연 좌장님들에 대한 안내

- 1) 좌장분들께서는 발표 예정 10분 전까지 해당 발표장 좌장석에 입장해 주시기 바랍니다.
- 2) 좌장 벨이나 기타 안내를 통해 발표가 주어진 시간 내에 진행 될 수 있도록 해주십시오.  
발표 시간 : 약 9분(발표 7분, 질의 응답 2분)
- 3) 문의 사항이나 학회장에서 필요한 사항이 있으시면 대기 중인 진행요원에게 문의하시기 바랍니다.

### 5. 포스터 심사위원님들에 대한 안내

- 1) 포스터 심사위원은 등록데스크에서 포스터 심사표를 수령 후 1차 심사 결과를 10월 31일(목) 17:30 이전까지 등록대로 제출해 주시기 바랍니다.
- 2) 1차 우수포스터로 선정된 포스터에 한하여 발표가 진행 되며 발표 시간은 11월 1일(금) 13:00 부터 포스터당 3분 발표, 2분 질의 응답으로 구성됩니다.

## General Information

### 1. Registration Guideline

- Registration Desk : Busan Port International Exhibition & Convention Center 5F, Busan
- Registration Hours : October 31st, 13:00 – November 2nd, 10:00
  - If you have already registered for KAMPRS 2019, please visit pre-registration desk, if not, please visit onsite registration desk. Overseas participants need to pay their registration fee only at the registration desk by cash during the conference period. All participants are requested to wear their name tag during the KAMPRS 2019 period.

### 2. Instructions For oral Presenter

All presentation will start at the schedule time, so please visit submitting desk in the KAMPRS 2019 Secretariat office to submit the presentation File.

Submitting Desk about 1 hour before your presentation and submit your presentation file in order to prevent unexpected problem.

#### ◆ For Poster Presenter

- Poster Venue will be set up Busan Port International Exhibition & Convention Center 5F, Oct. 31
- Please check the poster order list for your poster number (you can see the poster number in the program book)
- Outstanding poster presentation time will be November 2(Fri) 13:00 ~ 16:00  
Presenters must stand by their posters during the presentation time. Each poster presenter will have 3 mins for presenting and 2 mins for Q&A

## 주요 일정

### 1. 평의원회(Council Meeting)

- 일시 : 2019년 10월 31일(목) 16:00 ~ 17:30
- 장소 : 부산항 국제전시컨벤션센터 5층 8,9 회의실

### 2. 대한약안면성형재건외과인의 밤(KAMPRS Banquet)

- 일시 : 2019년 10월 31일(목) 18:00 ~ 20:00
- 장소 : 부산항 국제전시컨벤션센터 5층 A,B,E,F 컨퍼런스홀

### 3. 한·일 상임이사회(The 12th Conjunction Board Meeting of KAMPRS and JSJD)

- 일시 : 2019년 11월 1일(금) 08:00 ~ 09:00
- 장소 : 라마다 앙코르 부산역 호텔 3층

### 4. 한·대 합동이사회(The 5th Conjunction Board Meeting of KAMPRS and TAOMS)

- 일시 : 2019년 11월 2일(토) 08:00 ~ 09:00
- 장소 : 라마다 앙코르 부산역 호텔 3층

### 5. 중식 세션(런천세미나)

- 일시 : 2019년 11월 1일(금) 12:30 ~ 13:30
- 장소 : 부산항 국제전시컨벤션센터 5층 E,F 컨퍼런스홀

### 6. 학술대회장 초청만찬

- 일시 : 2019년 11월 1일(금) 18:00 ~ 20:00
- 장소 : 라마다 앙코르 부산역 호텔 3층

### 7. 전시(Exhibition)

- 일시 : 2019년 10월 31일(목) ~ 11월 2일(토)
- 장소 : 부산항 국제전시컨벤션센터 5층 로비

## Meeting & Social Events

### 1. Council Meeting

- Date & Time : October 31st(Thu) 16:00 ~ 17:30
- Venue : Busan Port International Exhibition & Convention Center Meeting Room 8,9

### 2. KAMPRS Banquet

- Date & Time : October 31st(Thu) 18:00 ~ 20:00
- Venue : Busan Port International Exhibition & Convention Center 5F Conference Hall A,B,E,F

### 3. The 12th Conjunction Board Meeting of KAMPRS and JSJD

- Date & Time : November 1st(Fri) 08:00 ~ 09:00
- Venue : Ramada Encore Busan Station Hotel 3F

### 4. The 5th Conjunction Board Meeting of KAMPRS and TAOMS

- Date & Time : November 2nd(Fri) 08:00 ~ 09:00
- Venue : Ramada Encore Busan Station Hotel 3F

### 5. Luncheon Seminar

- Date & Time : November 1st(Fri) 12:30 ~ 13:30
- Venue : Busan Port International Exhibition & Convention Center 5F Conference Hall E,F

### 6. Presidential Welcome Reception

- Date & Time : November 1st(Fri) 18:00 ~ 20:00
- Venue : Ramada Encore Busan Station Hotel 3F

### 7. Exhibition

- Date & Time : October 31st(Thu)~November 2nd(Sat)
- Venue : Busan Port International Exhibition & Convention Center 5F Lobby

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## Educational Lecture

■ Moderator : 박재억(가톨릭의대), 오희균(전남치대)

### Educational Lecture I

- Date : 10.31(Thu) 14:00~15:00
- Speaker : Farhad Naini
- Affiliation : St George's Hospital and Medical School, England
- Topic : Clinical diagnosis of the Orthognathic patient - Current concepts and perspectives

■ Moderator : 박재억(가톨릭의대), 오희균(전남치대)

### Educational Lecture II

- Date : 10.31(Thu) 15:00~16:00
- Speaker : Jae Seung Kim
- Affiliation : Konkuk Univ, Korea
- Topic : Surgical Correction of Anterior Open bites in Koreans

■ Moderator : 김옥규(부산치대), 박상준(부산백병원)

### Educational Lecture III

- Date : 10.31(Thu) 16:30~17:30
- Speaker : Bryan Bell
- Affiliation : Providence Cancer Institute, USA
- Topic : Custom Solution in Craniomaxillofacial Surgery

**교육강연 I | Educational Lecture I**

일시(Date) : 10.31(Thu) 14:00~15:00

Moderator : 박재익, 오희균

**Clinical diagnosis of the Orthognathic patient –  
Current concepts and perspectives**



Dr. Farhad Naini

*St George's Hospital and Medical School, England*

**Clinical diagnosis of the Orthognathic patient – Current concepts and perspectives**

Orthognathic surgery provides a unique method of altering both the form and function of the craniofacial complex. The role of accurate diagnosis in this treatment pathway is paramount and requires an understanding of aesthetic principles as well as technical knowledge. The purpose of this presentation is to provide an exploration of the scientific perspectives on facial aesthetics, the analysis of facial form and dysmorphology, and the interaction of art and science in orthognathic surgery.

## Curriculum Vitae

### Mini-biography for Dr Farhad B. Naini:

Dr Naini is the Consultant Orthodontist and Director of Research in the Maxillofacial Unit at St George's Hospital and Medical School, and Clinical Lead for Maxillofacial Surgery and Dentistry at Kingston Hospital, London, UK. He is a Fellow and examiner for the Royal College of Surgeons of England, a Fellow of the Royal College of Surgeons of Edinburgh, and an examiner for the University of London. His main clinical interest is orthognathic surgery. His clinical and academic work is devoted to patients with dentofacial and craniofacial deformities, with particular emphasis on clinical diagnosis and facial aesthetic analysis.

He has over 110 publications in peer reviewed journals, is co-editor of the textbook: "Orthodontics: Principles and Practice", co-editor of the 61-chapter tome: "Orthognathic Surgery: Principles, Planning and Practice", and author of the reference textbook: "Facial Aesthetics: Concepts and Clinical Diagnosis".

**교육강연II | Educational Lecture II**

일시(Date) : 10.31(Thu) 15:00~16:00

Moderator : 박재익, 오희균

**Surgical Correction of Anterior Open bites in Koreans**

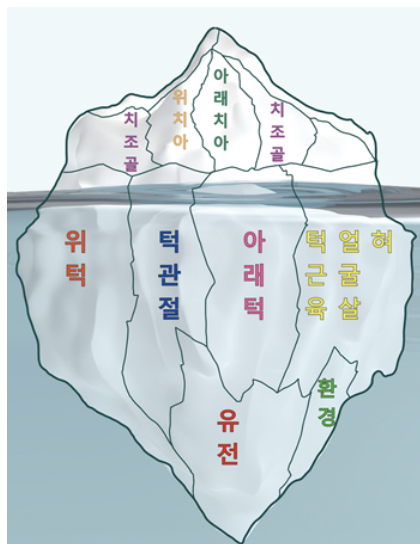


Prof. Jae Seung Kim

Konkuk Univ, Korea

**Surgical Correction of Anterior Open bites in Koreans**

Max-Mand. Transverse harmony	Mandibular Prognathic Openbite.
Mandibular Retrognathic Openbite	Asymmetric Openbite



Anterior Openbite is the tip of the iceberg.

It caused by not only skeletal problems, the teeth, the jaw and TMJ, but also and neuromuscular problems, tongue, lip and facial soft tissue.

We can change only the position of the teeth and the jaw in the most of orthognathic surgery. Therefore the surgery should be done within physiologic adaptation for improvement of facial aesthetic and dental function.

I want to present my opinions and experiences concerning anterior open bite surgery in Koreans as below:

1) Vertical problem should be corrected along with Transverse and Sagittal disharmony.

- Which is better technique for Maxillo-Mandibular transverse harmony, MARFE, SARFE, or segmental osteotomy?
- 2) Mandibular Prognathic Openbite.
  - Which is better between IVRO or SSRO?
- 3) Mandibular Retrognathic Openbite
  - What is tolerable range of neuromuscular components and TMJ for change of skeletal components?
- 4) Asymmetric Openbite
  - Which is better technique for facial Aesthetics?



## Curriculum Vitae

### **Jae-Seung Kim , DDS, PhD**

Dr. Kim graduated from the university of Seoul National University Dental School in 1980 and completed the oral and maxillofacial surgery residency at the Seoul National University Hospital. He practiced oral and maxillofacial surgery as a professor at the Hospital of Koongbook National University Dental School , Dankook university Dental School, and ASAN medical center. Now he works as the Chief of Bimaxillary Surgery Center, Kunkuk University Hospital from 2014.

Dr. Kim performs Orthognathic Surgeries with the concepts of ‘Firmitas, Utilitas, Venustas and Gaudium’,

And he authored two books titled ‘ Aesthetic Orthognathic Surgery of Mandibular Prognathism (1999)’ and ‘The Two Faces of Bimaxillary Surgery (2012)’.

### 교육강연Ⅲ | Educational LectureⅢ

일시(Date) : 10.31(Thu) 16:30~17:30

Moderator : 김옥규, 박상준

## Custom Solutions in Craniomaxillofacial Surgery



Dr. Bryan Bell

*Providence Cancer Institute, USA*

### Custom Solutions in Craniomaxillofacial Surgery

Dr. Bell will discuss contemporary virtual surgical planning in combination with custom implants for multiple indications in the craniomaxillofacial skeleton, including orthognathic surgery, craniomaxillofacial trauma and head and neck oncologic reconstructive surgery.

## Curriculum Vitae

### R. Bryan Bell, MD, DDS, FACS, FACD

Medical Director, Providence Head and Neck Cancer Program  
Director, Fellowship in Head and Neck Oncologic and Reconstructive Microvascular Surgery  
Associate Member, Earle A. Chiles Research Institute at Robert W. Franz Cancer Center  
Providence Cancer Institute  
Portland, Oregon

Dr. Bell is a oral and maxillofacial surgeon whose clinical activity, teaching and research is devoted entirely to the comprehensive surgical management of patients with head and neck cancer and craniomaxillofacial deformity.

Dr. Bell is Director of the Providence Head and Neck Cancer Program and Clinic at Providence Cancer Institute, where he also directs a Fellowship in Head and Neck Oncologic and Microvascular Reconstructive Surgery; an Associate Member of the Earle A. Chiles Research Institute at the Robert W. Franz Cancer Center; Attending Trauma Surgeon at Legacy Emanuel Medical Center; and Clinical Professor at Oregon Health & Science University. He has served in leadership positions with numerous professional societies, boards, foundations and committees and is Past President of the American Academy of Craniomaxillofacial Surgeons and the American College of Oral and Maxillofacial Surgeons.

Dr. Bell has pioneered the use of virtual surgical planning in head and neck surgery and was one of the first surgeons on the U.S. west coast to perform transoral robotic surgery for the treatment of oropharyngeal and laryngeal cancer. His research efforts are currently directed toward studying reversal of immunosuppression in head and neck cancer through monoclonal antibodies and other novel immunotherapeutic approaches. Using his surgical practice to run phase I and phase II trials, Dr. Bell bridges basic, translational and clinical activities. His work has resulted in over 150 scientific articles and book chapters, and he is co-editor of two major textbooks, including *Oral, Head and Neck Oncology and Reconstructive Surgery* and *Current Therapy in Oral and Maxillofacial Surgery*. He has given more than 200 invited lectures, highlighting his interests in virtual surgical planning in craniomaxillofacial surgery, transoral robotic surgery and immunotherapy for head and neck cancer. Among his honors, Dr. Bell is a recipient of the William F. Harrigan Award for major contributions to surgery.



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## Invited Lecture

■ Moderator : 차인호(연세치대), 안강민(서울아산병원)

### Invited Lecture I

- Date : 11.01(Fri) 09:00~09:45
- Speaker : Bryan Bell
- Affiliation : Providence Cancer Institute, USA
- Topic : Advances in Head and Neck Oncologic Surgery

### Invited Lecture I

- Date : 11.01(Fri) 09:45~10:30
- Speaker : Jong Ho Lee
- Affiliation : Seoul Natl' Univ., Korea
- Topic : Risk factors for flap failure and complications in microvascular free flaps

■ Moderator : 정영수(연세치대), 고승오(전북치대)

### Invited Lecture II

- Date : 11.01(Fri) 13:30~14:10
- Speaker : Farhad Naini
- Affiliation : St George's Hospital and Medical School, England
- Topic : Anterior open bites: Treatment planning and postoperative considerations

### Invited Lecture II

- Date : 11.01(Fri) 14:10~14:50
- Speaker : George Sandor
- Affiliation : University of Oulu Finland
- Topic : Stem Cell Based Tissue Engineering in the Cranio-maxillofacial Skeleton: Aspirations and Experience

### Invited Lecture II

- Date : 11.01(Fri) 14:50~15:30
- Speaker : Lian Ma
- Affiliation : Peking university, China
- Topic : Cleft palate repair based on hard palate plate deformity

**초청강연 I | Invited Lecture I**

일시(Date) : 11.01(Fri) 09:00~09:45

Moderator : 차인호, 안강민

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**Advances in Head and Neck Oncologic Surgery**



**Dr. Bryan Bell**

*Providence Cancer Institute, USA*

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**Advances in Head and Neck Oncologic Surgery**

Dr. Bell will discuss recent advances in the treatment of head and neck cancer, including virtual surgical planning; transoral robotic surgery; and immunotherapy. Ongoing clinical trials will be reviewed and future directions involving personalized treatment and neoadjuvant immunotherapy strategies will be discussed.

## Curriculum Vitae

### **R. Bryan Bell, MD, DDS, FACS, FACD**

Medical Director, Providence Head and Neck Cancer Program  
Director, Fellowship in Head and Neck Oncologic and Reconstructive Microvascular Surgery  
Associate Member, Earle A. Chiles Research Institute at Robert W. Franz Cancer Center  
Providence Cancer Institute  
Portland, Oregon

Dr. Bell is a oral and maxillofacial surgeon whose clinical activity, teaching and research is devoted entirely to the comprehensive surgical management of patients with head and neck cancer and craniomaxillofacial deformity.

Dr. Bell is Director of the Providence Head and Neck Cancer Program and Clinic at Providence Cancer Institute, where he also directs a Fellowship in Head and Neck Oncologic and Microvascular Reconstructive Surgery; an Associate Member of the Earle A. Chiles Research Institute at the Robert W. Franz Cancer Center; Attending Trauma Surgeon at Legacy Emanuel Medical Center; and Clinical Professor at Oregon Health & Science University. He has served in leadership positions with numerous professional societies, boards, foundations and committees and is Past President of the American Academy of Craniomaxillofacial Surgeons and the American College of Oral and Maxillofacial Surgeons.

Dr. Bell has pioneered the use of virtual surgical planning in head and neck surgery and was one of the first surgeons on the U.S. west coast to perform transoral robotic surgery for the treatment of oropharyngeal and laryngeal cancer. His research efforts are currently directed toward studying reversal of immunosuppression in head and neck cancer through monoclonal antibodies and other novel immunotherapeutic approaches. Using his surgical practice to run phase I and phase II trials, Dr. Bell bridges basic, translational and clinical activities. His work has resulted in over 150 scientific articles and book chapters, and he is co-editor of two major textbooks, including *Oral, Head and Neck Oncology and Reconstructive Surgery* and *Current Therapy in Oral and Maxillofacial Surgery*. He has given more than 200 invited lectures, highlighting his interests in virtual surgical planning in craniomaxillofacial surgery, transoral robotic surgery and immunotherapy for head and neck cancer. Among his honors, Dr. Bell is a recipient of the William F. Harrigan Award for major contributions to surgery.

초청강연 I | Invited Lecture I

일시(Date) : 11.01(Fri) 09:45~10:30

Moderator : 차인호, 안강민

**Risk factors for flap failure and complications in microvascular free flaps**



Prof. Jong Ho Lee

*Seoul Natl' Univ., Korea*

**Risk factors for flap failure and complications in microvascular free flaps**

Many surgeons consider free flap reconstruction as a standard protocol for orofacial defects requiring tissue grafts. This study aimed to figure out risk factors of free flap failure and complications in the orofacial region through retrospective analysis of my cases performed at Seoul National University Dental Hospital.

Clinical data of patients who underwent microvascular free flap reconstruction surgeries from 2006 to 2018 were collected. Total of 1143 free flaps in 1042 patients were included. Each risk factor was examined by univariate analysis using chi-square and Fisher's exact test. Factors with  $p$ -values less than 0.10 were analyzed with multivariate logistic regression models to figure out statistically significant risk factors.

In the 1143 cases performed over 11-year period, overall success rate of free flap transfer surgeries was 96.5%. Microvascular anastomosis with saphenous vein graft resulted in statistically significant increase in flap failure rate. Higher tendency for developing local complications was shown in male, and latissimus dorsi free flap groups, in radiotherapy history patients and double free flap groups. Risk of dehiscence was increased in male, and double free flap groups while risk of bleeding was increased in the preoperative chemotherapy group. Additionally, geriatric patients (over 60 years of age) were at higher risk of developing systemic complications.

With proper planning and surgical technique, free flap reconstruction is a safe and reliable treatment option for various defects of head and neck region. Attention to known risk factors may aid in achieving successful free flap reconstruction.



## Curriculum Vitae

### **Jong-Ho Lee, DDS, MSD, PhD**

Dr Lee completed his dental education at the School of Dentistry, Seoul National University in 1982 and trained at the Department of Oral and Maxillofacial Surgery, Seoul National University Hospital and military field hospital in Korea till 1988.

He has written a PhD thesis in Dentistry 1992 about “Assessment of capillary blood flow and histologic study of neovascularized bone flaps using interpositional vein graft as pedicles” and was subsequently appointed as an Associate Professor at the Chonnam University Hospital(1998-1996) and Professor at Seoul National University(1996-present).

Presently Dr Lee practices as a specialist of oncology-reconstruction and director at the Oral Cancer Center, Clinical Trial Center and Department of Oral and Maxillofacial Surgery, Seoul National University, Korea. Dr Lee has served a visiting Professor for a year in the Department of Maxillofacial and Plastic Surgery, Eberhardt Karls Universitaet Tuebingen, Germany. He also served as a research Fellow at the Laboratory for the Study of Skeletal Disorders and Rehabilitation, Children's Hospital, Harvard Medical School, USA. Dr Lee is also a Director of AOCMF Fellowship Center, Honorable President of Korean Association of Oral and Maxillofacial Surgeons(KAOMS), President of Korean Academy of Dental Science(2017-2020), and Member of The National Academy of Science, Republic of Korea(2017-life time)

Dr Lee has lectured internationally, has over 400 Publications. His clinical and research interests include peripheral nerve regeneration, oral oncology and micro-reconstruction of maxillofacial region

## 초청강연II | Invited Lecture II

일시(Date) : 11.01(Fri) 13:30~14:10

Moderator : 정영수, 고승오

### Anterior open bites: Treatment planning and postoperative considerations



Dr. Farhad Naini

*St George's Hospital and Medical School, England*

#### **Anterior open bites: Treatment planning and postoperative considerations**

Severe anterior open bites are often a considerable challenge, both for the patient and the treating clinical team. The purpose of this presentation is to describe the diagnostic and treatment planning process in the management of severe anterior open bites. Combined orthodontic-surgical treatment will be described and the role of each team member and the interaction of the orthodontist-surgeon team will be emphasised.

### Curriculum Vitae

#### Mini-biography for Dr Farhad B. Naini:

Dr Naini is the Consultant Orthodontist and Director of Research in the Maxillofacial Unit at St George's Hospital and Medical School, and Clinical Lead for Maxillofacial Surgery and Dentistry at Kingston Hospital, London, UK. He is a Fellow and examiner for the Royal College of Surgeons of England, a Fellow of the Royal College of Surgeons of Edinburgh, and an examiner for the University of London. His main clinical interest is orthognathic surgery. His clinical and academic work is devoted to patients with dentofacial and craniofacial deformities, with particular emphasis on clinical diagnosis and facial aesthetic analysis.

He has over 110 publications in peer reviewed journals, is co-editor of the textbook: "Orthodontics: Principles and Practice", co-editor of the 61-chapter tome: "Orthognathic Surgery: Principles, Planning and Practice", and author of the reference textbook: "Facial Aesthetics: Concepts and Clinical Diagnosis".

## 초청강연II | Invited Lecture II

일시(Date) : 11.01(Fri) 14:10~14:50

Moderator : 정영수, 고승오

### Stem Cell Based Tissue Engineering in the Cranio-maxillofacial Skeleton: Aspirations and Experience



Prof. George Sandor

*University of Oulu*

#### Stem Cell Based Tissue Engineering in the Cranio-maxillofacial Skeleton: Aspirations and Experience

Tissue engineering efforts involve multidisciplinary collaborations between groups of cell biologists, biochemists, biomaterial scientists, engineers, and clinicians. In order to understand the complex role of the various components of tissue engineering, one can consider the paradigm of an equilateral triangle where stem cells, resorbable scaffolds and bioactive molecules such as growth factors continuously interact with each other. The science of Tissue Engineering has been built on the understanding of the nature of the interactions between these three key components.

The source of cells for tissue engineering depends on the requirements of the structure that is to be replaced. Human embryonic stem cells (hESC's) are pluripotent stem cells isolated from the inner mass of human blastocysts. While hESC's have greatest potential due to their differentiation capacity, there are problems that must be solved prior to their clinical use in tissue engineering. The problems with hESC's include culturing hESC without exposure to animal proteins, avoidance of teratoma or hamartoma development and immune rejection by the recipient host. For the present time it is adult stem cells which are used clinically. Those cells types which present the lowest morbidity in harvesting and tissue which still retains a degree of pluripotentiality would be the most advantageous in the tissue engineering of bone in the cranio-maxillofacial skeleton for example.

One source of mesenchymal stem cells (MSC) for bone regeneration is from adipose tissue to using adipose-derived stem cells (ASC). This approach should not be surprising as there is interdependency between adipogenesis and osteogenesis. When we look at a sample of bone marrow we find osteogenic cells, hematopoietic cells and fat cells. Certainly, the harvesting of autogenous adipose tissue from the anterior abdominal wall for example is minimally morbid.

MSCs are capable of multiple lineage differentiation including changing to adipocytes, chondrocytes and osteoblastic pathways. MSC clones can sequentially differentiate into adipocytes, dedifferentiate and subsequently transdifferentiate into osteoblasts *in vitro*. Using the tissue engineering model, it is possible to harvest autogenous ASCs from patients to seed a resorbable scaffold manufactured using CAD/CAM technology to the precise dimensions of a missing segment of bone due to congenital deformity such as cleft lip and palate or following tumor resection or trauma. Three-dimensional bioprinting is another option to explore with printed cells to reconstruct a bony defect. Finally, in order to provide a more off the shelf approach the tissue engineering of bone using cell therapy with either autologous and allogeneic adult mesenchymal stem cells could provide adipose derived stem cells needed in this therapeutic approach

## Curriculum Vitae

### Professor György K. Sándor

György Kálmán Sándor is the Discipline Head and Professor of Oral and Maxillofacial Surgery at the University of Oulu and Oulu University Hospital in Oulu, Finland. He was formerly Professor of Tissue Engineering at Regea Institute for Regenerative Medicine, BioMediTech, Institute for Biosciences and Medical Technology at Tampere University, Tampere, Finland being funded through the competitive Finnish Distinguished Professor Program (FiDiPro) by the Finnish Granting Agency, TEKES. György Sándor was also the former Professor and Head of Oral and Maxillofacial Surgery at the University of Toronto. He was also the Co-ordinator of Pediatric Oral and Maxillofacial Surgery at The Hospital for Sick Children and Bloorview Kids Rehab in Toronto, Canada.

Professor György Sándor received his dental and medical degrees from the University of Toronto, Canada. He trained as an Oral and Maxillofacial Surgeon at the University of Washington in Seattle USA and at the Gemeente Ziekenhuis, Arnhem, The Netherlands. György Sándor also completed his residency in Plastic Surgery at the University of Toronto. He trained as a Craniofacial Surgeon in Paris, France and Bern, Switzerland. György Sándor completed his PhD at the University of Oulu in Finland, where he was also appointed as dosent. He received a Doctor Honoris Causa from Semmelweis Medical University in Budapest, Hungary and a second Honoris Causa from The Medical University of Plovdiv, Plovdiv, Bulgaria.

The research focuses of Professor Sándor include cleft lip and palate treatment, the development of bone harvesting techniques with the minimization of morbidity in mind, the Tissue Engineering of Bone using Cell Therapy with both autologous and allogeneic adult mesenchymal stem cells, adipose derived stem cells, hyperbaric oxygen therapy as it pertains to angiogenesis and bone healing in compromised wounds, along with the reconstruction of congenital, traumatic and post ablative defects with navigation, computer assisted planning of reconstructions which include dental implants, in pediatric, adolescent and young adult patients.

Professor Sándor has published over 240 scientific papers, written 29 book chapters, published 2 books and given over 100 invited lectures all over the globe.

Professor György K. Sándor Oral and Maxillofacial Surgery

Unit of Oral Health Sciences

Dentopolis, Aapistie 3, H2130 PL 5000, 90014 UNIVERSITY OF OULU george.sandor@oulu.fi p. +358 504

## 초청강연II | Invited Lecture II

일시(Date) : 11.01(Fri) 14:50~15:30

Moderator : 정영수, 고승오

### Cleft palate repair based on hard palate plate deformity



Prof. Lian Ma

*Peking university, China*

#### Cleft palate repair based on hard palate plate deformity

Several techniques for cleft palate repairing had been used since 1930's, and lengthening of soft palate in form become the unique goal for restoring the speech regardless the age of operation, type of cleft palate and complications. Even then there are still a few with speech problem after cleft palate repair. Since 2013 we repaired cleft palate using simple langenbeck technique with or without release incision and with or without fracture of pterygoid Hamulus based on hard palate deformity shown on CT 3D reconstruction images.

600 cases were included in the study using the simple cleft palate repairing technique and follow up years were 4 years above. The age of operation was from 6months to 12months. The results show the average length of operation time was 18ms(from 12minutes to 25minutes), the amount of blood loss was less than 10ml, The rate of fistula was 0.08% and Oral pressure had been set up during speech at 24months in 95%(570/600).

In the lecture, more details were indicated about the classification of deformity shape of hard palate and the selection of operation procedure.

## Curriculum Vitae

### Lian MA

Prof. Lian MA was born in the May 1959. She is working in School of Stomatology Peking University as Professor and Consultant in Oral and Maxillofacial field specialized on cleft lip & palate and head and neck congenital deformities. She graduated from the same school as she works now in 1983 and got Bachelor degree. She got her Ph.D degree on dental science and medicine in 1987 . 1991 to Apr. 1992, Dr Lian MA did clinical and research work in Great Ormond Street Children Hospital London as a British council post doctoral fellow, then was employed by GOS, UCH, EDH as senior registrar in London until 1996. She also held and has hold position - Dean assistant, Director of cleft lip and palate center, School of Stomatology, Chairman of cleft lip and palate division of Chinese Oral Maxillofacial Association , Chairman of speech disorder rehabilitation division of Chinese medicine association and so on. Dr Ma had also worked in Speech and Hearing Science department of HongKong University for three years as research fellow doing the research on Articulation development on Putonghua. Dr Ma's main interesting is cleft lip and palate treatment and syndrome related with head and neck, also including cleft palate speech and speech disorders caused by other reasons. She has translated a book -“Head and Neck Syndromes” into Chinese with her colleges, also joined in writing a few books such as “Team approach for cleft lip and palate treatment”. As keynote speaker She has attended many international conference. Numbers of postgraduate students ( Master degree and Ph.D ) have been supervised by Dr Ma for recent ten years. Over 30,000 patents (primary and secondary deformities) have been operated and treated by Dr Ma . Over 180 scientific papers have been published. She has an abundant of clinical experience for the patients with cleft lip & palate and other congenital deformities.





# 심 | 포 | 지 | 엄 I

## Symposium I

■ Moderator : 박홍주(전남치대), 명훈(서울치대)

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### Symposium I

- Date : 11.01(Fri) 11:00~11:30
  - Speaker : Jin-Wook Kim
  - Affiliation : Kyungpook Natl' Univ., Korea
  - Topic : Mandibular reconstruction with patient-specific 3D printed titanium implants
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### Symposium I

- Date : 11.01(Fri) 11:30~12:00
  - Speaker : Seong Yong Moon
  - Affiliation : Chosun Univ., Korea
  - Topic : VR & AR application in oral cancer surgery
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### Symposium I

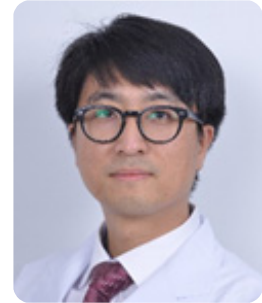
- Date : 11.01(Fri) 12:00~12:30
  - Speaker : Yu Cheng Cheng
  - Affiliation : Taipei medical Univ., Taiwan
  - Topic : The options of recipient vessels in patients with vessel-depleted neck
-

## 심포지엄 I | Symposium I

일시(Date) : 11.01(Fri) 11:00~11:30

Moderator : 박홍주, 명훈

### Mandibular reconstruction with patient-specific 3D printed titanium implants



Prof. Jin-Wook Kim

*Kyungpook Natl' Univ., Korea*

#### Mandibular reconstruction with patient-specific 3D printed titanium implants

하악골 재건 수술은 하악이 가지는 복잡한 해부학적 구조, 하악골 주변 근육, 신경 시스템 그리고 케이스마다 다른 결손 정도 및 부위로 인해 아무리 노련한 술자라 하더라도 어려움이 따르는 수술이다. 이뿐만 아니라 하악골 결손은 구강암, 큰 양성 종양, 골수염, 외상 등 다양한 원인에 의해 발생하며 원인과 수술 후 처치 등을 고려하면 획일 적인 방법이 아니라 각 케이스에 맞는 재건이 필요하게 되어 더욱 어려움이 있을 수 있다.

하악골 재건에 자가골이식이 가장 좋은 방법이나 경우에 따라 시행할 수 없는 경우 여러 가지 인골대체물을 사용하였다. 레진폴리머를 사용한 시절도 있었으며, 그 후 재건용 titanium plate를 많이 사용하게 되었다. 최근 십여년동안 3D 프린트 기법을 이용한 수술이 도입되면서 하악골재건은 많은 발전을 이루어 술전RP model을 이용한 평가 및 수술에 필요한 cutting guide, pre-bending plate 등을 사용하여 수술시간을 단축하고 양호한 결과를 내놓고 있다. 최근에는 여기서 더 발전하여 electron beam melting(EBM) 방법을 이용하여 3D printed titanium implant를 이용한 재건이 가능해져 수술에 사용되고 있다.

국내에서는 케이스가 아직 많지는 않으나 patient-specific 3D printed titanium implant의 장단점 및 적응증을 문헌고찰 및 케이스를 통해 고찰해 보고 향후 임상 적용에 도움이 되고자 한다.

## Curriculum Vitae

### Jin-Wook Kim

- 1996 ~ 2002 : DDS, School of Dentistry, Kyungpook National University, Korea
2002. 03 ~ 2006. 02 : Intern & Resident, Department of Oral & Maxillofacial Surgery School of Dentistry, Kyungpook National University, Korea
2006. 03 ~ 2009. 02 : Clinical Fellow & professor, Department of Oral & Maxillofacial Surgery School of Dentistry, Kyungpook National University, Korea
2009. 03 ~ 2010. 08 : Clinical Professor, Department of Dentistry, College of Medicine, Yeungnam University, Daegu, Korea
2010. 09 ~ 2016. 09 : Assistant Professor, Department of Oral & Maxillofacial Surgery, School of Dentistry, Kyungpook National University, Korea
2016. 10 ~ present : Associate Professor, Department of Oral & Maxillofacial Surgery, School of Dentistry, Kyungpook National University, Korea
- 2019 ~ present : Chief, Department of Oral & Maxillofacial Surgery, Kyungpook National University Dental Hospital

## 심포지엄 I | Symposium I

일시(Date) : 11.01(Fri) 11:30~12:00

Moderator : 박홍주, 명훈

### VR & AR application in oral cancer surgery



Prof. Seong Yong Moon

*Chosun Univ., Korea*

#### **VR & AR application in oral cancer surgery**

Oral and maxillofacial surgery has undergone a technological revolution over the past several decades, from computer guided surgery to image-guided navigation. Advancements in virtual reality (VR) and augmented reality (AR) represent some of the newest modalities being integrated into clinical practice and education. In this presentation, i would like to present the development of VR and AR technologies, analyze its current uses, and discuss its emerging applications in the field of oral and maxillofacial surgery. Augmented reality appears to be a powerful tool possibly capable of revolutionising the field of surgery. In the future, AR will likely serve as an advanced human-computer interface, working in symbiosis with surgeons, allowing them to achieve even better results

## Curriculum Vitae

### Seong Yong Moon

#### *Education*

2002 D.D.S . College of dentistry, Chosun University, Gwangju, Korea

2006 MSD in Oral and Maxillofacial Surgery, College of Dentistry, Chosun University, Gwangju, Korea

2013 Ph.D in Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University, Gwangju, Korea

#### *Professional Affiliations*

Mar. 2002- Feb.2006 : Postgraduate Program, Department of Oral and Maxillofacial Surgery, Chosun University Dental Hospital, Gwangju, Korea

Mar. 2006- August 2007 : Fellowship, Department of Oral and Maxillofacial Surgery, Chosun University Dental Hospital, Gwangju, Korea

July 2007 : Chang-Gung Memorial Hospital, Taipei, Taiwan: Short Term Visiting

Feb. 2010 : MD Anderson Cancer Center, Houston, TX, USA : Short Term Visiting

Sep. 2011 : Department of Dentistry, National Taiwan University Hospital, Taipei, Taiwan.

Sep. 2007- Aug 2013 : Assistant Professor, Dept. of Oral and Maxillofacial Surgery, Chosun University Dental School, Gwangju, Korea

Feb. 2013 - Aug 2013 : Director, Dept. of Oral and Maxillofacial Surgery

Aug. 2013 - Feb 2014 : Visiting Professor, Peking University Stomatology, Beijing, China

Sep. 2013 - Mar. 2017 : Associate Professor, Dept. of Oral and Maxillofacial Surgery, Chosun University Dental School, Gwangju, Korea

Oct. 2016 - Oct. 2017 : Director of Education and Research Center, Chosun University Dental Hospital, Gwangju, Korea

Feb. 2014- Present : Director, Oral Cancer Center, Chosun University Dental Hospital, Gwangju, Korea

Apr. 2017 - Present : Professor, Dept. of Oral and Maxillofacial Surgery, Chosun University Dental School, Gwangju, Korea

Dec. 2018 - Present: : Director, Virtual reality educational center, Chosun University

## 심포지엄 I | Symposium I

일시(Date) : 11.01(Fri) 12:00~12:30

Moderator : 박홍주, 명훈

### The options of recipient vessels in patients with vessel-depleted neck



Dr. Yu Cheng Cheng

*Taipei medical Univ., Taiwan*

#### **The options of recipient vessels in patients with vessel-depleted neck**

Microsurgery had developed more than 40 years. In the early times, most of our patients have one chance to have free flap reconstruction after tumor ablation. However, with the advancement of oncology, we had more treatment options for our patients, such as chemotherapy and radiotherapy. Such treatment had significantly prolonged the patient's life. Since the patient's life is prolonged, we have more and more patients who had 2 or 3 times tumor ablative surgery, reconstructive surgery and previous radiotherapy and chemotherapy. And yet they still have local or regional tumor recurrence. Then we need to operate on this kind of patients with vessel-depleted neck. The speech will talk about the way we use to solve this problem.

## Curriculum Vitae

### **Yu Cheng Cheng**

DDS, Taipei medical university

Member of Taiwanese association of oral & maxillofacial surgeons (TAOMS)

Member of Taiwan academy of facial plastic and reconstructive surgery

Deputy secretary general of TAOMS

Attending doctor of oral & maxillofacial surgery dep't, WanFang medical center 2010~ Now

Director of oral & maxillofacial surgery dep't , En Chu Kong hospital 2013~ Now





# 심 | 포 | 지 | 엄 II

■

## Symposium II

■ Moderator : 표성운(가톨릭의대), 김성곤(강릉원주대)

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### Symposium II

- Date : 11.01(Fri) 11:00~11:30
  - Speaker : Jun Hyouk Shin
  - Affiliation : Digital ART dental clinic, Korea
  - Topic : Digital Art: aesthetic view point from the layperson's eyes
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### Symposium II

- Date : 11.01(Fri) 11:30~12:00
  - Speaker : Umberto Garagiola
  - Affiliation : University of Milan, Italy
  - Topic : IMPLANT OVERLOADING AND PARAFUNCTIONS: AVOIDING AND MANAGING COMPLICATIONS
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### Symposium II

- Date : 11.01(Fri) 12:00~12:30
  - Speaker : Chih-Yuan Fang
  - Affiliation : Wanfang Hospital, Taiwan
  - Topic : Differentiation strategy in implant surgery
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## 심포지엄 II | Symposium II

일시(Date) : 11.01(Fri) 11:00~11:30

Moderator : 표성운, 김성곤

### Digital Art: aesthetic view point from the layperson's eyes



Dr. Jun Hyouk Shin

*Digital ART dental clinic, Korea*

#### **Digital Art: aesthetic view point from the layperson's eyes**

In the digital and Smart Machine age, dental technologies including digital camera, video, intraoral scanners, CBCT, CAD/CAM, 3d printers, milling machines have been developed and are continually advancing.

Smart machines are also used in the dental procedures.

The digital tools and smart machines have many advantages and they can make up for the weaknesses of the analogue dental procedures.

Especially in the diagnostic step and the Intermediate stage of treatment they make it easy to diagnose the patient current situation, which are often neglected in the analogue dental treatment. In this lecture, I would like to show the development and usage of the digital tools in the digital prosthodontics, digital esthetics and each treatment steps.

## Curriculum Vitae

### **Jun Hyouk Shin**

Busan National University of Dental College & post graduate school

The director of the Korean Academy of Esthetic Association

QDT 2018(QUINTESENCE OF DENTAL TECHNOLOGY, year book) case published

A chief of the Digital ART dental clinic

## 심포지엄 II | Symposium II

일시(Date) : 11.01(Fri) 11:30~12:00

Moderator : 표성운, 김성곤

### IMPLANT OVERLOADING AND PARAFUNCTIONS: AVOIDING AND MANAGING COMPLICATIONS



Prof. Umberto Garagiola

*University of Milan, Italy*

#### IMPLANT OVERLOADING AND PARAFUNCTIONS: AVOIDING AND MANAGING COMPLICATIONS

The aim of this study was to show the destructive effects of abnormal occlusal forces on implant supported prostheses in patients with bruxism, abnormal habits and other parafunctions, and to focus on concepts and the clinical procedures to reduce the potential risk factors for implant failure.

40 TMD patients were compared to 40 no-TMD patients in which were inserted 430 implants with the same features as number, size, position, design. Another experimental group of 50 TMD patients treated by prevention protocol was assessed. Besides, were considered type of restoration, cemented or screwed, malocclusion type, smoking, load timing. The heavy force of compression, clenching and grinding, as in bruxism, simultaneously applied strong pressures to the implants, crestal bone, restorations and temporomandibular joints. This was a potential risk factor for crestal bone loss, loss of integration before and after restoration, abutment screw loosening and fracture, implant fracture, decementation of restorations and fracture of the porcelain.

The 5 years follow-up showed a 58% of soft tissues, bone and prosthetic complications in TMD patients versus a 11% in non TMD patients ( $P < 0.01$ ). When TMD patients were undergone to occlusal overload prevention protocol, the complications were diminished to 13% ( $P < 0.01$ ). Increasing the number of implants and reducing cantilevers decreases the stress; using the longest and widest implant possible increases implant/bone surface area and reduces also strain. Also implant design, occlusal table size, the direction, duration and magnification of the forces influences the stress at the crestal bone/implant surface.

Developing treatment plan that control the chronic bruxism through night-guards and an occlusal adjustment protocol to modify the occlusal forces on implants and their restorations, patients with temporomandibular disorders and bruxism can be candidates for implants.

## Curriculum Vitae

### Umberto Garagiola DDS PhD

Assistant Professor, University of Milan,  
Biomedical Surgical and Dental Sciences Department.  
Maxillofacial and Odontostomatology Unit.  
Fondazione Cà Granda IRCCS Ospedale Maggiore Policlinico Milan Italy

Degree in Dental Surgery at the University of Milan (1991); PhD in Oral and Maxillofacial Surgery Semmelweis University, Budapest (2006); MSc in Oral Surgery at the University of Milan (2007); MSc in Orthodontics at the University of Milan (2010).

Postgraduate Certificate and Course: Implantology at Boston University, USA (1993); Implantology and TMD at University of Gothenburg, Sweden (1993); Periodontics and Oral Surgery at New York University, USA (1994, 1996) and University of California - UCLA, Los Angeles, USA (1999); Oral and Maxillofacial Surgery at University of Heidelberg, Germany (1998) and Semmelweis University of Budapest, Hungary (1999-2000).

Lecturer of Oral Surgery and Periodontics at the University of Eastern Piedmont Novara, Italy (2002-2004). Lecturer of Oral Surgery, Implantology, Orthognathic Surgery and TMD at the Semmelweis University of Budapest, Hungary (2000-). Lecturer of Oral Surgery, Orthognathic Surgery, Implantology and Orthodontics at University of Milan (2000-2004; 2010-2012).

Assistant Professor Department of Biomedical, Surgical and Dental Sciences, University of Milan (2012). National Habilitation to Associate Professor (2014).

Active Member of several International associations as: IADR, AO, EAO, iACD, AAO, EOS, WFO, EAPD, IAPD, IAOMS, HAOMS, ESOLA, IADT, FDI, ADA, SIDO, SIOI, SISCOO, SIO, SUSO, IAO.

President of Italian Society of Orthodontics-Orthognathic Surgery (SIDOP); President, Italian Society Specialists in Oral Surgery (SISCOO); Member of Editorial Board and Scientific Board of Directors in iACD (International Academy of Contemporary Dentistry); President of iACD Italy .Guest speaker in more than 560 international congress, seminars, courses; Author of several publications in international journals and author of 6 atlas books, 4 book and 7 chapters-book; Reviewer of international journals (AJODO, MPRS, Quintessence, Clinical Cosmetic and Investigational Dentistry J...).

Research Interest Oral Surgery, Implantology, Osseointegration, Bone Regeneration, Digital Dentistry and Surgery, Periodontics, Orthognathic Surgery, Orthodontics, Gnathology, Temporomandibular Joint Disorders, and Oral Pathology.

## 심포지엄 II | Symposium II

일시(Date) : 11.01(Fri) 12:00~12:30

Moderator : 표성운, 김성곤

### Bone Defect Management Before Implant Surgery



Prof. Chih-Yuan Fang

*Wanfang Hospital, Taiwan*

#### **Bone Defect Management Before Implant Surgery**

Dental implant has already become red sea market. Differentiation and market positioning become very important for oral and maxillofacial surgeons. Differentiation strategy is not only about developing a new skill or providing a different product in the medical field. It is also very important to maximize the benefit of the treatment outcome and minimize risk or discomfort during treatment. Our knowledge about blood vessels, sinus cavities and jaw bones are our stand point of the market. No other dental surgeon can do this better than us. In this presentation, the speaker will share his experiences in treating different bone defects:

1. repair soft tissue fistula and reconstruct cleft alveolar ridge with GBR simultaneously.
2. grafting in sinus membrane perforation cases.
3. jaw discrepancy case

## Curriculum Vitae

### Chih-Yuan Fang

#### *Current position*

- Attending Doctor, Department of Oral maxillofacial surgery, Wanfang Hospital
- Associate Professor, School of Dentistry, College of Oral Medicine, Taipei Medical University
- Executive Director & Committee Chair of Organic laws and Statutes of TAOMS
- Doctoral Candidate, School of Dentistry, College of Oral Medicine, Taipei Medical University (PHD course)

#### *Previous Position*

- Secretary-general (2015-2017) and Executive Supervisor(2009~2011) of the TAOMS
- Head of dental department, Armed forces Sunghahn General Hospital
- Specialty training in TSGH (2001-2004)





# 심 | 포 | 지 | 엄 III

## Symposium III

■ Moderator : 이정근(아주대), 서병무(서울치대)

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### Symposium III

- Date : 11.01(Fri) 16:00~16:30
  - Speaker : Dae Seok Hwang
  - Affiliation : Pusan Natl' Univ., Korea
  - Topic : Unilateral cleft lip repair using modified Millard Method : procedure and esthetic evaluation(movie)
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### Symposium III

- Date : 11.01(Fri) 16:30~17:00
  - Speaker : Hyun Seok
  - Affiliation : Chungbuk Natl' Univ., Korea
  - Topic : Prevention and management of palatal fistula after palatoplasty
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### Symposium III

- Date : 11.01(Fri) 17:00~17:30
  - Speaker : Naoto Suda
  - Affiliation : Meikai Univ., Japan
  - Topic : Vertical correction in short face cases with cleft lip and palate
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### 심포지엄Ⅲ | SymposiumⅢ

일시(Date) : 11.01(Fri) 16:00~16:30

Moderator : 이정근, 서병무

## Unilateral cleft lip repair using modified Millard Method : procedure and esthetic evaluation(movie)



Prof. Dae Seok Hwang

*Pusan Natl' Univ., Korea*

### Unilateral cleft lip repair using modified Millard Method : procedure and esthetic evaluation(movie)

The purpose of cleft lip repair is to improve the symmetry of vermilion, philtrum and nose by connecting cleft lip. Therefore, patient can have functional and aesthetic lip and nose.

Various surgical methods have been introduced and used until now, such Cronin triangular method, Millard method and Fisher method.

Triangular method is simple and easy to operate, but it has disadvantage due to non-esthetic scar crossing the midline. Millard method is easy to modify and apply on patients, but it is difficult to get enough philtral length in some cases.

In this presentation, procedure of modified Millard method, which can solve problems in philtrum length by adding a small triangle, will be discussed with surgical movie.

Esthetic outcome analysis was performed on patients with unilateral cleft lip and palate who underwent surgery for the last 4 years. All of patients in this study were asian.

Twenty patients who underwent cleft lip repair surgery using modified Millard method from 2016 to 2019 were analyzed before and after surgery using Asher-McDade esthetic index;

1. Nasal form
2. Nasal deviation
3. Vermilion border
4. Nasal profile

## Curriculum Vitae

### Daeseok Hwang

Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University, Korea, DDS, MSD, PhD

- |                   |   |
|-------------------|---|
| 2009.9 - 2014.2   | Director, Dental Center, Pusan National University Hospital, Korea  |
| 2012.1 - 2012.2   | Visiting Professor, Department of Oral and Maxillofacial Surgery, Kyushu University, Japan                                    |
| 2014.2 - 2015.7   | Visiting Scholar, Department of Oral and maxillofacial surgery, Orthodontics, University of North Carolina, USA               |
| 2015.11 - present | Director of Specialized center and Public health care center, Pusan National University Dental Hospital                       |
| 2010.9 - present  | Assistant, Associate Professor, Department of Oral and Maxillofacial Surgery, Dental School, Pusan National University, Korea |
| 2018.2- present   | Director of Department of Oral and Maxillofacial Surgery, Dental School, Pusan National University, Korea                     |

### 심포지엄Ⅲ | SymposiumⅢ

일시(Date) : 11.01(Fri) 16:30~17:00

Moderator : 이정근, 서병무

## Prevention and management of palatal fistula after palatoplasty



Prof. Hyun Seok

*Chungbuk Natl' Univ., Korea*

### Prevention and management of palatal fistula after palatoplasty

Department of Oral and Maxillofacial Surgery, Chungbuk National University Hospital, Cheongju 28644, Korea

Cleft palate is most common congenital deformity in head and neck regions. The palatal defect that is opening between oral and nasal cavity induces various functional problems in patient speech, feeding, and hearing ability. Various surgical techniques have been introduced for the palate repair. The aim of the palatoplasty is reconstruction of the normal anatomy improve feeding, normal speech ability and the maxillofacial growth, and reduce the articulation problems. The potential complication of palatoplasty is the palatal fistula formation. The incidence of palatal fistula varies according to the study ranging from 3% to 38%. The fistula causes difficulty of speech by hypernasality and food and liquid nasal regurgitation. A number of factors affect postoperative palatal fistula formation. The patient factors are the age at operation, the cleft type and severity, and other congenital deformity syndromes. And other factors that are related to treatment procedure are the surgical technique, medical environment, surgeon experience, and postoperative care. In this lecture, author would like to review the risk factors of the palatal fistula formation after the palatoplasty and discuss about the prevention and management strategy of the postoperative palatal fistula.

## Curriculum Vitae

**Hyun Seok, D.D.S., M.S.D., Ph. D.**

### *Education*

2005. 03. - 2011. 02. D.D.S., College of Dentistry, Gangneung-Wonju National University(2011. 02. 22.)
2012. 03. - 2014. 02. M.S.D., College of Dentistry, Gangneung-Wonju National University(2014. 02. 21)
2014. 03. - 2016. 02. Ph. D., College of Dentistry, Gangneung-Wonju National University(2017. 02. 22)

### *Employment*

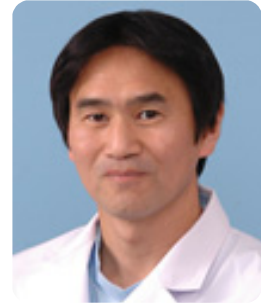
2011. 03.01. - 2012. 02.29. Intern in Gangneung-Wonju National University Dental Hospital
2012. 03.01. - 2015. 02.28. Resident in Oral and Maxillofacial Surgery, Gangneung-Wonju National University Dental Hospital
2016. 03. 14. - 2017. 02. 28. Fellowship in Oral and Maxillofacial Surgery, Gangneung-Wonju National University Dental Hospital
- 2017.03.01. - present Clinical professor in Oral and Maxillofacial Surgery, Chungbuk National University Hospital Membership
2014. 12. 13. Korean Board of Maxillofacial Plastic and Reconstructive Surgeon
2015. 03. 02. Korean Board of Oral and Maxillofacial Surgeon

### 심포지엄Ⅲ | SymposiumⅢ

일시(Date) : 11.01(Fri) 17:00~17:30

Moderator : 이정근, 서병무

## Vertical correction in short face cases with cleft lip and palate



Prof. Naoto Suda

*Meikai Univ., Japan*

### Vertical correction in short face cases with cleft lip and palate

Individuals with a cleft lip and palate (CLP) are subsequently at risk of maxillary retrognathia. Maxillary retrognathia affects both aesthetics and function such as occlusion and chewing. It is reported that 10-47% for patients with CLP requiring orthognathic surgery to improve occlusion and facial appearance. To correct the anterior-posterior problem, surgical intervention by the maxillary advancement after Le Fort I osteotomy, is frequently performed.

Moreover, many CLP patients show underdevelopment of maxilla in the vertical dimension, resulted in the characteristic short face. To improve this vertical problem, inferior movement as well as advancement of the maxilla has to be planned at Le Fort I osteotomy. However, the occlusal force and masticatory force stress and press the maxilla after surgery, and frequently induce the skeletal relapse to superior direction. Thus, it is known that inferior movement of the maxilla is the most unstable direction when evaluating postsurgical stability.

In this presentation, cases in which the vertical correction was challenged, are going to be shown. Some trials to avoid vertical postsurgical relapse will be discussed.

## Curriculum Vitae

**Naoto Suda D.D.S., Ph.D.**

### *Career*

2010-present, Professor, Division of Orthodontics, Department of Human Development and Fostering, Meikai University School of Dentistry

2005-2010, Lecturer, Maxillofacial Orthognathics, Graduate School, Tokyo Medical and Dental University

1998-2004, Assistant Professor, Maxillofacial Orthognathics, Graduate School, Tokyo Medical and Dental University

1996-1997, Research Fellow of the Japan Society for the Promotion of Science

1993-1995, Visiting Academics, St. Vincent Institute of Medical Research, Melbourne University

### *Education*

1988-1992, Graduate School, Tokyo Medical and Dental University

1982-1988, Faculty of Dentistry, Hokkaido University

### *Awards*

Best Poster Award, Gordon Research Seminar (2011)

Young Investigator Award, Japanese Association for Oral Biology (2002)

Young Investigator Award, Japanese Orthodontic Society (1998)

Unilever Award, International Association of Dental Research (1996)

Young Investigator Award, American Society for Bone & Mineral Research (1995)

### *Committee Service*

Director, Japanese Society for Jaw Deformities

Director, Tokyo Orthodontic Society

Councilor, Japanese Orthodontic Society

Councilor, Japanese Cleft Palate Association

Medical Geneticist, Japan Society of Human Genetics

### *Editors*

Editor, Journal of Tokyo Orthodontic Society

Associate Editor, Orthodontic Waves (Journal of Japanese Orthodontic Society)

Associate Editor, Journal of Japanese Cleft Palate Association

Associate Editor, Journal of Japanese Society for Jaw Deformities

Associate Editor, Japanese Association for Dental Science





# 심 | 포 | 지 | 엄Ⅳ

## SymposiumⅣ

■ Moderator : 김재승(건국대), 박영욱(강릉원주대)

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### SymposiumⅣ

- Date : 11.01(Fri) 16:00~16:30
  - Speaker : Min-Suk Kook
  - Affiliation : Chunnam Natl' Univ., Korea
  - Topic : Clinical application of 3D image in the orthognathic surgery
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### SymposiumⅣ

- Date : 11.01(Fri) 16:30~17:00
  - Speaker : Sejin Han
  - Affiliation : Dankook Univ., Korea
  - Topic : Condyle Positioning and Fixation after Sagittal Split Ramus Osteotomy
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### SymposiumⅣ

- Date : 11.01(Fri) 17:00~17:30
  - Speaker : Kensuke Yamauchi
  - Affiliation : Tohoku Univ., Japan
  - Topic : Pyramidal and posterior osseous release technique using ultrasonic bone cutting device with long-tips.
-

## 심포지엄IV | SymposiumIV

일시(Date) : 11.01(Fri) 16:00~16:30

Moderator : 김재승, 박영욱

### Clinical application of 3D image in the orthognathic surgery



Prof. Min-Suk Kook

*Chunnam Natl' Univ., Korea*

#### Clinical application of 3D image in the orthognathic surgery

Cephalometric radiographs have been used for a long time in preoperative and postoperative analysis for orthodontic and orthognathic surgery. This traditional method has several limitations such as superimposition of anatomical structures, local deformation, and error by the head posture. In addition, since the three-dimensional(3D) change after surgery must be predicted in the two-dimensional(2D) plane, accurate post-operative analysis is difficult. Recently, with the development of imaging devices and various analysis programs, 3D images of maxillofacial bone tissues are acquired more accurately and used for surgical analysis. In particular, the increased precision of computed tomography(CT) images and the development of 3D printing machines and technologies have enabled the production of precise 3D models of the skull and jaw of patients. Based on this technique, it is easy to manufacture the auxiliary devices to predict the postoperative condition and reduce the errors during the operation. 3D CT has many advantages over conventional images, but it has some disadvantages as well, such as increased radiation exposure when repeated several times, higher cost, etc. Recently, however, the radiation exposure of patients has been reduced by the development of cone-beam CT, which allows to obtain high-resolution 3D images at low cost and can be used for diagnosis and simulation.

In this lecture, I will present a series of procedures used in orthognathic surgery such as diagnostic analysis, simulation surgery, and model production using 3D images compared the procedures using 2D images with the literature reviews.

## Curriculum Vitae

**Min-Suk Kook, D.D.S., Ph.D**

### *Position/Address*

Professor, Dept. of Oral and Maxillofacial Surgery  
Chonnam National University School of Dentistry, Gwangju, Korea

### *Education*

2011. 2.            Graduated from Chonbuk National University Graduate School, Cheonju, Korea  
                         received PhD. in Oral and Maxillofacial Surgery
2005. 2.            Graduated from Chonnam National University Graduate School, Gwangju, Korea  
                         received M.S.D. in Oral and Maxillofacial Surgery
1999. 2.            Graduated and Received D.D.S. from College of Dentistry, Chonnam National  
                         University, Gwangju, Korea

### *Professional Background*

2019. 3.- Present    Director of Dental 4D research institute Chonnam National University, Gwangju,  
                         Korea
2017. 4.- Present    Professor Chair, Department of Oral and Maxillofacial Surgery Chonnam  
                         National University Hospital, Gwangju, Korea
2017. 2.- 2019. 1    Vice Dean School of Dentistry, Chonnam National University, Gwangju, Korea
2015. 8.- 2016. 7    Research Scholar Department of Oral and Maxillofacial Surgery University of  
                         Florida, Gainesville, FL, USA
2012. 4.- 2017. 3    Associate Professor Department of Oral and Maxillofacial Surgery Chonnam  
                         National University, Gwangju, Korea
2008. 4.- 2012. 3    Assistant Professor Department of Oral and Maxillofacial Surgery Chonnam  
                         National University, Gwangju, Korea
2006. 3.- 2008. 3    Full-time lecturer Department of Oral and Maxillofacial Surgery Chonnam  
                         National University, Gwangju, Korea

## 심포지엄IV | SymposiumIV

일시(Date) : 11.01(Fri) 16:30~17:00

Moderator : 김재승, 박영욱

### Condyle Positioning and Fixation after Sagittal Split Ramus Osteotomy



Prof. Sejin Han

*Dankook Univ., Korea*

#### Condyle Positioning and Fixation after Sagittal Split Ramus Osteotomy

Sagittal split ramus osteotomy (SSRO) is an established procedure for the surgical correction of mandibular deformities. However, the position of the mandibular condyle in the glenoid fossa was reported to change after SSRO. Such changes were reported to occur more frequently with rigid screw fixation than with non-rigid wire fixation. Failure to correctly reposition the condyle can result in short-term relapse or temporomandibular joint (TMJ) dysfunction.

Several procedures or techniques have been developed for rigid osteosynthesis among them the lag screw technique, positional screw technique, and miniplate procedure. The type of osteosynthesis used may influence the position of the mandibular condyle and such changes may affect the movement of the TMJ.

In many studies, controlling the proximal segment is an important technique for achieving skeletal stability. The postoperative condylar position is affected by various factors such as the surgeon's skill, surgical procedure, and neuromuscular environment.

Even though a large bony contact area can be obtained after SSRO with rigid fixation, the rigid fixation process can induce postoperative positional changes of the condyle in the fossa. Moreover, transverse rotation of the proximal segment is known to occur after rigid fixation. Such postoperative changes can have an adverse effect on skeletal stability. All these changes are potential factors that lead to postoperative skeletal relapse.

## Curriculum Vitae

**SEJIN HAN, D.D.S., M.S.D., Ph.D.**

### *Professional Career*

March 2014- Present : Chief, Department of Oral and Maxillofacial Surgery, Dental Hospital,  
Dankook University, Cheonan, Korea

March 2014- Present : Associate Professor, Department of Oral and Maxillofacial Surgery, School of  
Dentistry, Dankook University, Cheonan, Korea

August 2015- August 2016 : Visiting Scholar, Department of Oral and Maxillofacial Surgery, School  
of Dentistry, UCLA, LA, USA

March 2009- February 2014 : Assistant Professor, Department of Oral and Maxillofacial Surgery,  
School of Dentistry, Dankook University, Cheonan, Korea

March 2006-February 2009 : Instructor, Department of Oral and Maxillofacial Surgery, School of  
Dentistry, Dankook University, Cheonan, Korea

March 2005-February 2006 : Army Surgeon Staff, Department of Oral and Maxillofacial Surgery,  
The Armed Forces Medical Center, Seoul, Korea

March 2004-February 2005 : Army Surgeon Staff, Department of Oral and Maxillofacial Surgery,  
Zytun Field Hospital, Arvil, IRAQ

March 1999-February 2003 : Clinical Resident, Department of Oral and Maxillofacial Surgery,  
School of Dentistry, Dankook University, Cheonan, Korea

### *Doctoral Degree*

August 2008

Ph. D. received from Dankook University, Korea

## 심포지엄IV | SymposiumIV

일시(Date) : 11.01(Fri) 17:00~17:30

Moderator : 김재승, 박영욱

### Pyramidal and posterior osseous release technique using ultrasonic bone cutting device with long-tips.



Prof. Kensuke Yamauchi

*Tohoku Univ., Japan*

#### **Pyramidal and posterior osseous release technique using ultrasonic bone cutting device with long-tips.**

During recent decades, the Le Fort I (LFI) osteotomy has become a procedure increasingly applied in elective orthognathic surgery, usually resulting in a high level of patient satisfaction. Although increased experience with this procedure over many years has led to better results, a decrease in operating times, and improved comfort for the patient, it is essential that the surgeon remains aware of the potential intraoperative and postoperative complications associated with the LFI osteotomy. Managing for security and time consuming, surgeons have to select the device for each step of surgery. Considering for LFI osteotomy, one of the most difficult steps is to manage the bone interference around descending palatine artery (DPA) area of the segment. Ultrasonic bone cutting devices are widely used in oral and maxillofacial surgery. These devices reduce the surgical risks of the damage of neurovascular bundle, blood loss and bad fractures. However the most of the tips were designed for dentoalveolar surgery, so it is hard to use at deeper area for example around DPA and mandibular canal. Around the posterior osseous part under DPA bundle, the oscilating-type long tip of ultrasonic bone cutting device was brought to obtain the horizontal cutting groove including palatal bone. The posterior bone segment was free by inserting and twisting with curved raspatrium, then the segment was securely repositioned superiorly and/or posteriorly. In this presentation, we present our digital workflow for orthognathic surgery, and the surgical technique using ultrasonic bone cutting device with long tip in the bimaxillary surgery.

## Curriculum Vitae

### Kensuke Yamauchi

#### *Education*

- April 1995 to March 2001; I graduated from Tohoku University with a D.D.S degree, Doctor of Dental Science
- July 2008; Ph. D. Div. of Oral and Maxillofacial Reconstructive Surgery, Dept. of Oral and Maxillofacial Surgery, Kyushu Dental College (Supervisor: Prof. Tetsu Takahashi)

#### *Professional Affiliations*

- March 2017~ Dept. of Oral and Maxillofacial Surgery, Tohoku University Graduate School of Dentistry as an associate professor.
- September 2012~ Dept. of Oral and Maxillofacial Surgery, Tohoku University Graduate School of Dentistry
- April 2011~March 2012 Department of Craniomaxillofacial Surgery, Maastricht University (The Netherlands) as a visiting clinical and research fellow.
- April 2003~August 2012 The Second department of Oral and Maxillofacial surgery, Kyushu Dental College as an assistant professor
- November 2001~March 2003 The division of Oral and Maxillofacial Surgery, Kagawa Pref. Central Hospital as a resident





# 런 | 천 | 세 | 미 | 나

## Luncheon Seminar

■ Moderator : 허종기(연세대), 권경환(원광대)

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### Luncheon Seminar

- Date : 11.01(Fri) 12:30~13:00
  - Speaker : Jae-Young Kim
  - Affiliation : Yonsei Univ., Korea
  - Topic : 구강악안면외과 환자 진료와 보험청구
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### Luncheon Seminar

- Date : 11.01(Fri) 13:00~13:30
  - Speaker : Chung Seung-Won
  - Affiliation : Cha Univ., Korea
  - Topic : Guidelines on National Health Insurance claim for Oral and Maxillofacial Surgeons
-

## 런천세미나 | Luncheon Seminar

일시(Date) : 11.01(Fri) 12:30~13:00

Moderator : 허종기, 권경환

### 구강악안면외과 환자 진료와 보험청구

#### 김재영 교수

Yonsei Univ., Korea

#### 구강악안면외과 환자 진료와 보험청구

정부는 2022년까지 건강보험 보장성을 강화한다는 이른바 ‘문재인 케어’를 발표한 바 있습니다. 이에 따라 최근 자기공명영상 급여화, 항암제와 치매약제 등의 급여화가 이루어졌습니다. 주로 의과 영역에서 많은 변화가 예상되나 이러한 정부의 정책은 향후 치과 영역에도 상당 부분 급여 항목 확대에 영향을 미칠 것으로 생각됩니다. 이에 따라 보험진료의 중요성은 지금보다 더욱 증가할 것으로 예상됩니다.

국민건강보험제도는 많은 변화를 거쳐왔고 현재에도 이러한 변화는 진행중에 있습니다. 최근 몇 년간 임플란트 및 의치가 급여화되고 보험 기준이 확대되는 등 치과영역에서의 보험진료가 많이 확대되었고 그 중요성을 더해가고 있습니다.

하지만 보험 항목이 많아지고 복잡해짐에 따라 점차 멀게만 느껴지는 것이 현실입니다. 이에 발맞추어 구강악안면외과 보험연구회 (대한구강악안면외과학회와 대한악안면성형재건외과학회 연합 보험위원회, 구보연)에서는 구강악안면외과 진료 영역에 대한 보험항목을 정리하였습니다

본 발표에서는 구강악안면외과 진료 영역을 중심으로 전체적인 보험에 대한 내용, 고시 및 청구 기준들에 대해 알아보고 이를 통해 보험청구에 도움이 되고자 합니다.

The government has announced the so-called “Moon Jae In Care”, which will have strengthened health insurance coverage by 2022. Recently, magnetic resonance imaging (MRI), some drugs for chemotherapy and dementia are covered by insurance. While many changes are expected mainly in the medical part, the government policy is also likely to have significant impact on dentistry in the future. The importance of insurance covered health care is expected to increase even more.

The national health insurance system has undergone many changes, and these changes are still in progress. In recent years, dental care insurance selectively covers implants and dentures and the insurance standards has been expanded too.

But it is true that insurance coverage has been expanded and become more complex, it is not practical and convenient for clinicians. The Oral and Maxillofacial Surgery Insurance Committee would like to summarize the national insurance system in the area of oral and maxillofacial surgery.

In this presentation, we will introduce and explain insurance system as a guide for insurance charging in the department of oral and maxillofacial surgery.

## Curriculum Vitae

**Jae-Young Kim**

### *Academic Records*

College of Dentistry, Yonsei University (2000.3-2006.2)

Graduate School, Yonsei University, M.S.D (2008.3~2010.2)

Graduate School, Yonsei University, Ph.D (2014.3~2017.2)

### *Professional Records*

2006.3~2010.2: Intern/ Residentsip, Dept. of Oral and Maxillofacial Surgery, Yonsei University College of Dentistry

2013.5~2014.2: Fellow, Dept. of Oral and Maxillofacial Surgery, Yonsei University College of Dentistry

2014.3~2015.2: Clinical & research assistant professor, Dept. of Oral and Maxillofacial Surgery, Gangnam severance Hospital, Yonsei University College of Dentistry

2015.3~: Clinical assistant professor, Dept. of Oral and Maxillofacial Surgery, Gangnam severance Hospital, Yonsei University College of Dentistry

## 런천세미나 | Luncheon Seminar

일시(Date) : 11.01(Fri) 13:00~13:30

Moderator : 허종기, 권경환

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# Guidelines on National Health Insurance claim for Oral and Maxillofacial Surgeons

정승원 교수

*Cha Univ., Korea*

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### **Guidelines on National Health Insurance claim for Oral and Maxillofacial Surgeons**

National Health Insurance Service in dentistry has limitations in covering the wide field of Oral and Maxillofacial Surgery. Therefore different hospitals may claim differently after similar procedures. In this session, guidelines on National Health Insurance claim after oral and maxillofacial treatments are presented based on medical care notifications.

## Curriculum Vitae

**Chung Seung-Won, DDS, PhD**

### *Education*

2006 DMD, Yonsei University College of Dentistry, Seoul, Korea

2010 MSD, Graduate School of Yonsei University, Seoul, Korea

2017 PhD, Graduate School of Yonsei University, Seoul, Korea

### *Professional Experiences*

2006~2007: Intern, Yonsei University Dental Hospital, Seoul, Korea

2007~2010: Resident, Department of Oral and Maxillofacial Surgery, Yonsei University Dental Hospital, Seoul, Korea

2013~2014: Fellow, Department of Oral and Maxillofacial Surgery, Yonsei University Dental Hospital, Seoul, Korea

2014~2015: Clinical Research Assistant Professor, Department of Oral and Maxillofacial Surgery, Yonsei University Dental Hospital, Seoul, Korea

2015~Present: Assistant Professor, Department of Dentistry, Cha Bundang Medical Center, Cha University, Seongnam, Korea

2019~Present: Chief, Department of Dentistry, Cha Bundang Medical Center, Cha University, Seongnam, Korea



The 58th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

# 메 | 모 | 리 | 얼 | 강 | 의

■

## Memorial Lecture

■ Moderator : 이 원(카톨릭대)

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### Memorial Lecture

- Date : 11.02(Sat) 11:10~12:00
  - Speaker : Pil Hoon Choung
  - Affiliation : Seoul Nat'l Univ., Korea
-

**메모리얼강의 | Memorial Lecture**

일시(Date) : 11.02(Sat) 11:10~12:00

Moderator : 이 원

**정필훈 교수**(Pill-Hoon Choung, DDS, MSD, Ph.D.)

*Seoul Natl' Univ., Korea*





## Curriculum Vitae

**Pill-Hoon Choung, DDS, MSD, Ph.D.**

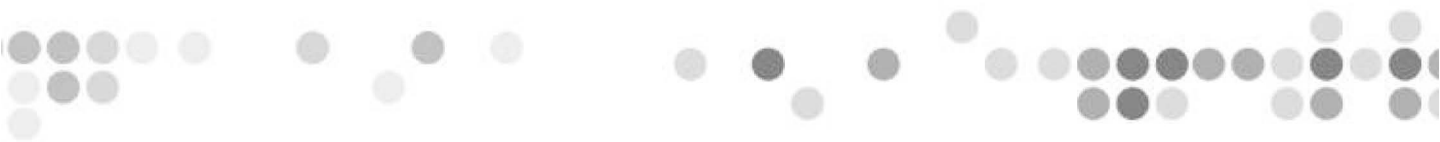
### *Education*

- 1973-1979 School of Dentistry, Seoul National University, Seoul, Korea  
1980-1982 MSD, Graduate School, Seoul National University, Seoul, Korea  
1982-1987 Ph.D., Graduate School, Seoul National University, Seoul, Korea  
1979-1982 Residency in Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Seoul, Korea

### *Major Activities*

- 1985-1989 Associate Professor, Chairman, Dept. of Oral and Maxillofacial Surgery, Chungnam National University  
1989-Present Professor, Director, Department of Oral and Maxillofacial Surgery, Cranio-Maxillo-Facial Syndrome Plastic Clinic, Tooth Bioengineering National Research Laboratory, School of Dentistry, Seoul National University, Seoul, Korea  
2004-Present Member, Korean Academy of Science and Technology, Korea  
2007-2011 President, Vice-president Korean Society for Stem Cell Research  
2004-2006, 2008-2010 Dean, School of Dentistry, Seoul National University President, Korean Dean's Society of Dental Colleges Establishment of Kwanak Campus and Dental Hospital of School of Dentistry, Seoul National University  
2008-2010 President, Korean Association of DEET and MEET  
2006-2016 Director, Tooth Bioengineering Lab. selected as a National Research Laboratory and a National Strategy Laboratory in National Research Foundation of Korea  
1998-Present President, Korean Association of Research & Charity for Craniofacial Deformity





The 58th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

# Oral Presentation Schedule



제58차  
대한악안면성형재건외과학회  
종합학술대회 및 정기총회

11월 2일(Sat) A,B Conference Hall Orthognathic

- O1 (A-1) 08:00-08:39 하악전돌증 환자에서 시상분할 골절단술 후 하악 과두 위치 변화에 대한 장기 추적 연구  
민송희\*, 강노을, 송승일, 이정근  
아주대학교 치과병원 구강악안면외과  
Assessment of Positional change of the mandibular condyle after Sagittal Split Ramus Osteotomy of the mandibular prognathism : Long-term Follow-up  
Song Hee Min\*, No Eul Kang, Seung Il Song, Jeong Keun Lee  
Department of Oral and Maxillofacial Surgery, AJOU University Dental Hospital
- O2 (A-2) 08:39-08:48 하악골 후퇴 수술 후 골격성 3급 부정교합 환자의 수면의 질에 있어서의 잠재적 변화: 전향적 연구  
온성운<sup>1\*</sup>, 송승일<sup>2</sup>  
1 한림대학교 동탄성심병원 구강악안면외과  
2 아주대학교 치과병원 구강악안면외과  
Silent Changes in Sleep Quality Following Mandibular Setback Surgery in Patients with Skeletal Class III Malocclusion: A Prospective Study  
Sung Woon On<sup>1\*</sup>, Seung Il Song<sup>2</sup>  
1 Division of Oral and Maxillofacial Surgery, Department of Dentistry, Dongtan Sacred Heart Hospital, Hallym University College of Medicine  
2 Department of Oral and Maxillofacial surgery, Ajou University Dental Hospital
- O3 (A-3) 08:48-08:57 하악 수직 골절단술을 이용한 악교정 수술 후 안면비대칭 환자의 하악 폭경 및 하악지 축의 변화에 대한 삼차원 분석  
유한솔\*, 이소연, 김재영, 박광호  
연세대학교 치과대학 구강악안면외과학교실 (강남세브란스병원)  
3-dimensional analysis about changes of mandibular widths and condylar axis after orthognathic surgery using intraoral vertical ramus osteotomy in facial asymmetry patients  
Han-Sol YOU\*, Soyeon LEE, Jae-Young KIM, Kwang-Ho PARK  
Department of Oral and Maxillofacial surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry, Seoul, Korea
- O4 (A-4) 08:57-09:06 안면비대칭을 가진 환자에서 악교정 수술 시 원심골편의 후방골절단술의 효과에 관한 연구  
조현미\*, 이백수, 권용대, 최병준, 오주영, 이정우, 황보연, 정준호  
경희대학교 치과대학 치의학전문대학원 구강악안면외과학교실  
The effectiveness of Posterior Bending Osteotomy during orthognathic surgery in facial asymmetric patients  
Hyunmi Jo\*, Baik-Soo Lee, Yong-Dae Kwon, Byung-Joon Choi, Joo-Young Ohe, Jung-Woo Lee, Bo-Yeon Hwang, Junho Jung  
Department of Oral & Maxillofacial Surgery Kyung Hee University School of Dentistry
- O5 (A-5) 09:06-09:15 악교정 수술에서 3D printer를 이용한 intermediate wafer의 유효성에 관한 연구  
마윤희\*, 최나래, 송재민, 이재열, 김용덕, 신상훈, 김옥규, 황대석  
부산대학교 치의학전문대학원 구강악안면외과학교실  
Validation of three-dimensional printed intermediate wafer for orthognathic

surgery

Yoon-Hee Ma, Na-rae Choi, Jae-Min Song, Jae-Yeol Lee, Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim, Dae-Seok Hwang

*Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University*

O6 (A-6) 하악 과두흡수를 동반한 하악후퇴증 환자에서 하악 자가회전에 따른 상악 악교정수술후  
09:15-09:24 하악과두의 위치 변화와 하악의 수술 후 안정성

지용 니<sup>1</sup>, 양훈주<sup>1,2</sup>, 김성민<sup>1</sup>, 황순정<sup>3</sup>

*1 서울대학교 치의학대학원 구강악안면외과*

*2 서울대학교치과병원 턱교정수술센터*

*3 황순정구강악안면외과치과의원*

Positional changes of condyle and mandibular stability after isolated maxillary orthognathic surgery combined with the mandibular autorotation in mandibular retrognathism with idiopathic condylar resorption

Ni Xiong<sup>1</sup>, Hoon Joo Yang<sup>1,2</sup>, Sung Min Kim<sup>1</sup>, Soon Jung Hwang<sup>3</sup>

*1 Dept. of Oral and maxillofacial Surgery, School of Dentistry, Seoul National University*

*2 Orthognathic Surgery Center, Seoul National University Dental Hospital, Seoul, Korea*

*3 HSJ Dental Clinic for Oral and Maxillofacial Surgery, Seoul, Korea*

O7 (A-7) Can Mandibular Setback Surgery Cause Obstructive Sleep Apnea Hypopnea  
09:24-09:33 Syndrome in Patients with Skeletal Class III Malocclusion?: AProspective Study

Jing-Wen Li, Jung-Hyun Park, **Jin-WooKim**, Sun-Jong Kim

*Department of Oral and Maxillofacial Surgery, Ewha Womans University Medical Center*

O8 (A-8) OSA 환자 치료시 CAD/CAM을 적용한 modified MMA의 정확성  
09:33-09:42 이승현<sup>a</sup>  
최진영<sup>b</sup>

*a 서울대학교 치과병원 치과마취과*

*b 서울대학교 치과병원 구강악안면외과*

Accuracy of modified MMA in OSA patients using CAD/CAM

Seung-Hyun Rhee<sup>a</sup>

Jin-Young Choi<sup>b</sup>

*a Department of Dental Anesthesiology, Seoul National University Dental Hospital, Seoul, Republic of Korea*

*b Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Seoul, Republic of Korea*

## 11월 2일(Sat) 회의실6 Implant & dentoalveolar surgery

O9 (B-1) SA 표면 임플란트의 장기적 예후 관찰 : 후향적 임상연구  
08:30-08:39 김민중\*<sup>1</sup>, 윤필영<sup>1</sup> 김영균<sup>1,2</sup>

*1 분당서울대학교병원 치과, 구강악안면외과*

*2 서울대학교 치의학대학원 치의학과, 치의학 연구소*

Long-term evaluation of the prognosis of Sandblasted with alumina and Acid-etched surface implant: Retrospective clinical study

Min-Joong Kim\*<sup>1</sup>, Pil-Young Yun<sup>1</sup> YoungKyunKim<sup>1,2</sup>

*1 Department of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea*

*2 Department of Dentistry & Dental Research Institute, School of Dentistry, Seoul National University, Seoul, Korea*

- O10 (B-2) 자가치아뼈이식재를 사용한 골이식술의 장기 관찰 연구  
08:39-08:48 신연수\*<sup>1)</sup>, 윤필영<sup>1)</sup>, 김영균<sup>1,2)</sup>  
1 분당서울대학교병원 치과, 구강악안면외과  
2 서울대학교 치의학대학원 치의학과, 치의학 연구소  
Long-term evaluation of bone graft with autogenous demineralized dentin matrix: Retrospective clinical study  
Yonsoo Shin\*<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, YoungKyun Kim<sup>1,2)</sup>  
1 Department of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea  
2 Department of Dentistry & Dental Research Institute, School of Dentistry, Seoul National University, Seoul, Korea
- O11 (B-3) 상악동 거상술과 동시에 식립한 임플란트의 생존률 및 성공율 : 500개 임플란트 분석  
08:48-08:57 이진모, 안강민  
울산대학교 의과대학 구강악안면외과 서울아산병원  
Survival and success of dental implants with sinus lifting and simultaneous installation: Results of 500 implants  
Keonmo Lee, Kang-Min Ahn  
Department of oral and maxillofacial surgery, College of medicine, University of Ulsan
- O12 (B-4) 임플란트가 연관된 악골괴사증의 임상적인 특징 및 증례 보고  
08:57-09:06 장동규\*, 박영룡, 박정현, 김진우  
이화여자대학교 목동병원 구강악안면외과  
Clinical characteristics and case presentation of Dental implant associated Osteonecrosis of the jaw  
Dongkyu Jang\*, Young-Long Park, Jung-Hyun Park, Jin-Woo Kim  
Ewha Womans University Mokdong Hospital Department of Oral and Maxillofacial Surgery
- O13 (B-5) 티타늄 튜브를 이용한 진행된 임플란트주위염의 구제 처치  
09:06-09:15 우재만<sup>1)</sup>, 우진오<sup>2)</sup>  
1 제주대학교 의학전문대학원 치의학과  
2 우치과의원  
Titanium Tube placed around Implant Fixture as Salvage Treatment for Advanced Peri-implantitis  
Jaeman Woo<sup>1)</sup>, Jin-Oh Woo<sup>2)</sup>  
1 Department of Dentistry, Jeju National University School of Medicine  
2 Dr.Woo'sDentalClinic
- O14 (B-6) 이비인후과에서 의뢰된 치성 상악동염의 진단과 치료방법, 예후에 관한 연구  
09:15-09:24 윤민근, 김창수, 팽준영, 안재명  
삼성서울병원 구강악안면외과  
Maxillary sinusitis of dental origin referred from otolaryngology - Diagnosis, treatment and prognosis : case study  
Min-Geun Yoon, Chang-Soo Kim, Jun-Young Paeng, Jae-Myung Ahn  
Department of Oral and Maxillofacial surgery, Samsung Medical Center, Sungkyunkwan University school of Medicine.
- O15 (B-7) 하악 매복 제3대구치의 새로운 분류를 위한 고찰  
09:24-09:33 용해성, 김민식, 박광호, 허종기  
연세대학교 치과대학 구강악안면외과학교실 (강남세브란스병원)

Consideration of a new classification for impacted mandibular third molar extraction

Hae-Seong YONG, Minsik KIM, Kwang-Ho PARK, Jong-Ki HUH

Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University colleges of Dentistry, Seoul, South Korea

O16 (B-8) 의도적 치아재식술을 통한 치근낭종 적출술의 임상 증례  
09:33~09:42 임세정<sup>1\*</sup>, 손승환<sup>2</sup>, 장준구<sup>2</sup>, 손장호<sup>1</sup>, 조영철<sup>1</sup>, 성일용<sup>1</sup>

<sup>1</sup> 울산대학교 의과대학 울산대학교병원 구강악안면외과학교실

<sup>2</sup> 울산대학교 의과대학 울산대학교병원 통합치의학과

Cyst enucleation and apicoectomy via intentional replantation

Se-Jeong

Lim<sup>1\*</sup>, Seung-HwanSon<sup>2</sup>, Jun-GuJang<sup>2</sup>, Jang-HoSon<sup>1</sup>, Yeong-CheolCho<sup>1</sup>, Iel-YongSung<sup>1</sup>

<sup>1</sup> Department of Oral and Maxillofacial Surgery, Ulsan University Hospital, University of Ulsan College of Medicine

<sup>2</sup> Department of Advanced General Dentistry, Ulsan University Hospital, University of Ulsan College of Medicine

11월 2일(Sat) 회의실7 Basic research

O17 (C-1) 딥러닝을 통한 하악 제3대구치에 발생한 함치성 낭종의 자동 탐지  
08:30~08:39 장완희<sup>1\*</sup>, 안강민<sup>1</sup>

울산대학교 의과대학, 서울아산병원, 구강악안면외과

Automated detection of dentigerous cyst associated with mandibular third molar by deep learning

Wan-Hee Jang<sup>1\*</sup>, Kang-MinAhn<sup>1</sup>

Department of Oral and Maxillofacial Surgery, College of Medicine, University of Ulsan, Asan Medical Center<sup>1</sup>

O18 (C-2) 제 3대구치 발치 교육을 위한 VR 시뮬레이터  
08:39~08:48 김효준<sup>1\*</sup>, 문성용<sup>1</sup>, 오지수<sup>1</sup>, 유재식<sup>1</sup>, 최해인<sup>1</sup>

조선대학교 치과대학 구강악안면외과학교실

VR simulator for 3rdmolar extraction

Hyo-Joon Kim<sup>1\*</sup>, Seong-YongMoon<sup>1</sup>, Ji-SuOh<sup>1</sup>, Jae-SeekYou<sup>1</sup>, Hae-InChoi<sup>1</sup>

Dept of Oral and maxillofacial Surgery, School of Dentistry, Chosun University

O19 (C-3) 백서 모델에서 신경 견인 손상에 의한 기능적 회복 및 전자현미경적 변화에 대한 고찰  
08:48~08:57 김홍준<sup>\*</sup>, 안강민<sup>1</sup>

울산대학교 의과대학, 서울아산병원 구강악안면외과

Tension-induced nerve injury correlates with functional loss and electron microscopic changes in the rat model

Hong-Joon Kim<sup>\*</sup>, Kang-MinAhn

Department of oral and maxillofacial surgery, College of medicine, University of Ulsan, Asan medical center

O20 (C-4) IL-6/RANKL Axis 에 의한 Zoledronate의 골세포와 연관된 파골세포 분화의 촉진  
08:57~09:06 박진영, 최나래, 황대석, 김용덕, 신상훈, 김옥규, 이재열

부산대학교 치과대학 구강악안면외과학교실

Zoledronate Enhances Osteocyte-Mediated Osteoclast Differentiation by

IL-6/RANKL Axis

Jinyoung Park, Na-rae Choi, Dae-seok Hwang, Yong-deok Kim, Sang-hun Shin, Uk-kyu Kim, Jae-yeol Lee

*Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University*

021 (C-5) 냉동 보존된 치낭-유래 줄기 세포의 3 차원 배양은 다능성 및 골 형성 유도 특성을 향상시킨다.  
09:06-09:15

강영훈<sup>1,2</sup>, 강민수<sup>1</sup>, 변준호<sup>1,2</sup>, 박봉욱<sup>3</sup>

*1 창원경상대학교병원 구강악안면외과*

*2 경상대학교 의과대학 치과학교실*

*3 진주 한일 치과병원*

Three-dimensional spheroid formation of cryopreserved human dental follicle-derived stem cells enhances pluripotency and osteogenic induction properties

Young-Hoon Kang<sup>1,2</sup>, Min-Su Kang<sup>1</sup>, June-Ho Byun<sup>2</sup>, Bong-Wook Park<sup>3</sup>.

*1 Department Oral and Maxillofacial Surgery, Changwon Gyeongsang National University Hospital*

*2 Department of Dentistry, Gyeongsang National University School of Medicine and Institute of Health Science.*

*3 Department of Dentistry, Hanil Hospital, Jinju.*

022 (C-6) Reconstruction Genioplasty with Customized Titanium by 3D Printing  
09:15-09:24 **이의석\***, Puneet, 최현우, 고경수, 소병규, 권예진, 김충남, 윤태승, 임호경, 장현석

*고려대학교 구강악안면외과*

Reconstruction Genioplasty with Customized Titanium by 3D Printing

**Eui Seok Lee\***, Puneet Wadhwa, Hyun Woo Choi, Kyung Soo Koh, Byung Gyu Soh, Yehjin Kwon, Choong Nam Kim, Tase Seung Yoon, Ho Kyung Lim, Hyon Seok Jang

*Department of Oral and Maxillofacial Surgery*

023 (C-7) Computational Analysis of Airflow Dynamics for Predicting Collapsible Sites  
09:24-09:33 in The Upper Airways: Machine Learning Approach

Hussain Alfadhel<sup>1</sup>, Seung Ho Yeom<sup>2</sup>, JiSungNa<sup>3</sup>, Hwi-DongJung<sup>1</sup>, Hyung-JuCho<sup>4</sup>, YoonJeongChoi<sup>2,5</sup>, and Joon Sang Lee<sup>2,5</sup>

*1 Department of Oral and Maxillofacial Surgery, Yonsei University, Seoul, Korea;*

*2 Department of Mechanical Engineering, Yonsei University, Seoul, Korea; 3 Unit of Ice Sheet and Sea Level Changes, Korea Polar Research Institute, Seoul, Korea; 4 Department of Otorhinolaryngology, Yonsei University, Seoul, Korea; and 5 Department of Orthodontics, The Institute of Craniofacial Deformity, Yonsei University, Seoul, Korea*

024 (C-8) 실크 단백질과 4-hexylresorcinol을 이용한 혈관 재생

09:33-09:42

김성곤

*강릉원주대학교 치과대학 구강악안면외과*

Angiogenesis by the application of silk protein and 4-hexylresorcinol

Seong-Gon Kim

*Department of Oral and Maxillofacial Surgery, Gangneung-Wonju National University*

11월 2일(Sat) A,B Conference Hall Tumor & reconstruction

025 (D-1) 바이오멧 시스템을 이용한 턱관절 재건술

09:45-09:54

장재호, 최진영

*서울대학교 치의학대학원 구강악안면외과학교실*



- Total TMJ reconstruction with Biomet  
Jaeho Jang, Jin-young Choi  
*Department of Oral & Maxillofacial Surgery, Seoul National University School of dentistry, Seoul, Korea*
- O26 (D-2) Treating oral submucosa fibrosis with autologous fat grafting- A de novo  
09:54~10:03 technique with multimodal therapies  
Chun-Liang Chang a, Chih-Huang Tseng b, Edward Cheng-chuan Ko c  
a. Resident, division of oral maxillofacial surgery of Hospital of Kaohsiung medical university, DDS  
b. Resident, division of oral pathology of Hospital of Kaohsiung medical university, DDS, DMD  
c. Visiting staff, division of oral maxillofacial surgery of Hospital of Kaohsiung medical university, DDS, PhD
- O27 (D-3) Application of Implantable Doppler in Microvascular Free Flap Surgery  
10:03~10:12  
Tsung Lin Tsai, Hao Jhe Liao, Shin Pai, Feng Hui Lee, Cheng Hsing Lo  
*Department of Maxillofacial Surgery, St. Martin de Porres Hospital, Chiayi City, Taiwan*
- O28 (D-4) 미세수술 재건: 121 증례 성공률 및 합병증 분석  
10:12~10:21 김성룡, 안강민  
*울산대학교 의과대학 구강악안면외과 서울아산병원*  
Microvascular reconstruction: analysis of success rate and complications in 121 cases  
Seong-Ryoung Kim, Kang-Min Ahn  
*Department of oral and maxillofacial surgery, College of medicine, University of Ulsan*
- O29 (D-5) 혀에 발생한 구강편평상피암종 예후 인자로서 종양 침윤 깊이를 사용하는 것에 대한  
10:21~10:30 적절성 평가: 42명 환자의 후향적 연구  
이유정, 장성백, 이성탁, 권대근, 김진욱, 최소영  
*경북대학교 치과대학 구강악안면외과학 교실*  
Verification of Depth of Invasion as a Prognostic Factor of Oral Tongue Squamous Cell Carcinoma: A Retrospective Study of 42 Patients  
You-Jung Lee, Sung-Baek Jang, Sung-Tak Lee, Tae-Geon Kwon, Jin-Wook Kim, So-Young Choi  
*Dept. of Oral & Maxillofacial surgery, School of Dentistry, Kyungpook National University*
- O30 (D-6) 혀에서 발생한 초기 편평상피암종에서 부분 혀 절제술 시행 이후 발생하는 경부림프절  
10:30~10:39 전이의 빈도 조사를 통한 예방적 경부곽청술 시행에 대한 고찰  
채연수, 박상윤, 이종호\*  
*서울대학교 구강악안면외과*  
Investigation of the Frequency of Cervical Lymph Node Metastasis after Partial Glossectomy in Early Squamous Carcinoma of the Tongue.  
Yeon-Su Chae, Sang-Yoon Park, Jong-Ho Lee\*  
*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Korea*
- O31 (D-7) Clinical evaluation of the secondary healing property using  
10:39~10:48 Neoveil®inoral mucosal defects: A case series  
Santhiya Iswarya Vinothini UDAYAKUMAR\*, Jin-Wook Kim, Tae-Geon Kwon, Jae-Myung Ahn, Chang-soo Kim, Jun-Young Paeng  
*Department of Oral and Maxillofacial Surgery, Samsung Medical Centre, Seoul, Republic of Korea.*

11월 2일(Sat) 회의실6 Trauma & TMJ

O32 (E-1) 하악골 골절선 상에 위치한 치아들의 예후  
09:45~09:54 이원범\*, 최나래, 송재민, 황대석, 김용덕, 신상훈, 김욱규, 이재열\*  
부산대학교 치의학전문대학원 구강악안면외과학교실

The Prognosis of Teeth in Mandibular Fracture Lines  
Won-bum Lee\*, Na-rae Choi, Jae-Min Song, Dae-Seok Hwang, Yong-Deok Kim, Sang Hun Shin, Uk-Kyu Kim, Jae-Yeol Lee\*  
Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University

O33 (E-2) 하악 과두 골절의 수술적 접근법의 차이에 따른 안면 신경 손상의 양상 및 회복에 대한 후향적 연구  
09:54~10:03 온도현\*, 조진용, 김성범, 류재영  
가천대 길병원 구강악안면외과

A Retrospective Study of Facial Nerve Injury with Different Surgical Approaches of Mandibular Condyle Fracture  
Do-Hyun ON\*, Jin-yong CHO, Sungbeom KIM, Jaeyoung RYU  
Dept. of Oral and Maxillofacial Surgery, Gachon University Gil Medical Center

O34 (E-3) 양's 키홀 플레이트의 안정성 평가; 하악골 골절 치료의 새로운 고정 시스템.  
10:03~10:12 천경준\*, 김주원, 양병은  
한림대학교 의과대학 구강악안면외과학교실  
한림대학교 임상치의학대학원  
한림대학교 임상치의학연구소

Stability evaluation of Yang's keyhole plate:New fixation sysetm for treatment of Mandible fracture  
Kyeong-Jun Cheon\*, Ju-Won Kim, Byoung-Eun Yang  
Div. of Oral and Maxillofacial Surgery, Hallym University College of Medicine  
Graduate School of Clinical Dentistry, Hallym University  
Institute of Clinical Dentistry, Hallym University

O35 (E-4) Le fort I 골절 후 발생한 비루관 폐쇄증 및 눈물석  
10:12~10:21 구정귀<sup>1</sup>, 윤필영<sup>2</sup>, 김영균<sup>2</sup>, 김지홍<sup>3</sup>  
1 구강악안면외과, 국군수도병원  
2 구강악안면외과, 분당서울대학교병원  
3 안과, 국군수도병원

Nasolacrimal duct obstruction and dacryolithiasis after le fort I fracture  
Jeong-Kui Ku<sup>1</sup>, Pil-Young Yun<sup>2</sup>, Young-Kyun Kim<sup>2</sup>, Ji Hong Kim<sup>3</sup>  
1 Department of Oral and Maxillofacial Surgery, Section of Dentistry, Armed Forces Capital Hospital, Seongnam, Korea  
2 Department of Oral and Maxillofacial Surgery, Section of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea  
3 Department of ophthalmology, Armed Forces Capital Hospital, Seongnam, Korea

O36 (E-5) 관골상악골복합체 골절의 술후 안정성에 대한 후향적 연구  
10:21~10:30 김성범\*, 조진용, 류재영  
가천대 길병원 구강악안면외과

Retrospective Study about the Postoperative Stability of Zygomaticomaxillary Complex Fracture

Sung-beom Kim \*, Jin-yong Cho, Jaeyoung Ryu  
*Department of Oral & Maxillofacial Surgery, Gachon University Gil Medical Center*

- O37 (E-6) 초음파를 이용하여 측정된 관절낭 폭과 턱관절 통증과의 관계  
10:30~10:39  
오드후 미치드게렐\*, 김지희, 박정현, 김진우, 김선종  
*이화여자대학교 의료원 구강악안면외과*

Can Ultrasonography Assessment of Capsular Width Determine Temporomandibular Joint Pain?

Michidgerel Odkhuu\*, Ji-Hoi Kim, Jung-Hyun Park, Jin-Woo Kim, Sun-Jong Kim  
*Department of Oral and Maxillofacial Surgery, Ewha Womans University Medical Center, Seoul, Korea*

- O38 (E-7) 흡수성 Mitek 을 이용한 턱관절 원판 재위치술의 수술 결과 보고  
10:39~10:48  
이동훈<sup>1</sup>\*, 이부규<sup>1</sup>  
*울산대학교 의과대학 구강악안면외과 서울아산병원*

Surgical results of the absorbable Mitek anchor for TMJ disk repositioning technique

Dong-Hun Lee<sup>1</sup>\*, Bu-KyuLee<sup>1</sup>  
*Department of Oral and Maxillofacial Surgery, College of Medicine, University of Ulsan, Asan Medical Center, Seoul*

- O39 (E-8) 하악골 골절이 동반되지 않은 두경부 외상 환자에서의 턱관절질환 : 관절강 세정술을 통한 치료효과에 대한 연구  
10:48~10:57

박주영\*  
*서울대학교치과병원 구강악안면외과학교실*

Efficacy of arthrocentesis and lavage for treatment of TMJ post traumatic arthritis without mandible fractures

Joo-Young Park\*  
*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital*

- O40 (E-9) 보톡스를 이용한 턱관절 환자의 치료효과  
10:57~11:06  
홍성욱  
*가톨릭관동대학교 국제성모병원 구강악안면외과 (치과)*

Effect of botox in TMJ patients

Sung ok Hong  
*Catholic Kwandong University International St. Mary's Hospital*

## 11월 2일(Sat) 회의실7 Deformity

- O41 (F-1) 저작근에 보툴리눔톡신 투여 후 비스포스포네이트의 적용이 안면비대칭에 미치는 영향  
09:45~09:54  
김대훈, 김재영, 박광호, 허중기  
*연세대학교 치과대학 구강악안면외과학교실(강남세브란스병원)*

Effect of bisphosphonate on facial asymmetry in osteopenia-induced rats by botulinum toxin A injection on masticatory muscle

Dae-Hoon KIM, Jae-Young KIM, Kwang-Ho Park, Jong-Ki HUH  
*Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry, Seoul, Korea*

- O42 (F-2) 09:54~10:03  
마이너, 마이크로, 미니-마이크로형태의 구순열 치료에 사용된 Fisher법  
박병호, 안강민  
울산대학교 의과대학 서울아산병원 구강악안면외과  
Fisher methods for minor-form, microform and mini-microform cleft lip  
Byungho Park, Kang-Min Ahn  
Department of oral and maxillofacial surgery, College of medicine, University of Ulsan, Asan medical center
- O43 (F-3) 10:03~10:12  
선천성 안면기형, 신드롬 환자의 악교정 수술에 대한 연구  
윤민근, 김창수, 팽준영, 안재명  
삼성서울병원 구강악안면외과  
Orthognathic surgery for the patients with congenital facial deformities and syndrome: Case study  
Min-Geun Yoon, Chang-Soo Kim, Jun-Young Paeng, Jae-Myung Ahn  
Department of Oral and Maxillofacial surgery, Samsung Medical Center, Sungkyunkwan University school of Medicine.
- O44 (F-4) 10:12~10:21  
폐쇄성 수면 무호흡과 중증 코골이 환자의 수술적 치료에 대한 임상연구  
장재호 최진영  
서울대학교 치의학대학원 구강악안면외과학교실  
Clinical Study of Surgical Treatment of Severe snoring and Obstructive Sleep Apnea  
Jaeho Jang, Jin-young Choi  
Department of Oral & Maxillofacial Surgery, Seoul National University School of dentistry, Seoul, Korea
- O45 (F-5) 10:21~10:30  
얼굴 비대칭에서 편위 및 비편위측 하악골 과두의 구조-형태 비교 연구  
신승우<sup>1</sup>, 문주원<sup>2</sup>, 탁혜진<sup>2</sup>, 이상휘<sup>1</sup>  
1) 연세대학교 치과대학 구강악안면외과학교실  
2) 연세대학교 치과대학 구강과학연구소  
Morphological and structural comparison of deviated and non-deviated condylar head in facial asymmetry  
Seung-Woo Shin<sup>1</sup>, Joo-WonMoon<sup>2</sup>, Hye-JinTak<sup>2</sup>, Sang-Hwylee<sup>1</sup>  
1) Department of oral and maxillofacial surgery, College of dentistry, Yonsei university, Seoul, Korea  
2) Oral science research center, College of dentistry, Yonsei university, Seoul, Korea
- O46 (F-6) 10:30~10:39  
심미적인 상악 전치의 이마에 대한 상대적 위치를 Cone Beam CT를 이용한 Andrews 분석법 연구; 한국 여성을 위한 제안.  
이창현, 양병은, 김주원, 천경준, 조승원  
한림대 성심병원, 대한민국, 경기도 14066, 안양시, 동안구, 관평로170번길  
Esthetic maxillary incisor position relative to forehead studied by Andrews analysis with Cone Beam CT; Proposal for Korean female.  
Chang-Hyeon Lee, Byoun-Eun Yang, Ju-Won Kim, Kyeong-Jun Cheon, Seung-Won Cho  
Dept. of Oral and Maxillofacial Surgery, Sacred Heart Hospital, Hallym University, Anyang 14068, Republic of Korea
- O47 (F-7) 10:39~10:48  
기도 폐쇄를 보이는 Pierre Robin Sequence 환자의 외과적 치료 치험례  
강효선, 한정준, 정승곤, 국민석, 오희균, 박홍주  
전남대학교 치의학전문대학원 구강악안면외과학교실, 전남대학교 치의학연구소  
Surgical Treatment of Pierre Robin Sequence Patients with Airway Obstruction: A case report

Hyo-Sun Kang\*, Jeong Joon Han, Seunggon Jung, Min-Suk Kook, Hee-Kyun Oh,  
Hong-Ju Park

*Department of Oral and Maxillofacial Surgery, School of Dentistry, Dental Science Research Institute, Chonnam National University*

O48 (F-8)  
10:48~10:57

선수술 환자에서 근심 골편 전위 교정을 위한 internal fixation의 조기 제거  
시슈한\*, 정승곤, 한정준, 국민석, 박홍주, 오희균

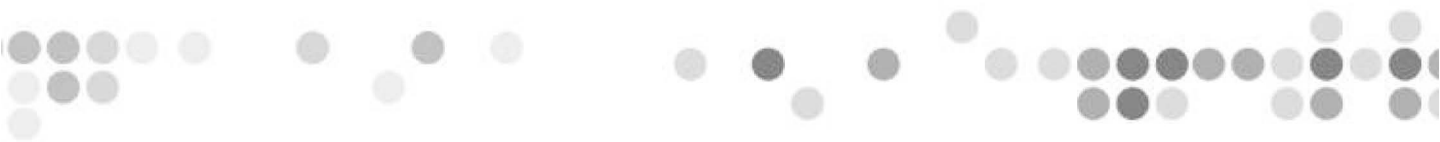
*전남대학교 치의학전문대학원,  
구강악안면외과학교실, 전남대학교 치의학연구소*

Early removal of internal fixation for correction of proximal segment  
displacement in surgery-first orthognathic patients

Shuhan Shi\*, DDS, MSD, Seunggon Jung, DDS, PhD, Jeong-Jun Han, DDS, PhD,  
Min-Seok Kook, DDS, PhD, Hong-Ju Park, DDS, PhD, Hee-Kyun Oh, DDS, PhD

*Department of Oral and Maxillofacial Surgery, School of Dentistry, Dental Science Research Institute, Chonnam National University, Gwangju, Korea*





The 58th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

# Poster Presentation



제58차  
대한악안면성형재건외과학회  
종합학술대회 및 정기총회

Part I 포스터 초록(Tumor & reconstruction)

- P I -01      구강 내에서의 IgG4연관 질환  
강동철\*, 임대호, 고승오, 백진아  
전북대학교 치의학전문대학원 구강악안면외과  
Analysis of IntraoralIgG4relateddiseases  
D. C. Kang\*, D. H. Leem, S. O. Ko, J. A. Baek  
Department of Oral and Maxillofacial Surgery, School of dentistry, Chun Buk National University
- P I -02      기저세포모반증후군과 관련된 다발성 치성 각화낭 환자의 치험례  
고성혁\*, 정연우, 한정준, 국민석, 박홍주, 오희균, 정승곤  
전남대학교치의학전문대학원 구강악안면외과학교실  
Multiple Odontogenic Keratocysts associated with Nevroid Basal Cell Carcinoma Syndrome : Case Reports  
Sung-Hyuk Koh\*, Yeon-Woo Jeong, Jeong Joon Han, Min-Suk Kook, Hong-Ju Park, Hee-Kyun Oh, Seunggon Jung  
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University
- P I -03      구강악안면영역에서 발생한 악성림프종의 후향적 연구  
김근환, 권대근, 김진욱, 이성탁, 장성백, 최소영  
경북대학교 치과대학 구강악안면외과학교실  
Malignant lymphoma in oromaxillofacial area : a retrospective study  
Kim Keun-Hwan, Kwon Tae-Guen, Kim Jin-Wook, Lee Seong-Tak, Jang Seong-Bak, Choi So-Young  
Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea
- P I -04      구개에 발생한 가성림프종: 증례보고  
김민규\*, 이재훈, 김철환, 한세진, 김문영, 박성민, 김지관, 이민우  
단국대학교 치과병원 구강악안면외과  
Pseudolymphoma located in the palate: a case report  
Kim Min-gyu\*, Lee Jae-hoon, Kim Chul-hwan, Han Se-jin, Kim Moon-young, Park Sung-min, Kim Ji-kwan, Lee Min-woo  
Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Dankook University
- P I -05      환자 맞춤형 3-D 출력 흡수성 비계를 이용한 안면 비대칭의 교정  
김민근<sup>1</sup>\*, 김성곤<sup>1</sup>, 권광준<sup>1</sup>, 박영욱<sup>1</sup>  
<sup>1</sup> 강릉원주대학교 치과대학 구강악안면외과  
Correction of facial asymmetry using Patient-specific 3D-printed Biodegradable Scaffolds  
Min-Keun Kim<sup>1</sup>\*,Seong-GonKim<sup>1</sup>,Kwang-JunKwon,Young-WookPark  
<sup>1</sup> Department of Oral and Maxillofacial Surgery, College of Dentistry, Gangneung-Wonju National University, Gangneung, Korea
- P I -06      혀 측면에 발생한 혈관내 유두모양 내피세포 증식증  
김병수<sup>1</sup>,김봉철<sup>1</sup>, 이준<sup>1</sup>, 임헌준<sup>1</sup>, 윤정훈<sup>2</sup>  
<sup>1</sup> 원광대학교 대전치과병원 구강악안면외과  
<sup>2</sup> 원광대학교 대전치과병원 구강병리과



Intravascular Papillary Endothelial Hyperplasia (Masson's Tumor) of the Left Tongue

Byung Su Kim<sup>\*1</sup>, Bong Chul Kim<sup>1</sup>, JunLee<sup>1</sup>, HunJunLim<sup>1</sup>, JungHoonYoon<sup>2</sup>

*1 Dept. of Oral and maxillofacial surgery, Daejeon Dental Hospital, College of Dentistry, Wonkwang University*

*2 Department of Oral and Maxillofacial Pathology, Daejeon Dental Hospital, College of Dentistry, Wonkwang University*

PI-07 악골에 발생한 범랑모세포종에 대한 감압술 적용 후의 골밀도 변화와 종양 크기 변화: 연속환자증례와 문헌연구

하성호, 김수민\*, 전재호, 명훈

*서울대학교치과병원 구강악안면외과*

Changes in Bone Density and Tumor Size after Decompression of Ameloblastoma of Jaw Bone: Case Series and Literature Review

Sung-Ho Ha, Sumin Kim\*, Jae-ho Jeon, Hoon Myoung

*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Seoul, Korea*

PI-08 로봇을 이용한 이하선 수술 : 증례보고

김영관<sup>1</sup>, 박지호<sup>1</sup>, 차인호<sup>1</sup>, 김형준<sup>1</sup>, 남용<sup>1</sup>, 고윤우<sup>2</sup>, 김동욱<sup>1</sup>

*1 연세대학교 치과대학병원 구강악안면외과학교실*

*2 연세대학교 신촌 세브란스 병원, 이비인후과학교실*

Robot-assisted parotid surgeries : a case series

Young Kwan

Kim<sup>1</sup>, JihoPark<sup>1</sup>, In-HoCha<sup>1</sup>, HyungJunKim<sup>1</sup>, WoongNam<sup>1</sup>, YoonWooKoh<sup>2</sup>, DongWookKim<sup>1</sup>

*1 Department of Oral and Maxillofacial Surgery, Yonsei University, College of Dentistry, Seoul, Korea*

*2 Department of Otorhinolaryngology, Yonsei University, College of Medicine, Seoul, Korea*

PI-09 급성골수성백혈병과 연관되어 발생한 노마병 (Noma, Orofacial gangrene) - 증례보고

박지호, 남용, 김형준, 차인호, 김동욱

*연세대학교 치과대학 구강악안면외과학교실*

Noma disease (Cancrum oris, Orofacial gangrene) in a acute myeloid leukemia patient - a case report

Jiho Park, Woong Nam, Hyung Jun Kim, In-Ho Cha, Dongwook Kim

*Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea*

PI-10 이하선에 발생한 와르틴 종양의 두 증례

박현준, 박관수, 윤규호, 박재안

*인제대학교 상계백병원 구강악안면외과*

Warthin's tumor of the parotid gland : Report of two cases

Hyun-Jun Park, Kwan-Soo Park, Kyu-Ho Yoon, Jae-An Park

*Dept. of Oral and Maxillofacial surgery, Inje University Sanggye Paik Hospital*

PI-11 요측전완유리피판 공여부위의 전층 또는 부분층 피부이식 후 인접조직과의 유사성 비교

서주연, 장성백, 이성탁, 최소영, 권대근, 김진욱

*경북대학교 치과대학 구강악안면외과학교실*

The Comparison of Similarities with

AdjacenttissuesafterFullorSplitThicknessSkinGraftsofRadialForearmsitewhereusedfreeflap

Ju-Yeon Seo, Sung-Baek Jang, Sung-Tak Lee, So-Young Choi, Tae-Geon Kwon,  
Jin-Wook Kim  
*Dept. of Oral & Maxillofacial Surgery, School of Dentistry, Kyungpook National University, Daegu, Korea*

PI-12 단방성 범랑모세포종의 보존적 치험례: 증례보고

<sup>1</sup>현창림, <sup>2</sup>송지영  
*1 제주대학교 의학전문 대학원 병리학 교실*  
*2 제주대학교 의학전문 대학원 치과학 교실*

Conservative therapy of extensive unicystic ameloblastoma: a case report  
Chang Lim Hyun<sup>1</sup>, Ji-Young Song<sup>2</sup>

*1 Department of Pathology, Jeju National University Hospital, Jeju National University College of Medicine and Graduate School of Medicine, Jeju, Republic of Korea*  
*2 Department of Oral and Maxillofacial Surgery, School of Medicine, Jeju National University, Jeju, Republic of Korea*

PI-13 하악골 부분 결손 치료를 위한 Pre-Bent Reconstruction plate의 설측 적용

신종석\*, 이백수, 권용대, 최병준, 오주영, 정준호, 황보연, 이정우  
*경희대학교 치의학전문대학원 구강악안면외과학교실*

Lingual Application of Pre-Bent Reconstruction plate for Segmental Mandibular Defect

Jong-Seok Shin\*, Baek-Soo Lee, Yong-Dae Kwon, Byung-Joon Choi, Joo-Young Ohe, Jun-Ho Jung, Bo-Yeon Hwang, Jung-Woo Lee\*  
*Dept. of Oral & Maxillofacial surgery*  
*School of Dentistry, Kyung Hee University*

PI-14 치성점액종 수술 이후 생긴 하악골 결손부의 골수유래 줄기세포를 이용한 재건

신현서\*<sup>1</sup>, 임헌준<sup>1</sup>, 김봉철<sup>1</sup>, 이준<sup>1,2</sup>  
*1 원광대학교 대전치과병원 구강악안면외과*  
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Reconstruction of Mandibular Defects with Bone Marrow-derived Stem Cells After Surgical Management of Odontogenic Myxoma

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PI-15 구강 내 누공 및 악성결손부위 재건을 위한 험부 지방 피판의 사용

양재영\*, 최나래, 송재민, 이재열, 황대석, 김용덕, 신상훈, 김옥규  
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The Use of the Buccal Fat Pad for Reconstruction of Oroantral fistula and malignant defects

Jae-Young Yang\*, Na-rae Choi, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Sang Hun Shin, Uk-Kyu Kim  
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PI-16 골이식을 동반한 임플란트 식립 후 우측 상악동에 발생한 술 후 낭종에 관한 증례보고

양지호\*<sup>1</sup>, 임헌준<sup>1</sup>, 김봉철<sup>1</sup>, 이준<sup>1,2</sup>  
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Case report of postoperative maxillary cyst in the right maxillary sinus after

implant placement with bone graft

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하악골에 발생한 평활근육종 : 증례 보고

윤민영\*, 남웅

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Leiomyosarcoma of Mandible : A rare case report

Min Yeong Youn\*, Woong Nam

Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea

PI-18

구강편평상피세포암 조기 진단을 위한 호기가스 분석

이민선, 이종호

서울대학교치과병원 중개임상시험지원센터,

서울대학교치과병원 구강악안면외과

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구강 편평 세포 암종으로부터 유래된 섬유육종 : 증례보고

강병훈\*, 강효선, 최송제, 한정준, 정승곤, 국민석, 오희균, 박홍주

전남대학교 치의학전문대학원,

구강악안면외과학교실, 전남대학교 치의학연구소

Fibrosarcoma transformed from Oral Squamous Cell Carcinoma : A case report

Byoung-Hun Kang, Hyo-Sun Kang, Song-Jay Choi, Jeong Joon Han, Seunggon Jung, Min-Suk Kook, Hee-Kyun Oh, Hong-Ju Park

Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University

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구강 점막 악성 흑색종 환자에서 음압창상치료요법(NPWT)을 이용한 비골 유리 피판 공여부의 술후 치료

이주용\*, 김혜원, 박성민, 김문영, 한세진, 김철환, 이재훈

단국대학교 치과대학 구강악안면외과

Post-operative Care of the Fibula Free Flap Donor Site Using the NPWT (Negative Pressure Wound Therapy) in the Oral Mucosal Melanoma Patient.

Joo-Young Lee\*, Hye-Won Kim, Sung-Min Park, Moon-Young Kim, Se-Jin Han,

Chul-Hwan Kim, Jae-Hoon Lee

Department of Oral & Maxillofacial Surgery, College of Dentistry, Dankook University, Korea

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상악에 발생한 치성 점액섬유종의 재발 환자의 치료 증례

이준상, 최나래, 송재민, 이재열, 황대석, 김용덕, 김육규, 신상훈

부산대학교 치의학전문대학원 구강악안면외과학교실

Recurrent Odontogenic Myxofibroma of the Maxilla : Case report

Jun-Sang Lee, Han-Kyul Park, Na-Rae Choi, Jae-Min Song, Jae-Yeol Lee, Dae-Seok

Hwang, Yong-Deok Kim, Uk-Gyu Kim, Sang-Hun Shin\*

Dept. of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University

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좌측 상악에 이환된 편평세포암종 환자에서 부분 상악골 절제술 시행 후

유경협부지방을 이용한 구개점막 결손 부위의 재건 - 증례보고와 논문고찰

이준호\*, 박한걸, 최나래, 송재민, 이재열, 황대석, 김용덕, 김육규, 신상훈\*

부산대학교 치의학전문대학원 구강악안면외과학교실

Reconstruction of a palatal mucosal defect with a buccal fat pad flap after partial maxillectomy in patient with SCC - A case report and literature review

Jun-Ho Lee\*, Han-Kyul Park, Na-rae Choi, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Uk-Kyu Kim, Sang-Hun Shin\*

*Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University*

P I -23 악안면 영역 미세수술 시의 항혈전제 적용 환자에 대한 분석: meta-analysis

전민아\*, 박한결, 이재열, 황대석, 신상훈, 김옥규, 김용덕, 송재민

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Screening for anti-thrombotic drugs use during maxillofacial microsurgery: meta-analysis

Min-A Jeon\* Han-kyul Park, Jae-Yeol Lee, Dae-Seok Hwang, Sang-Hun Shin, Uk-Kyu Kim, Yong-Deok Kim, Jae-min Song

*Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University*

P I -24 심장골회선동맥피판을 이용한 재건술 후 공여부의 골절과 3D프린팅을 이용한 내부고정 : 증례 보고

조예준\*, 문성용, 오지수, 유재식, 최해인

*조선대 치의학전문대학원 구강악안면외과학교실*

Donor-site fracture after DCIA flap reconstruction and internal fixation using customized 3D printing Implants : 3 Cases Report

Ye-joon Jo\*, Seong-Young Mon, Ji-Su Oh, Jae-Seek You, Hae-In Choi

*Department of Oral and Maxillofacial Surgery, College of Dentistry, Chosun university*

P I -25 설하선에 발생한 점액표피양암종 : 증례보고

최민호\*<sup>1)</sup>, 천승우<sup>1)</sup>, 이승준<sup>1)</sup>, 이종호<sup>1)</sup>, 김창현<sup>1)</sup>, 박재역<sup>1)</sup>

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Mucoepidermoid carcinoma of sublingual gland : A Case report

Min Ho Choi\*,

<sup>1)</sup>SeungWooCheon<sup>1)</sup>, SeungJoonLee<sup>1)</sup>, Jong-HoLee<sup>1)</sup>, ChangHyenKim<sup>1)</sup>, JeUkPark<sup>1)</sup>

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P I -26 상악골에서의 골모세포종: 증례보고

최송제\*, 강병훈, 강효선, 고성혁, 심유승, 정연우, 오희균, 박홍주, 국민석, 한정준, 정승곤

*전남대학교 치의학전문대학원*

*구강악안면외과학교실, 전남대학교 치의학연구소*

Osteoblastoma on Maxilla : A Case report

Song Jay Choi\*, Byung-Hun Kang, Hyo-Sun Kang, Sung-Hyuk Koh, You Song Sim, Hee-Kyun Oh, Hong-Ju Park, Min-Suk Kook, Jeong Joon Han, Seunggon Jung

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P I -27 16개월 환아에서 발생한 랑게르한스 세포 조직구증: 증례보고

홍유진, 김호준, 이성탁, 김진욱, 신희인, 최소영

*경북대학교 치과대학 구강악안면외과학교실*

Langerhans cell histiocytosis in a 16-month-old child: Case Report and review of clinical & histopathological features

Yoo Jin Hong, Ho-Joon Kim, Sung-Tak Lee, Jin-Wook Kim, Hong-In Shin,  
So-Young Choi  
*Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic  
of Korea*

P I -28 A Case Report : Recurred, Multiple Progression of Cavernous Sinus  
Meningioma

이승민, 박상윤, 이종호  
*서울대학교 치의학대학원 구강악안면외과학교실*

Meningioma : Case Report and Review of Literature

Seung Min Lee, Sang Yoon Park, Jong Ho Lee  
*Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University, Seoul*

**Part II 포스터 초록(Trauma)**

P II -01 하악 과두골절의 치료 및 예후

김기태, 박원중, 최문기, 권경환, 최은주  
*원광대학교 치과대학 구강악안면외과, 원광치의학연구소*

Treatment and prognosis of mandibular condyle fracture.

Gi Tae Kim\*, Won Jong Park , Moon Gi Choi, Kyung-hwan Kwon, Eun Joo Choi  
*Department of Oral and Maxillofacial Surgery, College of Dentistry, Wonkwang University,  
KoreaWonkwangDentalResearchInstitute,Korea*

P II -02 성형외과에서의 관혈적 정복술 후 부정 유합된 하악골의 골절단술을 이용한 치료 증례

김태용\*, 김좌영  
*한림대학교강남성심병원*

A Case Report of treatment of malunioned mandibular bone after open  
reduction internal fixation in plastic surgery.

Kim Tae Yong\*, Kim Jwa Young  
*Hallym University Kangnam Sacred Heart Hospital*

P II -03 증례보고: 소아 하악 과두골절 환자의 보존적 치료

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*단국대학교 치과대학 구강악안면외과학 교실*

Conservative Treatment of Pediatric Condylar Fractures: Case Reports

Tae Ho KIM, Joo Yong LEE, Young Tae JEON, Sung min PARK, Moon Young  
KIM, Se Jin HAN, Chul Hwan KIM, Jae Hoon LEE  
*Dept. of Oral and maxillofacial surgery, College of Dentistry, Dankook University*

P II -04 하악 과두골절의 보존적 치료와 그 예후에 관한 증례보고

박준상, 하현빈, 오현준, 서병무  
*서울대학교 치과병원 구강악안면외과학교실*

Case study: Surgical & Non-surgical Treatment of Mandibular Condyle  
Fracture

Jun Sang Park, Hyun-Bin Ha, Hyun Jun Oh, Byung-Moo Seo  
*Department of Oral & Maxillofacial Surgery, Seoul National University Dental Hospital*

- P II -05 스포츠 외상에 의한 악안면부 손상의 최근 5년간의 후향적 연구  
박한결\*, 송재민, 이재열, 황대석, 김용덕, 신상훈, 김옥규  
부산대학교 치의학전문대학원 구강악안면외과학 교실  
Retrospective study of the last 5 years of maxillofacial injuries by sports trauma  
Han-kyul PARK\*, Jae-min SONG, Jae-yeol LEE, Dae-seok HWANG, Yong-deok KIM, Sang-hun SHIN, Uk-kyu KIM  
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- P II -06 최근 3년간 원광대학교 치과대학병원 구강악안면외과에 내원한 외상 환자들의 임상적 연구  
신경수\*, 김기태, 박원종, 최은주, 최문기, 권경환  
원광대학교 치과대학 구강악안면외과학 교실  
원광치의학연구소  
Clinical study of trauma patients of oral and maxillofacial surgery visited Wonkwang University Iksan Dental Hospital in the last 3 years  
Kyung Su Shin\*, GiTaeKim, WonJongPark, EunJooChoi, MoonGiChoi, Kyung-hwanKwon  
Department of Oral and Macillofacial Surgery, ColleGe of Dentistry, Wonkwang University.  
WonkwangDentalResearchInstitute.
- P II -07 하악 과두골절 환자에서 악관절의 형태 변화에 대한 3차원 분석  
심유승\*, 최승제, 정승곤, 국민석, 박홍주, 오희균, 한정준  
전남대학교 치의학전문대학원  
구강악안면외과학교실, 전남대학교 치의학연구소  
Three-dimensional analysis of bone remodeling after condylar fracture of the mandible  
You Song Sim\*, Song-Jay Choi, Seunggon Jung, Min-Suk Kook, Hong-Ju Park, Hee-Kyun Oh, Jeong Joon Han  
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University
- P II -08 증례보고 : 좌측 악하간극으로 전위된 교정용 미니스크류  
이가형\*<sup>1</sup>, 김봉철<sup>1</sup>, 이준<sup>1,2</sup>, 임현준<sup>1</sup>  
1 원광대학교 대전치과병원 구강악안면외과  
2 원광 골재생 연구소  
Case report : Displacement of orthodontic screw into the left submandibular space  
Ga Hyung Lee\*<sup>1</sup>, BongChulKim<sup>1</sup>, JunLee<sup>1,2</sup>, HunJunLim<sup>1</sup>  
1 Dept. of Oral and maxillofacial surgery, Daejeon Dental Hospital, College of Dentistry, Wonkwang University  
2 Wonkwang Bone Regeneration Research Institute, Wonkwang University
- P II -09 안와저골절에서 조영제와 마이크로쏘우를 이용한 간단하고 효과적인 풍선확장술  
이상민\*<sup>1</sup>, 임대호<sup>1</sup>, 고승오<sup>1</sup>, 백진아<sup>1</sup>  
1 전북대학교 치과대학 구강악안면외과학교실  
Simple and effective balloon technique with contrast agent and micro saw in infraorbital fracture  
Sang min Lee\*<sup>1</sup>, Dae Ho Leem<sup>1</sup>, Seung-O Ko<sup>1</sup>, Jin-A Baek<sup>1</sup>  
1. Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonbuk National University, Jeonju, Korea

- P III-01      편측저작이 턱관절질환에 미치는 영향  
 고경수 \*, 소병규, 최현우, Puneet Wadhwa, 권예진, 김충남, 윤태승, 임호경, 이의석  
 고려대학교 부속 구로병원 구강악안면외과  
 Effect of Unilateral Occlusion on Temporomandibular Disease  
 Kyeong-Soo Ko \*, Byung-Kyu So, Hyun-Woo Choi, Punnet Wadhwa, Yeh-Jin Kwon, Choong-Nam Kim, Youn Tae Seung, Ho-Kyoung Lim, Eui-Suk Lee  
 Department of Oral and Maxillofacial Surgery, Guro Hospital, Korea University
- P III-02      턱관절 장애 시 보존적 치료의 증례 보고 및 문헌 고찰  
 김여갑<sup>1</sup>, 이지혜<sup>2</sup>  
 경희대학교 치과대학 명예교수, 천안충무병원 치과 구강악안면외과 과장<sup>1</sup>  
 서울치과의원 대표원장, 영서의료재단 이사장<sup>2</sup>  
 Conservative management of the temporomandibular disorders  
 Yeo Gab Kim<sup>1</sup>, DDS, MSD, PhD, Jee Hyea Lee<sup>2</sup>, DDS, MSD  
 Honorary Professor: Kyung Hee University, College of Dentistry  
 Director: Cheonan Chungmu Hospital, Division of Oral and Maxillofacial Surgery<sup>1</sup>  
 Director: Seoul Dental Clinic, Chairman of the Board: Young Seo Medical Foundation<sup>2</sup>
- P III-03      단일 술자에 의해 행해진 턱관절 세정술의 치료 효과에 대한 후향적 연구  
 김진우\*, 조진용, 김성범, 류재영  
 가천대 길병원 구강악안면외과  
 Retrospective Study about Treatment Effect of Temporomandibular Joint Arthrocentesis performed by a Single Surgeon  
 Jin-woo Kim\*, Jin-yong Cho, Sung-beom Kim, Jaeyoung Ryu  
 Department of Oral & Maxillofacial Surgery, Gachon University Gil Medical Center
- P III-04      Gap arthroplasty 환자에서의 수술 전후의 결과에 대한 후향적 연구  
 박상윤, 강상규, 채연수, 이승민, 이종호  
 서울대학교 치과병원 구강악안면외과  
 A retrospective study of the results before and after surgery in patients with Gap arthroplasty  
 Sang-Yoon Park, Sang-kyu Kang, Yeon-Su Chae, Seung-Min Lee, Jong-Ho Lee  
 Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University
- P III-05      3차원적 CT 체적분석을 통한 악관절 파절 전후 체적 변화 연구  
 소병규\*, Puneet Wadhwa, 최현우, 고경수, 권예진, 김충남, 윤태승, 임호경, 이의석  
 고려대학교 부속 구로병원 구강악안면외과  
 Change of condylar head after Temporomandibular joint Fracture based on computed tomography Volumetric analysis  
 Byung-Kyu So\*, Punnet Wadhwa, Hyun-Woo Choi, Kyung-Soo Goh, Yeh-Jin Kwon, Choong-Nam Kim, Tae-Seung Yoon, Ho-Kyoung Lim, Eui-Suk Lee  
 Department of Oral and Maxillofacial Surgery, Guro Hospital, Korea University
- P III-06      하악 과두에 발생한 골연골종의 수술적 치료 방법과 수술 후 교합의 회복에 대한 고찰  
 김민식\*, 유한솔, 김보라, 허종기

연세대학교 치과대학 구강악안면외과학교실I(강남세브란스병원)

Review of surgical treatments and post-operative occlusion re-establishment of osteochondroma on mandibular condyle

Minsik KIM\*, Han-Sol YOU, Bola KIM, Jong-Ki HUH

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P III-07 17 $\beta$ -estradiol 결핍이 턱관절에 미치는 영향의 나이에 따른 차이

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2 서울대학교치과병원, 턱교정수술센터

Age-dependent differences in the effect of 17 $\beta$ -estradiol deficiency on the temporomandibular joint

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1 Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University

2 Orthognathic Surgery Center, Seoul National University Dental Hospital

P III-08 측두하악관절부위를 포함한 두개저 거대세포 종양 환자의 종양 제거와 동시에 시행한 인공턱관절 전치환술 : 증례보고

이소연, 용해성, 최효원, 허종기

연세대학교 치과대학 구강악안면외과학교실I

(강남세브란스병원)

Total Joint Replacement simultaneously with tumor removal in Patients with Giant cell tumor skull basal giant cell tumor including Temporomandibular Joint : a case report

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## Part IV 포스터 초록(Orthognathic surgery)

P IV-01 Malignant Hyperthermia during Orthognathic Surgery for Patient with Klinefelter Syndrome: Case Report.

Abdullah Zaki

ALNAHASH<sup>a)</sup>, SeungjoonLEE<sup>a)</sup>, SeungwooCHEON<sup>a)</sup>, MinhoCHOI<sup>a)</sup>, JonghoLEE<sup>a)</sup>, Je-UkPA RK<sup>a)</sup>, Chang-HyenKIM<sup>a)</sup>

a) Department of Oral and Maxillofacial Surgery, Seoul St.Mary's Hospital, The Catholic University of Korea

P IV-02 Accuracy of a Le Fort I maxillary osteotomy in Class II patient treated 3D planned surgery.

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1 Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University

2 Department of Oral and Maxillofacial Surgery, Dammam Medical Complex, Ministry of Health in Saudi Arabia

P IV-03 Three-dimensional study on the relationship between lip cant and hard tissue change after two-jaw surgery.



Hiroki

Tsurushima<sup>1</sup>, Manabu Habu<sup>2</sup>, Daigo Yoshiga<sup>1</sup>, Taishi Ohtani<sup>1</sup>, Osamu Sakaguchi<sup>1</sup>, Jumpei Tanaka<sup>1</sup>,  
Osamu Takahashi<sup>1</sup>, Shinya Kokuryo<sup>1</sup>, Kazuhiro Tominaga<sup>2</sup>, Izumi Yoshioka<sup>1</sup>

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*2 Division of Oral and Maxillofacial Surgery, Department of Science of Physical Functions, Faculty of Dentistry, Kyushu Dental University*

P IV-04 Classification of 3-dimensional mandibular deviation using cluster analysis in patients with mandibular prognathism.

Kazuaki Osawa<sup>1</sup>, Jun Nihara<sup>1</sup>, Hideyoshi Nishiyama<sup>2</sup>, Kojiro Takahashi<sup>1</sup>, Ayako Honda<sup>1</sup>, Chihiro Atarashi<sup>1</sup>, Ritsuo Takagi<sup>3</sup>, Tadaharu Kobayashi<sup>4</sup>, Isao Saito<sup>1</sup>.

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*3 Division of Maxillofacial Surgery, Niigata University Graduate School of Medical and Dental Sciences*

*4 Division of Reconstructive Surgery, Niigata University Graduate School of Medical and Dental Sciences*

P IV-05 Three-dimensional evaluation of nasal morphology in a patient undergone subspinal Le Fort I osteotomy

Yuichiro OTSUKA, Naoto SUDA

*Division of Orthodontics,*

*Dept. of Human Development & Fostering,*

*Meikai University School of Dentistry, Saitama, Japan*

P IV-06 Assessment of risk factors for progressive condylar resorption after mandibular advancement

Naoaki

Saito<sup>1</sup>, Hasebe Daichi<sup>1</sup>, Daisuke Saito<sup>1</sup>, Hidenobu Sakuma<sup>1</sup>, Daisuke Suda<sup>1</sup>, Kanae Niimi<sup>1</sup>, Wataru K atagiri<sup>1</sup>, Isao Saito<sup>2</sup>, Tadaharu Kobayashi<sup>1</sup>

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P IV-07 Comparing Surgical Outcomes of Three Dimensional Surgical Virtual Planning and Splints Fabricating by Computer Aided Design/Computer Aided Manufacturing in Orthognathic Surgery

Pei-Jung Chen<sup>1</sup>, Han-Jen Hsu<sup>2</sup>

*1 Resident, Division of Oral and Maxillofacial Surgery, Kaohsiung Medical University Hospital, DDS*

*2 Visiting staff, Division of Oral and Maxillofacial Surgery, Kaohsiung Medical University Hospital, DDS, PhD*

P IV-08 약교정 수술 후 TMD 임상증상의 변화

김성룡<sup>1</sup>, 이부규<sup>1\*</sup>

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*2 서울아산병원 구강악안면외과*

The change of TMD clinical symptoms after orthognathic surgery

Seong Ryoung Kim<sup>1</sup>, Bu-Kyu Lee<sup>1\*</sup>

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*2 Department of Oral and Maxillofacial surgery, Asan Medical Center*

P IV-09 약교정 수술을 받은 환자의 특별성 과두흡수 : 증례연구

김솔아, 최나래, 송재민, 이재열, 황대석, 신상훈, 김육규, 김용덕  
부산대학교 치의학전문대학원 구강악안면외과학교실

Idiopathic condylar resorption after several orthognathic surgery : A case report

Sol A Kim, Na-rae Choi, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Sang-Hun Shin, Uk-Kyu Kim, Yong-Deok Kim  
Dept. of Oral and Maxillofacial surgery, School of Dentistry, Pusan National University

P IV-10 구내 르포씨 3형 골절단술을 이용한 중안면부 함몰 개선 - 골이식과 골신장기를 이용한 치험례

정필훈, 김영우\*, 이주영  
서울대학교 치과병원 구강악안면외과

Correction of Midfacial Deficiency using Intraoral Le Fort III Osteotomy - Cases with Bone graft and Distraction Osteogenesis

Pil-hoon Choung, Yeong Woo Kim\*, Ju-young Lee  
Department of Oral and Maxillofacial Surgery, Seoul National University

P IV-11 측두하악관절의 퇴행성 흡수가 진행된 수면무호흡 환자에 있어서 3D 가상수술과 CAD/CAM 기술을 이용한 동시적 양측성 맞춤형 인공턱관절재건술 및 양악전진술

김태섭<sup>1</sup>, 백승학<sup>2</sup>, 최진영<sup>1</sup>  
1 서울대학교 치과병원 구강악안면외과  
2 서울대학교 치과병원 치과교정과

Simultaneous bilateral temporomandibular joint reconstruction and maxillomandibular advancement for temporomandibular joint degeneration and obstructive sleep apnea using 3D virtual surgery and CAD/CAM technology

Tae Seup Kim<sup>1</sup>, Seung-Hak Baek<sup>2</sup>, Jin-Young Choi<sup>1</sup>  
1 Department of Oral and Maxillofacial Surgery, Seoul National University Dental hospital, Seoul, Korea  
2 Department of Orthodontics, Seoul National University Dental Hospital, Seoul, Korea

P IV-12 3차원 가상 모델 수술 및 CAD/CAM으로 제작한 수술용 장치와 맞춤형제작형 금속판을 이용한 악교정 수술의 정확성에 대한 예비연구

김현영\*, 장동규, 박영룡, 박정현, 김진우, 김선중  
이화여자대학교 의료원 구강악안면외과

An accuracy of orthognathic surgery using CASS, 3-dimensional surgical guides, and customized osteosynthesis plates : A pilot study

Heon-young Kim, DK Jang, YL Park, JH Park, JW Kim, SJ Kim  
Department of Oral and Maxillofacial Surgery, Ewha Womans University Medical Center

P IV-13 하악에서 IVRO를 시행한 환자의 술전 및 술후 악관절 공간 변화의 평가

김현민\*, 김준영, 정휘동, 정영수, 박진후  
연세대학교 치과대학 구강악안면외과학교실

Evaluation of Temporomandibular Joint space changes in patient with IVRO in the Mandible

Hyoumin Kim, Jun-Young Kim, Hwi-Dong Jung, Young-Soo Jung, Jin Hoo Park  
Department of Oral and Maxillofacial surgery, College of Dentistry, Yonsei University, Seoul, Korea

P IV-14 Angle class II malocclusion 환자의 악교정 수술 후 재발에 영향을 미치는

요인들에 대한 재고찰

박시연\*, 최나래, 송재민, 이재열, 황대석, 신상훈, 김옥규, 김용덕  
부산대학교 치의학전문대학원 구강악안면외과학교실

Review of Factors Contributing Skeletal Relapse after Orthognathic Surgery in Angle Class II Malocclusion Patients

Si-Yeon Park\*, Na-Rae Choi, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Sang-Hun Shin, Uk-Kyu Kim, Yong-Deok Kim  
Dept. of Oral and Maxillofacial surgery, School of Dentistry, Pusan National University

- P IV-15 비대칭 하악 전돌 치료를 위한 구내 하악골 상행지 수직골 절단술을 동반한 편측 하악골 상행지 시상분할 골절단술에서의 하악과두 위치변화

박준, 김정한, 김복주, 황희성, 김철훈  
동아대학교병원 구강악안면외과

osteotomy for the treatment of asymmetric mandible with prognathism

Jun Park, Jung Han Kim, Bok Joo Kim, Hee Sung Hwang, Chul Hoon Kim  
Department of Oral & Maxillofacial surgery, Department of Dentistry, Dong-A University Hospital

- P IV-16 중증의 하악과두 흡수와 하악 후퇴증을 가진 환자에서 인공관절치환술과 상하악복합체의 반시계 방향 회전을 통한 교합과 안면 심미 및 기도공간의 개선: 증례보고

오혜민, 황순정  
황순정구강악안면외과치과의원

Counterclockwise rotation of maxillomandibular complex combined with total joint replacement for the improvement of occlusion, facial aesthetics and airway space in patients with severe mandibular retrognathism and idiopathic condylar resorption: a case report

Hae Min O\*, Soon Jung Hwang  
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- P IV-17 편측성 과두 과증식에 의한 심한 안면 비대칭 환자의 수술적 치료 : 증례 보고

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강동 경희대학교 치과병원 구강악안면외과학교실

Surgical management of severe facial asymmetry as a result of unilateral condylar hyperplasia : a case report

Jaedeok Lee\*, Dong-mok Ryu, You-jin Jee, Miju Kang, Sang-pil Jung, Gwangjin Oh, Heeyeon Bae, Hyenwoo Lee  
Dept. of Oral and Maxillofacial surgery, Kyung-Hee University Dental Hospital at Gangdong

- P IV-18 악교정수술이 안면비대칭 환자의 하악골 기능 단위 변화에 미치는 영향

임기현, 이환규, 김준영, 김진근, 정영수, 정휘동  
연세대학교 치과대학 구강악안면외과학교실

Effect of Orthognathic surgery on mandibular function units in facial asymmetry patients

Kihyun Im, Hwangyu Lee, Jun-Young Kim, Jin-Guen, Kim, Young-Soo Jung, Hwi-Dong Jung  
Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea

- P IV-19 하악각 절제술 및 피질골 절제술 시행 후 발생한 급속한 골흡수 - 증례 보고 및 외과적 방지법  
장효원<sup>1</sup>, 정한울<sup>1</sup>, 최영준<sup>2</sup>  
1 중앙대학교병원 치과센터 구강악안면외과  
2 중앙대학교 의과대학 구강악안면외과  
Rapid Bone Resorption after Mandibular Angle Resection and cortical ostectomy - Report of cases and surgical prevention  
Hyo-Won Jang, Han-Wool Choung, Young-Jun Choi  
Department of Oral and Maxillofacial Surgery, Dental Center, Chung-Ang University College of medicine, Seoul, Korea
- P IV-20 골격성 3급 부정교합 환자에서 부분 혀 절제술을 동반한 악교정 수술 이후 3D-CBCT를 이용한 하악골의 안정성에 대한 연구  
정봉진\*, 이백수, 권용대, 오주영, 이정우, 정준호, 황보연, 최병준  
경희대학교 치과병원 구강악안면외과  
A stability of mandible in patients with skeletal class III malocclusion after orthognathic surgery with partial glossectomy: a three-dimensional cone-beam computed tomography study  
Bongjin Chung\*, Baeksoo Lee, Yongdae Kwon, Jooyoung Ohe, Jungwoo Lee, Junho Jung, Boyeon Hwang, Byungjoon Choi  
Dept. of Oral and Maxillofacial Surgery, Kyung Hee University Dental Hospital, Seoul, Korea
- P IV-21 악교정수술 과 함께 시행된 하악 우각부 절제술 후 우각부의 골재형성에 관한 증례 보고 및 고찰  
정한울<sup>1</sup>, 장효원<sup>1</sup>, 이의룡<sup>1</sup>, 최영준<sup>2</sup>  
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2 중앙대학교 의과대학 구강악안면외과  
Bony Re-growth After Reduction Mandibuloplasty Accompanied by Orthognathic surgery in Patients With Prominent Mandibular Angle  
Han-Wool Choung<sup>1</sup>,Hyo-Won Jang<sup>1</sup>, Ui-Lyong Lee<sup>1</sup>,Young-JunChoi<sup>2</sup>  
1 Department of Oral & Maxillofacial Surgery, Dental Center, Chung-Ang University Hospital, Seoul, Republic of Korea  
2 Department of Oral & Maxillofacial Surgery, College of Medicine, Chung-Ang University, Seoul, Republic of Korea
- P IV-22 3D 프린팅 플레이트를 이용한 교정적 치료  
조승원, 천경준, 이창현, 김주원, 양병은  
한림대학교 의과대학 구강악안면외과학 교실  
한림대학교 임상치의학 대학원  
한림대학교 임상치의학 연구소  
Orthodontic treatment using customized plates: a short term follow-up  
Seoung-Won Cho, Kyeong-Jun Cheon, Chang-Hyun Lee, Ju-Won Kim, Byoung-Eun Yang  
Div. of Oral and Maxillofacial Surgery, Hallym University College of Medicine  
GraduateSchoolofClinicalDentistry,HallymUniversity  
InstituteofClinicalDentistry,HallymUniversity
- P IV-23 3D Facial CT를 통해 살펴본 Intraoral Le Fort II / II-1 osteotomy 이후 안모 변화  
정필훈, 하성호\*

서울대학교 치과병원 구강악안면외과학교실

Comparison of Aesthetics after Intraoral Le Fort II osteotomy using 3D Facial CT

Pill-Hoon Choung, Sung-Ho Ha\*

Dept. of Oral & Maxillofacial Surgery, Seoul National University Dental Hospital.

P IV-24 하악골 비대칭 전돌환자에서 원심골편 후방골절제술을 포함한 양측성 하악지 시상골 절단술 후 하악 과두의 안정성평가

홍기은, 김정한, 김복주, 황희성, 김철훈

동아대학교병원 구강악안면외과

The evaluation of mandibular condyle stability in bilateral sagittal split ramus osteotomy combined with osteotomy of distal segment for the treatment of asymmetric mandible with prognathism

Ki Eun Hong, Jung Han Kim, Bok Joo Kim, Hee Sung Hawng, Chul Hoon Kim

Department of Oral & Maxillofacial surgery, Department of Dentistry, Dong-A University Hospital

P IV-25 악안면 비대칭 및 하악전돌을 보이는 환자에서 양측성 하악골 시상분할 골절단술 후의 과두의 위치변화 : 임상적 연구

홍인석, HAN YE, 백진아, 고승오

전북대학교 치과병원 구강악안면외과

Changes in condylar position after bilateral sagittal split ramus osteotomy in patients with asymmetrical deformity : a clinical study.

Inseok Hong, HAN YE, Jin-A Bae, Seung-O Ko

Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonbuk National University

P IV-26 턱교정수술 후 상기도 공간 변화에 대한 후향적연구

강노을\*, 민승희, 송승일\*, 이정근

아주대학교 의과대학 치과학교실 구강악안면외과

Retrospective study on change in pharyngeal airway space after orthognathic surgery

No-Eul KANG\*, Song-Hee MIN, Seung-II SONG\*, Jeong-Keun LEE

Department of Dentistry, Oral and Maxillofacial surgery, Ajou university school of Medicine

P IV-27 하악 비대칭 환자에서 하이브리드 기법으로 고정된 BSSRO 수술 후 안정성의 3차원 분석

이동훈<sup>2\*</sup>, 조상아<sup>1</sup>, 정상진<sup>1</sup>, 이수현<sup>1</sup>, 전주홍<sup>2</sup>

울산대학교 의과대학 구강악안면외과 서울아산병원

울산대학교 의과대학 치과교정과 서울아산병원

Three Dimensional analysis of Post-operative stability after BSSRO fixed with Hybrid Technique in patients with mandibular asymmetry

Dong-Hun Lee<sup>2\*</sup>, Sang-Ah Jo<sup>1</sup>,

Sang-Jin Sung<sup>1</sup>, Su-Hyun Lee<sup>1</sup>, Ju-Hong Jeon<sup>2</sup>

Department of Oral and Maxillofacial Surgery, College of Medicine, University of Ulsan, Asan Medical Center, Seoul<sup>2</sup>

Department of Orthodontics, College of Medicine, University of Ulsan, Asan Medical Center, Seoul

P IV-28 양악수술을 시행한 Skeletal Class III 환자에서 3D analysis를 통한 악골 위치 변화에 따른 upper airway의 volume 변화와 Computational fluid dynamics를

통한 fluid flows 분석

권진주\*, 이재열, 황대석, 김용덕, 신상훈, 김옥규, 송재민  
부산대학교 치의학전문대학원 구강악안면외과학교실

Computational fluid dynamics for analysis of upper airway fluid flows and 3D analysis software for volumetric changes of upper airway according to jaw position changes in skeletal Class III patients with 2-jaw surgery  
Jin-Ju Kwon\*, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim, Jae-Min Song

Dept. of Oral and Maxillofacial surgery, School of Dentistry, Pusan National University

Part V 포스터 초록(Infection)

PV-01

골수염, MRONJ 환자에서 임상 병리학적 및 약물역학적 특징

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Clinical Characteristics and Pharmacoepidemiology of Osteomyelitis, Medication-related Osteonecrosis of the Jaw

Min-Su Kang<sup>1</sup>, June-Ho Byun<sup>2</sup>, Bong-Wook Park<sup>3</sup>, Young-Hoon Kang<sup>1,2</sup>

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임플란트 주위에 발생한 약물관련 약골괴사증의 치료: 증례 보고 및 문헌 고찰

김지연\*, 송현철

가톨릭대학교 성빈센트병원 구강악안면외과

Treatment of medication-related osteonecrosis of the jaw around dental implants: Cases series and literature review

Ji-Youn Kim\*, Hyun Chul Song

Division of Oral and Maxillofacial surgery, Department of Dentistry, St. Vincent's Hospital, College of Medicine, The Catholic University of Korea

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Vacuum-Assisted Closure 장치를 이용한 심경부감염 치료 증례보고

양석환\*, 류재영

가천대 길병원 구강악안면외과

Management of Deep Neck Infection Using Vacuum-Assisted Closure Device: a Case Report

Seoghwan Yang\*, Jaeyoung Ryu

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이규훈\*, 이영철, 임이랑, 서동준, 윤나라, 오지수, 유재식, 최해인

조선대학교 치의학전문대학원 구강악안면외과

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Kyu-Hoon Lee\*, Yeong-Cheol Lee, Lee Rang Lim, Dong-Jun Seo, Na-Ra Youn, Ji-Su Oh, Jae-Seek You, Hae-In Choi

- PV-05 치성감염에 의한 뇌농양 증례보고 및 문헌고찰  
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전북대학교병원 구강악안면외과  
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Department of Dentistry & Dental Research Institute, School of Dentistry, Chonbuk-National University, Chonju, Korea
- PV-06 치과로 내원한 슬루 상악낭 58증례의 임상병리학적, 영상진단학적 지표 분석  
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경북대학교 치과대학 구강악안면외과학교실  
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Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea
- PV-07 비스포스포네이트 유래 악골괴사증 환자에서  
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A Correlation Study between anti-periodontal bacterial antibodies in serum of patients with bisphosphonate-derived osteonecrosis  
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Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University
- PV-08 감염된 치성각화낭에 의한 심경부 공간 농양 : 증례보고  
서동준\*, 문성용, 오지수, 유재식, 최해인  
조선대학교 치의학전문대학원 구강악안면외과  
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Dong-Jun Seo\*, Seong-Yong Mon, Ji-Su Oh, Jae-Seek You, Hae-In Choi  
Department of oral and maxillofacial surgery, college of dentistry, Chosun university

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*Department of dentistry, Oral & Maxillofacial Surgery, Catholic University Hospital of Daegu Daemyung-4-dong, Namgu*
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*조선대학교 치과대학 구강악안면외과학교실*  
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*Dept of Oral and maxillofacial Surgery, School of Dentistry, Chosun University*
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*조선대학교 치의학전문대학원 구강악안면외과학교실*  
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*Department of Oral and Maxillofacial Surgery, School of Dentistry, Chosun University*
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*Department of Oral and maxillofacial surgery, Cheongju Hankook hospital*
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*Hospital Department of Oral and maxillofacial surgery, Cheongju Hankook hospital*
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*국민건강보험공단 일산병원 구강악안면외과*  
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*National Health Insurance Service Ilsan Hospital , Oral & Maxillofacial surgery department*



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*이화여자대학교 부속 목동병원 구강악안면외과*  
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*Department of Oral and Maxillofacial Surgery, Ewha Womans University Mok-Dong Hospital, Seoul, Korea*
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*강동 경희대학교 치과병원 구강악안면외과학교실*  
The stability of dental implant treatment on osteoporosis patients with  
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Heeyeon Bae\*, Dong-mok Ryu, You-jin Jee, Miju Kang, Sang-pil Jung, Gwangjin  
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*Dept. of Oral and Maxillofacial surgery, Kyung-Hee University Dental Hospital at Gangdong*
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*연세대학교 원주의과대학 치과학교실  
원주세브란스기독병원 구강악안면외과*  
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*Dept. of Oral and maxillofacial surgery, Yonsei university of medicine, Wonju Severance Christian Hospital*
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양현우\* , 이천의, 최병호  
*연세대학교 원주의과대학 치과학교실  
원주세브란스기독병원 구강악안면외과*  
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*Dept. of Oral and maxillofacial surgery, Yonsei university of medicine, Wonju Severance Christian Hospital*
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*경북대학교 치과대학 구강악안면외과학교실*  
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*Dept. of Oral and Maxillofacial Surgery, School of Dentistry, Kyungpook National University, Daegu, Korea*
- P VI-13 소켓셴드테크닉과 터널테크닉을 이용한 임플란트 즉시식립 및 보철

김영현, 우라현, 손동석  
대구카톨릭병원 구강악안면외과

Immediate Implant Placement and Restoration using Socket Shield  
Technique and Tunnel Technique

Kim Young Hyun, Woo Ra Hyeon, Dong-Seok Sohn  
Department of dentistry, Oral & Maxillofacial Surgery, Catholic University Hospital of Daegu  
Daemyung-4-dong, Namgu

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Han-Chang Yu\*<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, Young-KyunKim<sup>1,2)</sup>

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2 서울대학교 치의학대학원 치의학과, 치의학 연구소

Implant prosthetic complications, fracture of the implant fixtures  
Han-Chang YU\*<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, Young-KyunKim<sup>1,2)</sup>

1 Department of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea  
2 Department of Dentistry & Dental Research Institute, School of Dentistry, Seoul National University, Seoul, Korea

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Han-Chang Yu\*<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, Young-KyunKim<sup>1,2)</sup>

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2 서울대학교 치의학대학원 치의학과, 치의학 연구소

Prognosis of implants installed simultaneously with periodontal surgery of  
the adjacent tooth

Han-Chang YU\*<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, Young-KyunKim<sup>1,2)</sup>

1 Department of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea  
2 Department of Dentistry & Dental Research Institute, School of Dentistry, Seoul National University, Seoul, Korea

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윤지인, 김정한, 김복주, 김철훈, 황희성

동아대학교병원 구강악안면외과

Types and causes of dental Implant failure referred to Dong-A university  
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Ji Eon Yun, Jung Han Kim, Bok Joo Kim, Chul Hoon Kim, Hee Sung Hawng  
Department of Oral & Maxillofacial surgery, Department of Dentistry, Dong-A University Hospital

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응력분포특성 분석

이성현<sup>1)</sup> 이상화<sup>1, 2)</sup>,  
가톨릭대학교 임상치과대학교 1  
가톨릭대학교 은평성모병원 치과 (구강악안면외과)2

P VI-18 좁은 직경 임플란트의 후향적 관찰 연구

이중곤<sup>1)</sup>, 윤필영<sup>1)</sup>, 김영균<sup>1,2)</sup>  
1 분당서울대학교 병원 치과, 구강악안면외과  
2 서울대학교 치의학대학원 치의학과, 치의학 연구소

Retrospective observational study of narrow diameter Implants

Jung-Gon Lee<sup>1)</sup>, Pil-Young Yun<sup>1)</sup>, Young-KyunKim<sup>1,2)</sup>  
1 Department of Dentistry, Seoul National University Bundang Hospital, Seongnam, Korea  
2 Department of Dentistry & Dental Research Institute, School of dentistry, Seoul National University, seoul, Korea

- P VI-19      **임플란트 수술 가이드를 이용한 임플란트 식립 유용성에 대한 보고**  
 이해정\*, 문성용, 오지수, 유재식, 최해인  
*조선대학교 치의학전문대학원 구강악안면외과학교실*  
 Clinical efficiency of using surgical guide stent for implant placement :  
 Case report  
 Hye-jung Lee\*, Seong-Yong Mon, Ji-Su Oh, Jae-Seek You, Hae -In Choi  
*Department of Oral and Maxillofacial Surgery, School of Dentistry, Chosun University*
- P VI-20      **측방 접근법을 이용한 상악동 골이식 부위에 식립된 임플란트의 임상 결과 분석 :  
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 임세정<sup>1\*</sup>, 서정민<sup>2</sup>, 김진환<sup>2</sup>, 손장호<sup>1</sup>, 조영철<sup>1</sup>, 성일용<sup>1</sup>  
<sup>1</sup> 울산대학교 의과대학 울산대학교병원 구강악안면외과학교실  
<sup>2</sup> 울산대학교 의과대학 울산대학교병원 통합치 의학과  
 Clinical outcome of implants placed in grafted maxillary sinus via lateral  
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 Se-Jeong  
 Lim<sup>1\*</sup>, Jung-MinSeo<sup>2</sup>, Jin-HwanKim<sup>2</sup>, Jang-HoSon<sup>1</sup>, Yeong-CheolCho<sup>1</sup>, Iel-YongSung<sup>1</sup>  
<sup>1</sup> Department of Oral and Maxillofacial Surgery, Ulsan University Hospital, University of Ulsan College of  
 Medicine  
<sup>2</sup> Department of Advanced General Dentistry, Ulsan University Hospital, University of Ulsan College of  
 Medicine
- P VI-21      **약물관련 약골괴사 환자에서 치과용 임플란트의 식립 후 예후에 관한 연구**  
 정연우\*, 한정준, 정승곤, 국민석, 박홍주, 오희균,  
*전남대학교 치의학전문대학원 구강악안면외과학교실*  
 The Study On The Prognosis after Implantation of Dental Implants in  
 Patients with MRONJ (Medication- related osteonecrosis of the jaw)  
 Yeon-Woo Jeong\*, JeongJoon Han, Seunggon Jung, Min-Suk Kook, Hong-Ju Park,  
 Hee-Kyun Oh  
*Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University*
- P VI-22      **하치조신경전위술을 이용한 임플란트 식립의 장기적 예후 ; 증례보고**  
 정지혜\* 최순규 허성휘 양수남  
*청주한국병원 구강악안면외과*  
 Long Term Follow-Up in Inferior Alveolar Nerve Transposition ; Case Report  
 SUNGHWI HUR\*, JI HYE JEONG, SUNGYU CHOI, SOONAM YANG  
*Department of Oral and maxillofacial surgery, Cheongju Hankook hospital*
- P VI-23      **치과 임플란트 주변에 발생한 약물관련골괴사 (MRONJ) 환자에서의 주 1회  
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 김준영<sup>1</sup>, 최한솔<sup>1</sup>, 박진후<sup>1</sup>, 정휘동<sup>1</sup>, 정영수<sup>1</sup>  
<sup>1</sup> 연세대학교 치과대학병원 구강악안면외과학교실  
 Treatment of Medication-Related Osteonecrosis of the Jaw Around the  
 Dental Implant With a Once-Weekly Teriparatide : A Case Report and  
 Literature Review  
 Jun-Young Kim<sup>1</sup>, Han-SolChoi<sup>1</sup>, JinHooPark<sup>1</sup>, Hwi-DongJung<sup>1</sup>, Young-SooJung<sup>1</sup>  
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Part VII 포스터 초록(Dentoalveolar Surgery)

- P VII-01      구강내 부갑상선호르몬의 투약이 약물관련 악골괴사증에 미치는 영향  
김재영<sup>1</sup>, 김대훈<sup>1</sup>, 허종기<sup>1</sup>, 박광호<sup>1</sup>  
*1 연세대학교 치과대학 구강악안면외과학교실 (강남세브란스병원)*  
Effect of intra-oral parathyroid hormone administration to medication-related osteonecrosis of the jaw  
Jae-Young Kim, Dae-Hoon Kim, Jong-Ki Huh, Kwang-Ho Park  
*Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry, Seoul, Korea*
- P VII-02      최소 침습적 타액선 수술 : 단일 외과의 케이스  
김정현<sup>1</sup>, 남웅<sup>1</sup>  
*연세대학교 치과대학 구강악안면외과학교실*  
Minimally invasive salivary gland surgery : A single surgeon case series  
Junghun Kim<sup>1\*</sup>, WoongNam<sup>1</sup>  
*Department of Oral and Maxillofacial Surgery, Yonsei University, College of Dentistry, Seoul, Korea*
- P VII-03      구강악안면영역의 낭종 적출시 의도적 근관치료가 반드시 필요한가?  
김창수<sup>1</sup>, 손준배<sup>1,2</sup>, 이호<sup>1,2</sup>, 한윤식<sup>1,2</sup>  
*1 서울대학교 보라매병원*  
*2 서울대학교 치의학대학원 구강악안면외과학교실*  
Dentoalveolar Surgery Is intentional root canal treatment necessary for cyst enucleation of the oral and maxillofacial region?  
Chang Su Kim<sup>1</sup>, JunBaeSon<sup>1</sup>, HoLee<sup>1,2</sup>, Yoon-SicHan<sup>1,2</sup>  
*1 Department of Oral and Maxillofacial Surgery, SMG-SNU Boramae Medical Center*  
*2 Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University*
- P VII-04      치조골 신장술을 통한 유착된 상악 구치부의 치료 : 증례 보고  
오광진\*, 류동목, 지유진, 강미주, 정상필, 이재덕, 배희연, 이현우  
*강동 경희대학교 치과병원 구강악안면외과학교실*  
Treatment of an ankylosed maxillary molar by intraoral alveolar bone distraction osteogenesis : a case report  
Gwangjin Oh\*, Dong-mok Ryu, You-jin Jee, Miju Kang, Sang-pil Jung, Jaedeok Lee, Heeyeon Bae, Hyenwoo Lee  
*Dept. of Oral and Maxillofacial surgery, Kyung-Hee University Dental Hospital at Gangdong*
- P VII-05      증례보고 : 좌측 상악동에 발생한 국균증  
유정훈\*<sup>1</sup>, 임현준<sup>1</sup>, 김봉철<sup>1</sup>, 이준<sup>1,2</sup>  
*1 원광대학교 대전치과병원 구강악안면외과*  
*2 원광 골재생 연구소*  
A case report : Aspergillosis of Lt. maxillary sinus  
Jeong Hun Yoo\*<sup>1</sup>, Hun Jun Lim<sup>1</sup>, BongChulKim<sup>1</sup>, JunLee<sup>1,2</sup>  
*1 Dept. of Oral and maxillofacial surgery, Daejeon Dental Hospital, College of Dentistry, Wonkwang University*  
*2 Wonkwang Bone Regeneration Research Institute, Wonkwang University*
- P VII-06      Deep Neural Transfer Network를 이용한 매복치 진단의 정확도 분석

이동건<sup>1\*</sup>, 이홍석<sup>2</sup>, 김재영<sup>2</sup>, 김의현<sup>1</sup>, 김창우<sup>1</sup>, 송인석<sup>1</sup>, 정규환<sup>2</sup>, 전상호<sup>1</sup>  
1. 고려대학교 안암병원 구강악안면외과학교실  
2. 뷰노 코리아

Accuracy as a diagnostic tool of Deep Neural Transfer Network for impacted teeth

Dong-Keon Lee<sup>1\*</sup>, Hong-Seok Lee<sup>2</sup>, Jae-Young Kim<sup>2</sup>, Euy-Hyun Kim<sup>1</sup>, Chang-Woo Kim<sup>1</sup>, In-Seok Song<sup>1</sup>, Kyu-Hwan Jung<sup>2</sup>, Sang-Ho Jun<sup>1</sup>

1. Dept. of Oral and Maxillofacial Surgery, Anam Hospital, Korea University  
2. VUNOKorea

P VII-07 Marsupialization 후 panorama상의 병소 면적 변화에 대한 연구

이동우, 장성백, 최소영, 김진욱, 권대근, 이성탁  
경북대학교 치과대학 구강악안면외과학교실

Investigation of dimensional change of the lesion in panorama after Marsupialization

Lee Dong-woo, Kwon Tae-Guen, Kim Jin-Wook, Choi So-Young, Jang Seong-Bak, Lee Sung-Tak,

Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea

P VII-08 Rapid Prototyping을 이용한 자가치아 이식술에 대한 증례 보고.

이석모, 이백수, 권용대, 최병준, 오주영, 이정우, 황보연, 정준호\*  
경희대학교 치과대학 치의학전문대학원 구강악안면외과학교실

A case report of Autologous tooth Transplantation using Rapid Prototyping.  
Seok Mo Lee, Baek Soo Lee, Yong Dae Kwon, Byung Joon Choi, Joo Young Ohe, Jung Woo Lee, Bo Yeon Hwang, Junho Jung\*

Department of Oral & Maxillofacial Surgery Kyung Hee University School of Dentistry

P VII-09 국소마취제로 인한 전신 독성(LAST) 시의 Lipid Emulsion의 사용

이승현<sup>a</sup>, 박상헌<sup>b</sup>, 감명환<sup>a</sup>

a 서울대학교 치과병원 치과마취과

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Lipid emulsion therapy for local anesthetic systemic toxicity(LAST)

Seung-Hyun Rhee<sup>a</sup>

Sang-Hun Park<sup>b</sup>

Myong-Hwan Karm<sup>a</sup>

a Department of Dental Anesthesiology, Seoul National University Dental Hospital, Seoul, Republic of Korea

b Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Seoul, Republic of Korea

P VII-10 블록형 장골의 이식골 형태 차이에 따른 Bridge type과 Overdenture type 상악 임플란트 보철수복 증례비교

장훈\*, 최홍석, 최나래, 백영재, 송재민, 이재열, 황대석, 김용덕, 신상훈, 김육규  
부산대학교 치의학전문대학원 구강악안면외과학교실

Comparison of Bridge type and Overdenture Type of Upper Implant Prosthodontic Restoration according to Form of Iliac Block Bone Graft

Hun Jang\*, Hong-Seok Choi, Na-rae Choi, Young-jae Baek, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim

Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University

- P VII-11      악골내 낭종의 적출 후 이식재 감염의 빈도에 대한 후향적 보고  
정준홍, 하현빈, 오현준, 서병무  
*서울대학교치과병원 구강악안면외과*  
Retrospective Study : Infection rate of bone graft in cystic lesion  
Junhong Jung\*, Hyunbin Ha, Hyun Jun Oh, Byoung-Moo Seo  
*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital*

**Part VIII 포스터 초록(Deformity)**

- P VIII-01      Transient facial nerve palsy following intraoral vertical ramus osteotomy for mandibular setback  
Chia-Fu Yang Chun-Ming Chen  
*Oral and maxillofacial surgery department Kaohsiung medical university hospital, Taiwan*
- P VIII-02      좌측 악하부에 발생한 재발성 낭성 수종의 치험례 1례  
김균태, 권대근, 최소영, 이성탁, 장성백, 김진욱  
*경북대학교 치과대학구강악안면외과학교실*  
Reccurent Cystic Hygorma on left submandibular area: A case report  
Kyoum-Tae Kim, Tae-Geon Kwon, So-Young Choi, Sung-Tak Lee, Seoung-Bak Jang, Jin-Wook Kim,  
*Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea*
- P VIII-03      국소피판을 이용한 구외 누공의 재건 : 증례 보고  
김의현, 이동건, 김창우, 송인석, 전상호  
*고려대학교 안암병원 구강악안면외과학교실*  
Reconstruction of extraoral fistula using local flap: A case report  
Euy-Hyun Kim, Dong-Keon Lee, Chang-Woo Kim, In-Seok Song, Sang-Ho Jun,  
*Dept. of Oral and Maxillofacial Surgery, Korea University Anam Hospital*
- P VIII-04      양측성 완전 구순구개열 환자의 치료에서의 Latham 장치의 효용성 : 증례 보고  
김진규, 김준영, 박진후, 정휘동, 정영수  
*연세대학교 치과대학 구강악안면외과학교실*  
Efficacy of the Latham appliance in a patient with Bilateral Complete Cleft Lip and Palate : A Case Report  
Jin-kyu Kim, Jun-Young Kim, Jin Hoo Park, Hwi-Dong Jung, Young-Soo Jung  
*Department of Oral and Maxillofacial Surgery, Yonsei University College of Dentistry*
- P VIII-05      화상 후 경부구축으로 인한 개방교합 악안면기형 환자에서의 전방분절절골술  
김태섭<sup>1</sup>, 백승학<sup>2</sup>, 최진영<sup>1</sup>  
1. 서울대학교 치과병원 구강악안면외과  
2. 서울대학교 치과병원 치과교정과  
Anterior segmental osteotomy for mandibular deformity with anterior openbite of a postburn maxillofacial deformity patient.  
Tae Seup Kim<sup>1</sup>, Seung-HakBaek<sup>2</sup>, Jin-YoungChoi<sup>1</sup>

1 Department of Oral and Maxillofacial Surgery, Seoul National University Dental hospital, Seoul, Korea  
2 Department of Orthodontics, Seoul National University Dental Hospital, Seoul, Korea

- P VIII-06 변형 밀라드법을 이용한 편측구순열 수술 후 비순부의 심미성에 대한 주관적 평가  
김태흥\*, 최나래, 송재민, 이재열, 김용덕, 신상훈, 김옥규, 황대석  
부산대학교 치의학전문대학원 구강악안면외과 교실  
Subjective evaluation for nasolabial aesthetics after unilateral cleft lip repair using Modified Millard method  
Tae-heung Kim, Na-rae Choi, Jae-Min Song, Jae-Yeol Lee, Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim, Dae-Seok Hwang  
Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University
- P VIII-07 심한 치아 맹출장애를 가진 혼합치열기 환자에서의 발치 : 증례보고  
김희열\* 임대호, 고승오, 백진아  
전북대학교 치의학전문대학원 구강악안면외과  
Teeth extraction in a mixed dentition patient with severe teeth eruption disorder : Acasereport  
HeeYoul Kim\*, DaeHo Leem, SeungO Ko, JinA Baek  
Department of Oral and Maxillofacial surgery, School of Dentistry, Chonbuk National University
- P VIII-08 구순구개열 및 가로얼굴파열을 동반한 Goldenhar syndrome 환자에서 수술적 치료: 증례보고  
박종열, 김준영, 박진후, 정휘동, 정영수  
연세대학교 치과대학 구강악안면외과교실  
Surgical Treatment of a Goldenhar syndrome Patient with Cleft lip and palate and Transverse facial cleft : Case Report  
Jongyeol Park, Jun-Young Kim, Jin Hoo Park, Hwi-Dong Jung, Young-Soo Jung  
Department of Oral and Maxillofacial Surgery Yonsei University College of Dentistry
- P VIII-09 편측성 구순열 코변형에서 늑연골을 적용한 교정 코성형술  
오지현<sup>1</sup>\*, 정승곤<sup>2</sup>, 김민근<sup>1</sup>, 김성곤<sup>1</sup>, 권광준<sup>1</sup>, 박영욱<sup>1</sup>  
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2 전남대학교 치과병원 구강악안면외과  
Corrective rhinoplasty using rib cartilage for patients with unilateral cleft lip nasal deformity  
Ji-Hyeon  
Oh<sup>1</sup>\*,SeunggonJung<sup>2</sup>,Min-KeunKim<sup>1</sup>,Seong-GonKim<sup>1</sup>,Kwang-JunKwon<sup>1</sup>,Young-WookPark<sup>1</sup>  
1 Department of Oral and MaxilloFacial Surgery, Dental hospital, Gangneung-Wonju National University  
2 DepartmentofOralandMaxillofacialSurgery,ChonnamNationalUniversity,SchoolofDentistry
- P VIII-10 구순구개열 환자의 구비누공 치험례: 장골능 이식  
정용욱, 오현준, 하현빈, 서병무  
서울대학교치과병원 구강악안면외과  
Iliac Bone Graft on a Cleft Lip and Palate Patient for Defect After Cheiloplasty  
Yongwook Jung, Hyun Jun Oh, Hyunbin Ha, Byoung-Moo Seo  
Seoul National University Dental Hospital
- P VIII-11 구순구개열 환자의 장골 이식을 이용한 전치부 결손부 회복 : 증례보고

천승우<sup>1)</sup>, 이승준<sup>1)</sup>, 최민호<sup>1)</sup>, 이종호<sup>1)</sup>, 박재역<sup>1)</sup>, 김창현<sup>1)</sup>  
가톨릭대학교 서울성모병원 구강악안면외과

Correction of alveolar bone defect with Iliac bone graft in a cleft palate patient : a case report

Seungwoo

Cheon<sup>1)</sup>,MinhoChoi<sup>\*1)</sup>,SeungjoonLee<sup>1)</sup>,Jong-HoLee<sup>1)</sup>,Je-UkPark<sup>1)</sup>,Chang-HyenKim<sup>1)</sup>

Department of oral and maxillofacial surgery, Seoul St.Mary's hospital, The catholic University of Korea1)

P VIII-12 편측성 하악과두과형성이 동반된 심한 안면비대칭 환자에서의 과두절제술: 18년간의 후향적 평가

하태욱\*<sup>1</sup>, 김준영<sup>1</sup>, 박진후<sup>1</sup>, 정휘동<sup>1</sup>, 정영수<sup>1</sup>

1 연세대학교 치과대학병원 구강악안면외과

Condylectomy as the treatment for active unilateral condylar hyperplasia of the mandible and severe facial asymmetry: retrospective review over 18 years

Tae-Wook Ha\*<sup>1</sup>, Jun-young Kim<sup>1</sup>, JinHooPark<sup>1</sup>, Hwi-DongJung<sup>1</sup>, Young-SooJung<sup>1</sup>

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P VIII-13 Choung's 직사각형 피판을 이용한 Tessier no.0 안면열의 외과적 치료

이주영\*, 강상규, 정필훈

서울대학교 치의학대학원 구강악안면외과학교실

Surgical repair of Tessier no. 0 cleft via Choung's rectangular flap

Ju-Young Lee\*, Sang-Kyu Kang, Pill-Hoon Choung

Department of Oral and Maxillofacial Surgery, Seoul National University School of Dentistry

## Part IX 포스터 초록(Basic research)

P IX-01 Evaluation of Tantalum - Poly (L-lactic acid) Nerve Conduits for Peripheral Nerve Regeneration

Akram Abdo Almansoori <sup>1,2</sup>, ChanghaHwang<sup>3</sup>, Sung-HoLee<sup>2</sup>, BongjuKim<sup>2</sup>, Sung-MiLee<sup>3</sup>, Jong-Ho Lee <sup>1,2\*</sup>

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2 Clinical Translational Research Center for Dental Science, Seoul National University Dental Hospital, Seoul, Korea,

3 Department of Material Science and Engineering, College of Engineering, Seoul National University, Seoul, Korea,

P IX-02 Development of novel bone regenerative medicine by the contents from stem cell conditioned media

Satoshi

ENDO\*<sup>1</sup>, WataruKATAGIRI<sup>1</sup>, RyokoTAKEUCHI<sup>1</sup>, NaoakiSAITO<sup>1</sup>, TadaharuKOBAYASHI<sup>1</sup>

1 Division of Reconstructive Surgery for Oral and Maxillofacial Region, Department of Tissue Regeneration and Reconstruction, Niigata University Graduate School of Medical and Dental Sciences, Niigata, Japan

P IX-03 골유도재생술을 위한 평면방사 실크 차폐막과 누에고치 유래 실크 차폐막의 물성과 생활성도 비교

강예진<sup>1\*</sup>, 조유영<sup>2</sup>, 권해용<sup>2</sup>, 채원식<sup>3</sup>, 양원근<sup>3</sup>, Umberto Garagiola<sup>4</sup>, 김성곤<sup>1</sup>, Horatiu Rotaru<sup>5</sup>



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- 2 잠사양봉소재과, 국립농업과학원, 완주
- 3 한국기초과학지원연구원, 대구
- 4 Biomedical, Surgical and Oral Sciences Department, Maxillofacial and Dental Unit, School of Dentistry, University of Milan, Milan, Italy
- 5 Department of Cranio-Maxillofacial Surgery, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca 400001, Rumania

Comparison of the Physical Properties and in vivo Bioactivities of Flatwise-Spun Silk Mats and Cocoon-Derived Silk Mats for Guided Bone Regeneration

Yei-Jin

Kang<sup>1\*</sup>, You-YoungJo<sup>2</sup>, HaeYongKweon<sup>2</sup>, Weon-SikChae<sup>3</sup>, Won-GeunYang<sup>3</sup>, UmbertoGaragiola<sup>4</sup>, Seong-GonKim<sup>1</sup>, HoratiuRotaru<sup>5</sup>

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- 2 Sericultural and Apicultural Materials Division, National Academy of Agricultural Science, Korea
- 3 Daegu Center, Korea Basic Science Institute, Daegu, Korea
- 4 Biomedical, Surgical and Oral Sciences Department, Maxillofacial and Dental Unit, School of Dentistry, University of Milan, Milan, Italy
- 5 Department of Cranio-Maxillofacial Surgery, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca 400001, Romania

P IX-04 액션캠(Action camera) 개조를 통한 1인치 수술영상녹화 및 Indocyanine green 조영술 근적외선 촬영을 이용한 유리피판 모니터링에의 적용

김지홍, 윤민영, 차인호, 김형준, 남웅, 김동욱  
연세대학교 치과대학 구강악안면외과학교실

Utilizing modified action camera beyond intraoperative recording - converting into DIY portable indocyanine green(ICG) near infrared(NIR) imaging device for bedside free flap monitoring

Jihong Kim, Minyeong Youn, In-ho Cha, Hyung Jun Kim, Woong Nam, Dongwook Kim

Dept. of Oral & Maxillofacial Surgery, Yonsei University College of Dentistry

P IX-05 골격단위 분석으로 나타난 전돌된 아래턱의 정량적 특징

문성호<sup>\*1</sup>, 박미라<sup>2</sup>, 이준<sup>1,3</sup>, 임현준<sup>1</sup>, 김봉철<sup>1</sup>

- 1 원광대학교 대전치과병원 구강악안면외과
- 2 을지대학교 예방의학과
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Volumetric characteristics of prognathic mandible revealed by skeletal unit analysis

Seong Ho Mun<sup>\*1</sup>, Mira Park<sup>2</sup>, Jun Lee<sup>1,3</sup>, HunJunLim<sup>1</sup>, BongChulKim<sup>1</sup>

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- 3 Wonkwang Bone Regeneration Research institute, Wonkwang University

P IX-06 BMP-2 서방형 방출이 가능한 낙엽적층구조를 가지는 다공성 GBR 차폐막에 의한 골 재생

변준호<sup>1,\*</sup>, 변성훈<sup>1</sup>, 강영훈<sup>2</sup>, 오세행<sup>3</sup>

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- 3 단국대학교 나노바이오의과학과

BMP-2-immobilized porous matrix with leak-stacked structure as a bioactive GBR membrane

June-Ho Byun<sup>1,\*</sup>, Sung-Hoon Byun<sup>1</sup>, Young-Hoon Kang<sup>2</sup>, SeHeang Oh<sup>3</sup>

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*2 Department of Oral and Maxillofacial Surgery, Changwon Gyeongsang National University Hospital,*

*3 Department of Nanobiomedical Science, Dankook University*

P IX-07 **난소절제술에 의한 골다공증 유발 백서에서 멜론 추출물 섭취에 따른 골강도, 무기질화 및 대사에 대한 효과**

이성호<sup>1,2</sup>, 김봉주<sup>1</sup>, 송수진<sup>3</sup>, 김원현<sup>1</sup>, 송은성<sup>1</sup>, 이민선<sup>1</sup>, 이재창<sup>4</sup>, 이성재<sup>5</sup>, 한동욱<sup>3</sup>, 이종호<sup>1,2</sup>

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*5 인제대학교 의용공학과*

Protective Effects of Melon Extracts on Bone Strength, Mineralization, and Metabolism in Rats with Ovariectomy-Induced Osteoporosis.

Sung-Ho Lee<sup>1,2</sup>, Bongju Kim<sup>1</sup>, Su-Jin Song<sup>3</sup>, Won Hyeon Kim<sup>1</sup>, Eun-Sung Song<sup>1</sup>, Min-Sun Lee<sup>1</sup>, Jae-Chang Lee<sup>4</sup>, Sung-Jae Lee<sup>5</sup>, Dong-Wook Han<sup>3</sup>, and Jongh-Ho Lee<sup>1,2</sup>

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*3Department of Cogno-Mechatronics Engineering, College of Nanoscience & Nanotechnology, Pusan National University.*

*4Bio-based Chemistry Research Center, Korea Research Institute of Chemical Technology.*

*5Department of Biomedical Engineering, Inje University.*

P IX-08 **상악동염의 MESS 처치의 Water's projection 의 유용성**

이최량, 김성민

*서울대학교 구강악안면외과*

Clinical Availability of Water's projection in MESS of Maxillary sinusitis

Choi-Ryang Lee, Soung-Min Kim

*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Korea*

P IX-09 **합성곱신경망을 사용한 파노라마상에서 정중과잉치의 자동진단**

장완희<sup>1\*</sup>, 유영준<sup>2</sup>, 이부규<sup>1</sup>

*울산대학교 의과대학, 서울아산병원, 구강악안면외과*

*차의과대학교부속 구미치병원*

Automatic diagnosis using convolutional neural network for diagnosis of mesiodens on panoramic radiography

Wan-Hee Jang<sup>1\*</sup>, Young-Jun Yu<sup>2</sup>, Bu-Kyu Lee<sup>1</sup>

*Department of Oral and Maxillofacial Surgery, College of Medicine, University of Ulsan, Asan Medical Center*

*Department of Dentistry, Gumi CHA Hospital*

P IX-10 **재발률이 높은 남성 병소의 보조적인 치료제로 사용되는 Carnoy's solution의 하치조신경 손상에 대한 임상적 연구**

조현준, 임대호, 백진아, 고승우

*전북대학교 치의학전문대학원 구강악안면외과학교실*

전북대학교 병원 의생명공학 연구소

A clinical study of the inferior alveolar nerve damage caused by Carnoy's solution used as complementary therapeutic agent in cystic lesion with a high recurrence rate.

Hyun-Jun Jo, Dae-Ho Leem, Jin-A Back, Seung-O Ko

*Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonbuk National University Jeonju, Korea  
Research Institute of Clinical Medicine-Biomedical, Chonbuk National University hospital, Jeonju, Korea*



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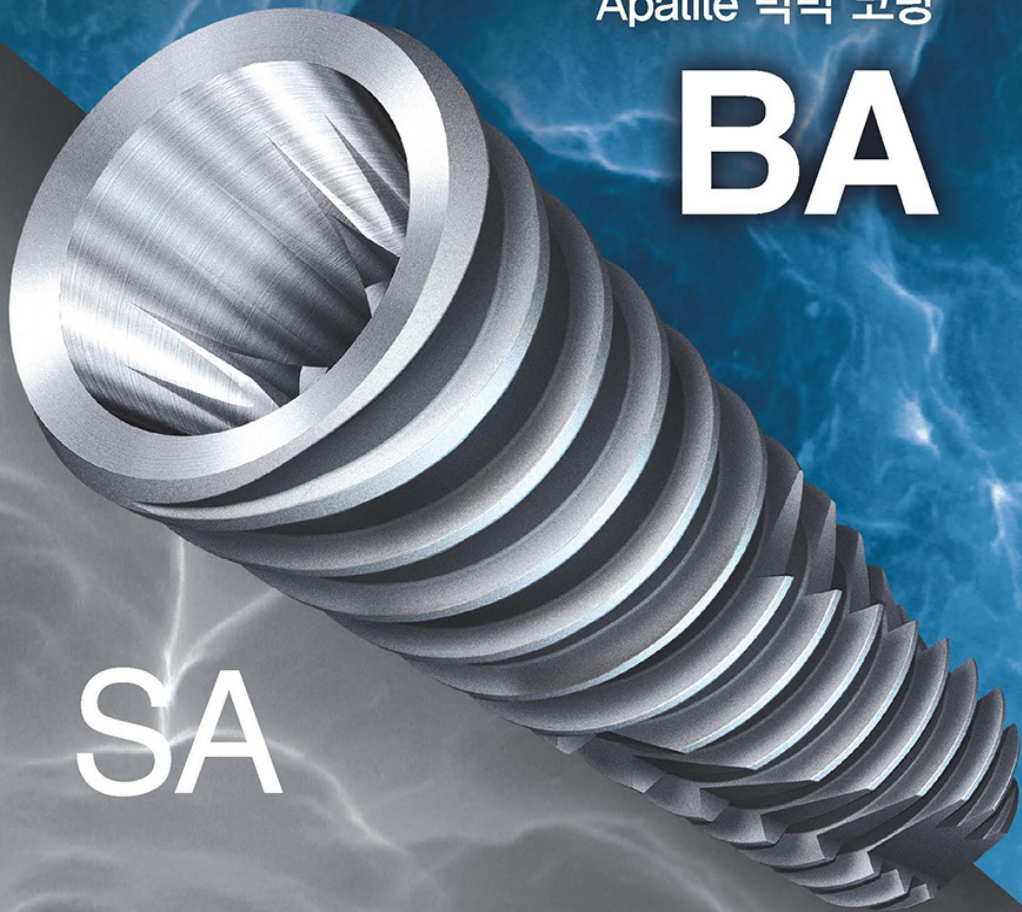
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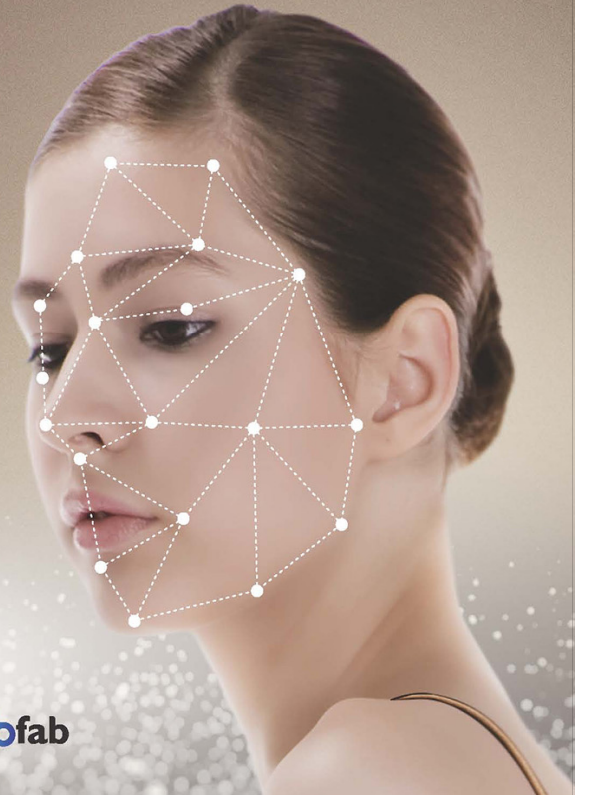
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