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THE 57TH CONGRESS OF THE KOREAN ASSOCIATION OF MAXILLOFACIAL PLASTIC AND RECONSTRUCTIVE SURGEONS

Theme : New fashion in Maxillofacial Cosmetic & Functions

Program Book

제57차 대한악안면성형재건외과학회 종합학술대회 및 정기총회

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주최 : 대한악안면성형재건외과학회
주관 : 단국대학교 치과대학 구강악안면외과학교실

"이 발표논문집은 2018년도 정부재원(교육과학기술부)으로 한국과학기술단체총연합회의 지원을 받아 발간되었음"
"This work was supported by the Korean Federation of Science and Technology Societies Grant funded by the Korean Government."

C·O·N·T·E·N·T·S

제57차
대한악안면성형재건외과학회 종합학술대회 및 정기총회

학술대회장 인사말

대한악안면성형재건외과학회 회원 여러분 안녕하십니까?

급변하는 국내외 정세를 맞이했던 2018년도 어느덧 만물이 결실을 맺는 가을의 중턱에 서 있습니다. 이렇듯 풍요롭고 아름다운 계절에 제 57차 대한악안면성형재건외과학회 종합학술대회를 세계최초의 금속활자본인 "직지"의 고장 청주에서, 단국대학교 치과대학 구강악안면외과학교실 주관하에 개최하게 되어 매우 큰 영광으로 생각합니다.

이번 학술대회는 "New Fashion in Maxillofacial Cosmetic & Functions"라는 주제하에, 교육 및 초청강연과 심포지엄, 모든 프로그램들을, 주제와 부합되고 심도깊은 강의가 되도록 턱교정수술, 안면의 심미적 치료 및 수면무호흡 치료법으로 선택과 집중하여 구성하였습니다. 또한, 우리나라 미의 기준은 점차 서구화되고 있는 가운데 우리와 비슷한 생김새와 피부, 문화 및 정서를 지닌 이웃나라 동아시아인들의 미의 기준은 어떠한지 그 차이를 알아보고자 하였습니다.

이에 초청강연도 다양한 주제가 아닌 턱교정 수술로 한정하여, 타이완 장궁메모리얼 병원 Yu-Ray Chen 교수님, 일본의 Mitsugi 박사님, 중국 북경대학의 Wang 교수님과 건국대 김재승교수님을 모시고 각 교수님들이 시행하고 계시는, 턱교정 수술의 진단과 수술법에 대해 자세히 들을 수 있는 시간을 마련하였습니다.

교육강연과 심포지엄 역시 국내 및 동아시아의 교수님들만 연자로 모시어 아시아인의 턱, 얼굴 심미와 기능의 새로운 치료법에 관한 강의가 진행될 예정입니다.

한편, 구연발표는 Keynote speaker로 운영할 예정이며, 심포지엄 OGS of facial asymmetry 섹션은 학회 턱교정 연구소에서 주관하여 본 학술대회에서 개최되는 점을 알려드립니다.

아무쪼록 이번 학술대회가 모든 회원님들이 지식을 습득하고, 친교와 우의를 나누는 귀중한 시간이 되시길 바랍니다.

끝으로 이번 학술대회가 성공적으로 개최될 수 있도록 성원을 해주신 우리학회 박영욱 회장님과 이사님들, 단국대학교 치과대학 구강악안면외과학교실, 동문 여러분, 전시업체 여러분, 그리고 바쁘신 가운데도 강연을 수락해 주신 국내외 연자분들과, 우리학회 회원님들께 진심으로 깊은 감사의 말씀을 올립니다.

제57차 대한악안면성형재건외과학회 학술대회장 **이 재 훈**

Welcome Message from the Chairman of KAMPRS

Dear distinguished guests, members of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons, dear colleagues, ladies and gentlemen,

The turbulent domestic and international events of the year 2018 have led us to stand amongst the middle autumn days, when all things bear juicy fruit and the hills aflame into a magnificent riot of gold and red. It is a great pleasure for me, especially at this glorious and abundant time of the year, to welcome you all to the 57th annual KAMPRS congress, taking place here in Cheongju – the birthplace of 'Jikji', the world's oldest metalloid print book. Our members of the Dankook University Department of Oral and Maxillofacial Surgery are truly greatly honored for having the privilege of hosting this event.

All the programs of the conference have been consisted to adequately fall under this year's theme – "New Fashion in Maxillofacial Cosmetic & Functions" - and to further target the conference, all the symposiums and intensive lectures presented by our renowned guest speakers will be consisted to highlight only the meticulously selected topics such as orthognathic surgery, facial esthetics, and treatment methods for obstructive sleep apnea. In addition, in regards to the Korean esthetic standards that are becoming gradually Westernized, the esthetic criteria of other Eastern Asian countries that possess the physical appearances, skin textures, cultures, and values similar to those of our country's will also be addressed.

Rather than covering the vast realms of maxillofacial surgery, the topic of the guest lectures has hence been limited to address orthognathic surgery only, in which our esteemed guest speakers – Professor Yu-Ray Chen of Chang Gung Memorial Hospital, Taiwan, Doctor Mitsugi from Japan, Professor Wang of Peking University, China, and Professor Jae Seung Kim of Konkuk University, Korea – will elaborate on the various diagnostic methods and procedures of the surgeries that they currently perform.

Only Korean and Eastern Asian professors have been invited to be the distinguished guest speakers for all the educational programs and symposiums of this event, in which they will discuss and propose new approaches and emerging strategies for the functional and aesthetically-orientated orthognathic treatment of contemporary Asians.

All the oral presentations will be presented by keynote speakers, and I would also like to announce that the symposium on the OGS of facial asymmetry will be hosted by the Association's orthognathics research institute.

I sincerely wish that this conference will be a memorable and invaluable opportunity to attain academic knowledge, broaden insights, and build precious friendship and rapport for all the members present. I would like to conclude by expressing my most sincere gratitude for the tremendous support of Chairman Young Wook Park, the Board of Directors, the members of Dankook University department of Oral and Maxillofacial Surgery, our alumni, exhibitors, eminent guest speakers who generously offered to take time off their busy schedules to share their precious knowledge, and last but not least, all the distinguished members of our association, in hosting this event.

Thank you.

Congress Chairman of the 57th Congress of Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Prof. Jae Hoon, Lee

학회장 인사말

존경하는 대한악안면성형재건외과학회 회원 여러분!

청명한 가을에 유서깊은 대한악안면성형재건외과학회 종합학술대회가 제57차를 맞아 단국대학교 치과대학 구강악안면외과학교실 주관하에 개최됨을 기쁘게 생각합니다. 잘알고 계신 것처럼 우리 대한악안면성형재건외과학회는 1962년 원로선배님들의 선견지명으로 창립된 이후, 지금까지 턱얼굴 영역의 재건수술과 미용수술 분야에서 끊임없는 발전을 이루어 왔습니다. 회원 여러분들의 적극적인 노력에 힘입어 최근에는 턱교정 연구소(Orthognathics Institute)를 출범하였으며, 턱얼굴 미용수술 연수회를 정기적으로 개최함으로써 회원 및 치과의사들에게 미용시술의 가이드라인을 제시하고 있습니다. 또한 턱얼굴성형재건 연구의 결과물인 학회지 "Maxillofacial Plastic and Reconstructive Surgery"의 인용지수는 고무적으로 상승하고 있습니다.

금번 종합학술대회는 10월 25일부터 27일까지 3일간 아름다운 고장 청주에서 개최됩니다. 종합학술대회의 대주제는 "New Fashion in Maxillofacial Cosmetic & Functions"로 최근 우리 학회의 관심분야에 초점을 맞추어져 있습니다. 초청 연자로는 대만 장궁기념병원(Chang-Gung Memorial Hospital) 성형외과의 Yu-Ray Chen 교수님과 Frank Chun-shin Chang 선생님, 일본 가가와 중앙병원의 Masaharu Mitsugi 원장님, 중국 북경대학의 Xiao-Xia Wang 교수님, 그리고 건국대학교 김재승 교수님을 모시고 턱교정 수술을 중심으로 최신 진단기법과 수술개념에 대해 지견을 나누고자 합니다. 항상 그래왔듯이 우리 학회와 자매결연 관계에 있는 일본 악변형증학회와 대만 구강악안면외과학회에서 심포지움 연자분들과 함께 사절단이 함께 하십니다.

또한 우리학회의 턱교정 연구소에서는 안면 비대칭(Facial Asymmetry)을 주제로 심포지움을 개최하게 됩니다. 그리고 회원들의 진료에 실질적인 도움을 주고자 보험에 관한 심포지움 시간을 따로 마련하였습니다. 회원 여러분들의 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 것입니다. 모쪼록 많은 회원분들이 함께 하시어 학문적인 축제의 장을 마음껏 즐기시길 바랍니다.

바쁘신 중에도 흔쾌히 강연을 수락해 주신 초청연자 분들과 심포지움 연자분들, 그리고 적극적으로 참여해 주신 회원 여러분들께 진심으로 감사의 말씀을 드립니다. 아울러 금번 학술대회를 주관하여 모든 준비를 하여주신 이재훈 학술대회장님과 조직위원회 위원분들, 그리고 단국대학교 치과대학 구강악안면외과학교실 교실원 및 동문 여러분들께 수고하셨다는 말씀을 드리고 싶습니다.

마지막으로 항상 수고하여 주시는 학회 임원분들과 전시에 참가해 주신 업체 관계자 분들께도 심심한 감사의 말씀을 드립니다.

금번 제57차 대한악안면성형재건외과학회 종합학술대회가 성황리에 유종의 미를 거둘 것을 믿어 의심치 않으며, 참가하신 여러분들 모두 건강과 행복이 함께 하시길 바랍니다.

대한악안면성형재건외과학회 회장 박 영 욱

Welcome Message from the President of KAMPRS

To all honorable members of the Korean Association of Maxillofacial Plastic and Reconstructive Surgeons (KAMPRS), it is with great joy and gratitude that I announce the holding of the 57th Congress of KAMPRS in this beautiful autumn, led by the Department of OMFS of the College of Dentistry, Dankook University. Since the founding of KAMPRS in 1962 by our wise predecessors, we have strived to make improvements in the areas of maxillofacial reconstructive surgery and aesthetic surgery. All of your active efforts and contributions to the knowledge of this field have enabled us to establish the Orthognathics Institute. Moreover, by holding maxillofacial aesthetic surgery workshops regularly, the institute's members and dentists can familiarize themselves more and more on the guidelines of aesthetic procedures. In addition, the result of maxillofacial reconstructive surgery research has been increasing dramatically, following the citation index of the Maxillofacial Plastic and Reconstructive Surgery journal.

This time, the Congress will be held in the beautiful town of Cheongju from October 25 to 27, under the theme of "New Fashion in Maxillofacial Cosmetic & Functions," which is something that, I believe, falls under the interest of most of us. To discuss the latest diagnostic methods and surgery concepts related to orthognathic surgery, Professor Yu-Ray Chen and Dr. Frank Chun-shin Chang from the Department of Plastic Surgery of ChangGung Memorial Hospital in Taiwan, Dr. Masaharu Mitsugi from Kagawa Prefectural Central Hospital in Japan, Professor Xiaoxia Wang from Peking University in China, and Professor Kim Jae-Seung from Konkuk University were gracious enough to be our speakers for this event. Through the years, symposium speakers and delegations from the Japanese Society for Jaw Deformities and the Taiwanese Association of Oral and Maxillofacial Surgeons have consistently engaged with us through this Congress.

On top of which, the Orthognathics Institute will hold a symposium on facial asymmetry, and there will be a separate symposium on insurance to provide actual help to members. Your attendance and support would be greatly appreciated. Despite these events holding great significance by themselves, we aim for the Congress to become a venue for academic exchange and relationship building, especially during the symposium, speech, and poster presentations. It is our sincere hope that you have a productive and enjoyable experience, and we encourage you to take full advantage of all that this Congress and the town of Cheongju have to offer.

My sincerest gratitude goes to the invited speakers, the symposium speakers who have gladly agreed to impart their knowledge and share their experiences, and all the participants of this event. Furthermore, I want to thank Congress Chairman, Jae Hoon Lee, and the organizing committee members and alumni of the Department of OMFS of Dankook University. Lastly, I would also like to thank the board members of the Congress who have spared no effort in ensuring the success of this event as well as all the other people taking part in it.

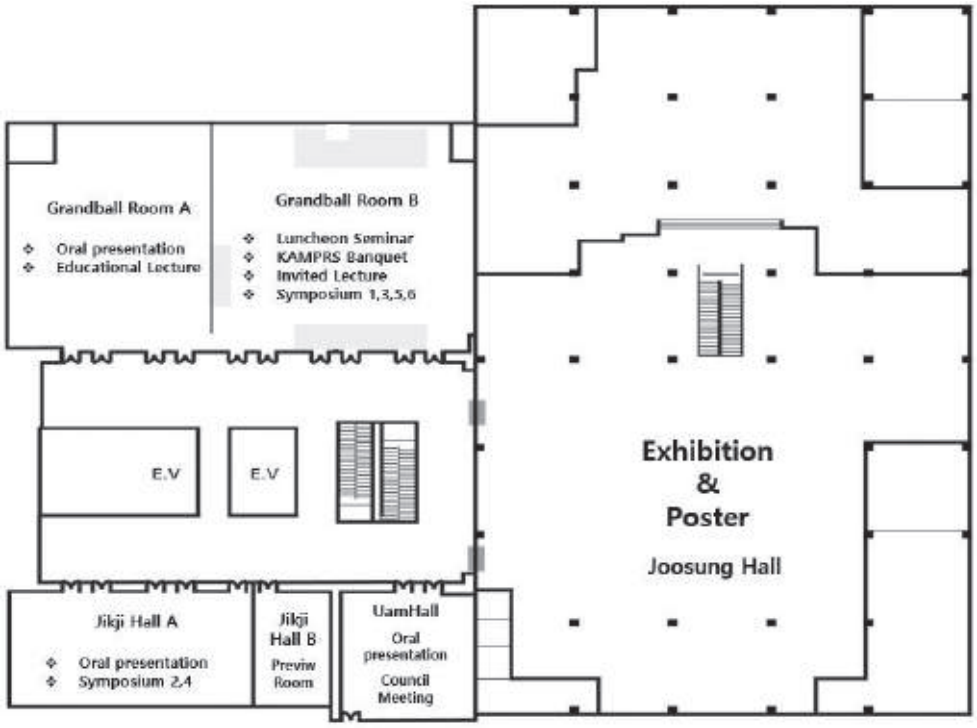
I wish you all a healthy and prosperous life, and I believe with great confidence that the 57th Congress of the KAMPRS will be a success.

President of KAMPRS Young-Wook, Park

Program at a Glance

Time	25, October (Thu)		26, October (Fri)			27, October (Sat)	
08:00-08:30			**Oral presentation II** [Implant] [TMJ] [Basic research]			**Oral presentation III** [Dentoalveolar Surgery] [Deformity] [Infection]	
08:30-09:00							
09:00-09:30			**Invited Lecture I** *Chang gung Surgery first orthognathic surgery* YR Chen(Chang-gung memorial hospital, Taiwan)			**Symposium V** *Multidisciplinary approach for obstructive sleep apnea* Pf.Jee-Hyun Kim(Dankook Univ., Korea) Pf.Hye-Kyung Kim(Dankook Univ., Korea) Pf.Jin-young Choi(Seoul Natl' Univ., Korea)	
09:30-10:00							
10:00-10:30			**Invited Lecture II** *Surgery first orthognathic approach using 3D virtual orthodontic and surgical planning* Masaharu Mitsugi(Kochi Health Science center, Japan)		Poster		Poster
10:30-11:00						**Coffee Break**	
11:00-11:30			**Coffee Break**			**Symposium VI** *Aesthetic Adjucts Therapy* Pf.Hee-Jin Kim(Yonsei Univ., Korea) Dr.Ji-soo Kim(Dr.Youth Clinic, Korea) Pf.Ji-Yoon Choi(Chosun Univ., Korea)	
11:30-12:00			**Invited Lecture III** *Correction of hemimandibular hyperplasia with the assistance of digital technique* Xiao-Xia Wang(Peking Univ., China)				
12:00-12:30							
12:30-13:30			**Luncheon Seminar**			**General Assembly & Closing Remarks**	
13:30-14:00	**Registration**		**Invited Lecture IV** *Beautiful orthognathic surgery complying with aesthetic functionalism* Jaesung Kim (Konkuk Univ. Medical Center., Korea)				
14:00-14:30	**Oral Presentation I** [Trauma & Orthognathic surgery] [Orthognathic surgery] [Tumor & Reconstruction]						
14:30-15:00			**Symposium I (Orthognathics Institute)** *Orthognathic surgery of facial asymmetry* Pf.Tomonao Aikawa(Osaka Univ., Japan) Pf.Yuanchien Chen(China Medical Univ., Taiwan) Pf.Se-Jin Han(Dankook Univ., Korea)	**Symposium II** *3D Soft Tissue Prediction & Analysis* Pf.Young-Jun Kim(KIST, Korea) Dr.Byung-Ho Kim(Smile Future Orthodontic Clinic, Korea) Pf.Min-Suk Kook(Chunnam Natl' Univ., Korea)			
15:00-15:30	**Educational Lecture I** *Avoidance and management of complications in orthognathic surgery* YR Chen(Chang Gung Univ., Taiwan)	Poster			Poster		
15:30-16:00							
16:00-16:30	**Coffee Break**		**Coffee Break**				
16:30-17:00	**Educational Lecture II** *Orthognathic surgery with simultaneous autologous fat transfer* Frank Chang(Chang Gung Univ., Taiwan)	Council Meeting	**Symposium III** *Controversies in Orthognathic Surgery* Prof. Chih-Yu Peng(Chung Shan Medical Univ., Taiwan) Pf.Koichiro Ueki(Yamanashi Univ., Japan) Pf.Tae-geun Kwon(Kyungpook Natl' Univ., Korea)	**Symposium IV** *Medical insurance system* Pf.Kyung-Hwan Kwon(Wonkwang Univ., Korea) Pf.Jae-Young Kim(Yonsei Univ., Korea) Pf.Su-Hwan Byun(Hanlim Univ., Korea)			
17:00-17:30							
17:30-18:00	**Coffee Break**						
18:00~	**KAMPRS Banquet**		**Presidential Welcome Reception**				

학회장 안내도



Grand Plaza Hotel Cheongju, 3F

Grand Plaza Cheongju Hotel 21F. Sky Lounge

좌장 일람표 (Moderators)

Date	Room	Time	Program	Moderator
10.25 (Thu)	Grand Plaza Cheongju Hotel, Cheongju	15:00~16:00	Educational Lecture Ⅰ	류동목 (경희치대)
				박영욱 (강릉원주치대)
		16:30~17:30	Educational Lecture Ⅱ	이종호 (서울치대)
				이부규 (울산의대)
10.26 (Fri)		09:00~11:00	Invited Lecture Ⅰ, Ⅱ	김경욱 (논산백제종합병원)
				김종렬 (부산온종합병원)
		11:30~12:30	Invited Lecture Ⅲ	박재억 (가톨릭의대)
				황순정 (서울치대)
		12:30~13:30	Luncheon Seminar	김경원 (오스템임플란트 교육연구원)
				이정근 (아주의대)
		13:30~14:30	Invited Lecture Ⅳ	박재억 (가톨릭의대)
				황순정 (서울치대)
		14:30~16:00	Symposium Ⅰ	김재승 (건국대 의료원)
				김용덕 (부산치대)
		14:30~16:00	Symposium Ⅱ	김선종 (이화의대)
				김창현 (가톨릭의대)
		16:30~18:00	Symposium Ⅲ	오희균 (전남치대)
				김철환 (단국치대)
		16:30~18:00	Symposium Ⅳ	김형준 (연세치대)
10.27 (Sat)		09:00~10:30	Symposium Ⅴ	고승오 (전북치대)
				권용대 (경희치대)
		11:00~12:30	Symposium Ⅵ	차인호 (연세치대)
				이진규 (M 치과의원)

일반연제 구연발표 (Oral Presentation)

Date	Room	Time	Program	Moderator
10.25 (Thu)	Grandball Room A	14:00 ~15:00	Oral Presentation 1 (Trauma & Orthognathic surgery)	송재민 (부산대)
				류재영 (가천대 길병원)
	Jikji Hall A		Oral Presentation 2 (Orthognathic surgery)	황대석 (부산대)
				이주민 (줌구강악안면외과의원)
	Uam Hall		Oral Presentation 3 (Tumor & Reconstruction)	문성용 (조선대)
				이정우 (경희대)
10.26 (Fri)	Grandball Room A	08:00 ~09:00	Oral Presentation 4 (Implant)	박관수 (상계백병원)
				유재식 (조선대)
	Jikji Hall A		Oral Presentation 5 (TMJ)	이 준 (원광대)
				김수호 (고려대 구로병원)
	Uam Hall		Oral Presentation 6 (Basic research)	이덕원 (경희대)
				최소영 (경북대)
10.27 (Sat)	Grandball Room A	08:00 ~09:00	Oral Presentation 7 (Dentoalveolar surgery)	김봉철 (원광대)
	Jikji Hall A		Oral Presentation 8 (Deformity)	변준호 (경상대)
				정승곤 (전남대)
	Uam Hall		Oral Presentation 9 (Infection)	박성민 (단국대)
				남 웅 (연세대)

포스터 심사위원 명단 (Poster Examiners)

Category	Name (Affiliation)
Examiners	양수남 (청주한국병원)
	백진아 (전북대)
	전상호 (고려대)
	최은주 (원광대)
	박봉욱 (경상대)
	양병은 (한림대)
	이은영 (충북대)
	김문영 (단국대)
	이성탁 (경북대)

등록 및 연제 발표 안내

1. 종합학술대회 참가 등록 안내

1) 현장등록은 10월 25일(목) 13:30부터 학술대회장 등록대(그랜드플라자 청주, 3F 로비)에서 하실 수 있습니다.
2) 사전등록을 하신 분은 사전등록 창구에서 명찰(영수증, 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 프로젝트 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 10월 25일(목)~27일(토)
2) 포스터 운영 장소 : 그랜드플라자 호텔 청주, 3F 주성홀
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 26일(금) 12:00 이전까지 등록대로 제출해 주시기 바랍니다.
2) 1차 우수포스터로 선정된 포스터에 한하여 발표가 진행 되며 발표 시간은 10월 26일(금) 16:00부터 포스터당 5분 발표, 2분 질의 응답으로 구성됩니다.

General Information

1. Registration Guideline

- Registration Desk : Grand Plaza Cheongju Hotel, Cheongju 3F, Cheongju
- Registration Hours : October 25th, 13:30 – October 27th, 10:00

– If you have already registered for KAMPRS 2018, 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 2018 period.

2. Instructions For oral Presenter

All presentation will start at the schedule time, so please visit submitting desk in the KAMPRS 2018 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 Grand Plaza Cheongju Hotel, Oct. 25 (Joosung Hall, 3F)
- 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 October 26(Fri) 16:00 ~
  Presenters must stand by their posters during the presentation time. Each poster presenter will have 5 mins for presenting and 2 mins for Q&A

주요 일정

1. 평의원회(Council Meeting)

- 일시 : 2018년 10월 25일(목) 16:00 ~ 17:30
- 장소 : 그랜드 플라자 청주호텔 3층 우암홀

2. 대한악안면성형재건외과인의 밤(KAMPRS Banquet)

- 일시 : 2018년 10월 25일(목) 18:00 ~ 20:00
- 장소 : 그랜드 플라자 청주호텔 3층 그랜드 볼룸 B

3. 한 · 일 상임이사회 (The 9th Conjunction Board Meeting of KAMPRS and JSJD)

- 일시 : 22018년 10월 26일(금) 12:30 ~ 13:30
- 장소 : 그랜드 플라자 청주호텔 2층 카페 그랜드 내 비너스 룸

4. 한 · 대 합동이사회 (The 3rd Conjunction Board Meeting of KAMPRS and TAOMS)

- 일시 : 2018년 10월 26일(금) 07:30 ~ 08:30
- 장소 : 그랜드 플라자 청주호텔 2층 카페 그랜드 내 비너스 룸

5. 중식 세션 (런천세미나)

- 일시 : 2018년 10월 26일(금) 12:30 ~ 13:30
- 장소 : 그랜드 플라자 청주호텔 3층 그랜드 볼룸 B

6. 학술대회장 초청만찬

- 일시 : 2018년 10월 26일(금) 18:00 ~ 20:00
- 장소 : 그랜드 플라자 청주호텔 21층 스카이 라운지

7. 전시(Exhibition)

- 일시 : 2018년 10월 25일(목) ~ 27일(토)
- 장소 : 그랜드 플라자 청주호텔 3층 주성홀

Meeting & Social Events

1. Council Meeting

- Date & Time : October 25th(Thu) 16:00 ~ 17:30
- Venue : Grand Plaza Cheongju Hotel 3F, Uam Hall

2. KAMPRS Banquet

- Date & Time : October 25th(Thu) 18:00 ~ 20:00
- Venue : Grand Plaza Cheongju Hotel 3F, Grandball Room B

3. The 9th Conjunction Board Meeting of KAMPRS and JSJD

- Date & Time : October 26th(Fri) 12:30 ~ 13:30
- Venue : Grand Plaza Cheongju Hotel 2F, Café Grand, Venus Room

4. The 3rd Conjunction Board Meeting of KAMPRS and TAOMS

- Date & Time : October 26th(Fri) 07:30 ~ 08:30
- Venue : Grand Plaza Cheongju Hotel 2F, Café Grand, Venus Room

5. Luncheon Seminar

- Date & Time : October 26th(Fri) 12:30 ~ 13:30
- Venue : Grand Plaza Cheongju Hotel 3F, Grandball Room B

6. Presidential Welcome Reception

- Date & Time : October 26th(Fri) 12:30 ~ 13:30
- Venue : Grand Plaza Cheongju Hotel 21F, Sky Lounge

7. Exhibition

- Date & Time : October 25th(Thu)~27th(Sat)
- Venue : Grand Plaza Cheongju Hotel 3F, Joosung Hall

Venue : Grandball Room A

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

교육강연 | Educational Lecture

■ Moderator : **류동목**(경희치대), **박영욱**(강릉원주치대)

Educational lecture Ⅰ

- Date : 10.25 (Thu) 15:00~16:00
- Speaker : Prof. Yu-Ray Chen
- Affiliation : Chang Gung University, Taiwan
- Topic : Avoidance and management of complications in orthognathic surgery

■ Moderator : **이종호**(서울치대), **이부규**(울산의대)

Educational lecture Ⅱ

- Date : 10.25 (Thu) 16:30~17:30
- Speaker : Prof. Frank Chun-Shin Chang
- Affiliation : Chang Gung university, Taiwan
- Topic : Orthognathic Surgery with Simultaneous Autologous Fat Transfer

교육강연 I | Educational Lecture I

일시(Date) : 10.25 (Thu) 15:00~16:00

Moderator : **류동목, 박영욱**

Avoidance and management of complications in orthognathic surgery

Prof. Yu-Ray Chen

Chang Gung University, Taiwan

Complications in orthognathic surgery include: 1. peri-operative complications: severe swelling, post operative nausea and vomiting (PONV), and infection. 2. adverse functional outcome: facial palsy, lower lip-chin hypoesthesia, and TMJ pain. 3. Adverse aesthetic result: asymmetry, unsatisfactory aesthetic outcome. 4. Negative psychosocial impact: cannot accept the new face. The prevention of these complications should start with pre-operative patient education including the patient's proper expectation, well prepared body fitness and good sleep habits. Detailed image studies including CBCT to understand the anatomy of the inferior alveolar nerves and carefully carry out the surgery by lubricating the lips with ointment and removal of the premature contacts of sagittal splits segments before rigid fixation. Careful selection of the patients, especially females over 30 years old with mild to moderate bimaxillary protrusion, can avoid operation on psychosocial unstable patients. The management of the complications needs doctors' patience. Re-operation may be need when we know the cause of the problem and make sure we can improve the final outcome.

Curriculum Vitae

Yu-Ray Chen, MD

Professor Yu-Ray Chen is currently the Honorary Chairman of the Chang Gung Steering Committee, the top leading committee of Chang Gung Group, and Professor of Surgery at the Chang Gung University. He graduated from the National Taiwan University Medical School in 1972 and did his general surgery residency at the National Taiwan University Hospital and plastic surgery training at the Chang Gung Memorial Hospital.

Throughout his career, he was appointed as Visiting Professor in many distinguished institutions including the University of Illinois in Chicago, Washington University in St. Louis, the University of Pennsylvania, the Singapore General Hospital, and the University of Stellenbosch and Tygerberg Hospital in Cape Town, South Africa.

Since 1980, Prof. Chen had performed over seven thousand mid-facial and mandibular osteotomies, and numerous cleft and intracranial reconstructions. Prof. Chen also had developed several modifications of osteotomies in the maxillofacial region. He and his team in Chang Gung Craniofacial Center are one of the first center to practice and promote surgery-first orthognathic surgery with publications on leading journals.

Prof. Chen is a dynamic member of many professional societies. In Taiwan, he had been elected President of the Cleft Palate and Craniofacial Association, the Plastic and Reconstructive Surgical Association, and the Society of Aesthetic Plastic Surgery. Internationally, he had also been elected the President of the International Society of Craniofacial Surgery (1997-1999), the Secretary of the Asian-Pacific Craniofacial Association (1993-1997), the General Secretary of the Asian-Pacific Section of IPRAS (2001-2005) and the Maliniac Lecturer of American Society of Plastic Surgeons (2008).

교육강연 Ⅱ | Educational Lecture Ⅱ

일시(Date) : 10.25 (Thu) 16:30~17:30

Moderator : **이종호, 이부규**

Orthognathic Surgery with Simultaneous Autologous Fat Transfer

Prof. Frank Chun-Shin Chang

Chang Gung University, Taiwan

The field of aesthetic medicine has been changing in such a rapid pace it has become hard to keep up with the latest trends and developments. According to American Society for Aesthetic Plastic Surgery, there was over 2 million people received hyaluronic acid injection and over 4 million people received botulinum toxin A injection on 2015. After satisfaction with hyaluronic acid, patients are looking for permanent filler. For reconstruction cases, patient do not want temporary fillers for their soft tissue correction. Autologous fat transfer has many advantages: the graft volume that takes is long lasting. Large volumes of fat are graftable, including in successive grafting sessions. The surgical wounds are insignificant in size, being punctures, and can be strategically hidden. Minimal complication rates and minimal donor site morbidity. Fat grafts are entirely biocompatible. The volumisation effect of fat grafting can improve the overlying skin texture. Relatively short operation time. The materials used during the procedure are relatively inexpensive. Donor sites are readily available. Fat grafting can be combined with other surgical procedures such as face lift, orthognathic surgery and others. The satisfaction of this procedure is high and many of them bring their family to have the same procedure.

The presentation will include fat injection to correct facial soft tissue deficiencies that used in conjunction with orthognathic surgery.

Curriculum Vitae

Frank Chun-Shin Chang, MD, MS

Email: frankchang@cgmh.org.tw

Education:

(1) 1990-1997: Medical College of Pedro Henriquez Ureña National University, Santo Domingo. Dominican Republic. Cum Laude

Post-Graduate Education:

(1) 2007-2010: Master Degree, Graduate Institute of Clinical Medical Sciences, College of Medicine, Chang Gung University, Taoyuan, Taiwan.

Academic Appointment:

2011 Department of Education Certified Lecturer, Chang Gung University, Taipei, Taiwan
2012 Academic Assistant Professor, Chang Gung Memorial Hospital, Taipei, Taiwan
2017 Academic Associate professor, Chang Gung Memorial Hospital, Taipei, Taiwan

Employment Record:

2008 Attending Doctor in Craniofacial Surgery, Chang Gung Memorial Hospital
2014 Chief, Plastic and Reconstructive Surgery of Taoyuan Chang Gung Memorial Hospital

Award:

1. Outstanding Thesis Award: Chang, C.-S., Por, Y.-C.,E.J.W. Liou, C.J.Chang, P. K.-T. Chen, Y.R.Chen "Long-Term Comparison of Four Techniques for Obtaining Nasal Symmetry in Unilateral Complete Cleft Lip Patients: A Single Surgeon's Experience". Outstanding Thesis Award for International College of Surgeons, Taiwan Section. 2010
2. Best Research & Clinical Application Award of Chang Gung Memorial Hospital 2012.
3. Best Pediatric/Craniofacial Paper Award of Plastic and Reconstructive Surgery Journal, 2015. Chang, C.-S., Wallace, C.G., Hsiao, Y.C., Chang, C.J., Chen, P.K.T. "Botulinum Toxin to Improve Results in Cleft Lip Repair." Plastic and Reconstructive Surgery 134 (3): 511-516, 2014.
4. Best Research & Clinical Application Award of Chang Gung Memorial Hospital 2017.

Related Publications: 1. Aesthetic Surgery Journal 36 (5): 184-186, 2016. 2. Aesthetic Surgery Journal 36(10): 1093-1100, 2016. 3. Plastic and Reconstructive Surgery 139 (3): 693-700, 2016. 4 Annals of Plastic Surgery 78(3): S108, 2017, 5. Cosmetology & Oro Facial Surgery 3 (1): 1, 2017.

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

초청강연 | Invited Lecture

■ Moderator : **김경욱**(논산백제종합병원), **김종렬**(부산온종합병원)

Invited Lecture Ⅰ

- Date : 10.26 (Fri) 09:00~10:00
- Speaker : **Prof. Yu-Ray Chen**
- Affiliation : Chang Gung University, Taiwan
- Topic : Chang Gung Surgery First Orthognathic Surgery

Invited Lecture Ⅱ

- Date : 10.26 (Fri) 10:00~11:00
- Speaker : **Dr. Masaharu Mitsugi**
- Affiliation : Kochi Health Science Center, Japan
- Topic : Surgery first orthognathic approach using 3D virtual orthodontic and surgical planning

■ Moderator : **박재억**(가톨릭의대), **황순정**(서울치대)

Invited Lecture Ⅲ

- Date : 10.26 (Fri) 11:30~12:30
- Speaker : **Prof. Xiao-Xia Wang**
- Affiliation : Peking University, China
- Topic : Correction of hemimandibular hyperplasia with the assistance of digital technique

Invited Lecture Ⅳ

- Date : 10.26 (Fri) 13:30~14:30
- Speaker : **김재승 교수(Prof. Jaeseung Kim)**
- Affiliation : Konkuk University Medical Center, Korea
- Topic : The Beautiful Orthognathic Surgery complying with “The Aesthetic Functionalism”

초청강연 I | Invited Lecture I

일시(Date) : 10.26 (Fri) 09:00~10:00

Moderator : **김경욱, 김종렬**

Chang Gung Surgery First Orthognathic Surgery

Prof. Yu-Ray Chen

Chang Gung University, Taiwan

Principles of Chang Gung surgery first orthognathic surgery include: 1. no or minimal pre-surgical orthodontic treatment, 2. no pre-surgical third molar extraction, 3. orthodontist determine the final occlusion position, 4. no intermaxillary fixation after surgery. Nerve block and extensive infusion of operative area, peri-surgery steroid, NSAID, and antiemetic drugs are routinely used besides hypotensive general anesthesia in the operation room. Patient's participation is strongly emphasized including pre-operative understanding the procedure, the proper expectation of the surgical result, the body fitness and healthy sleep habit. We provide meticulous nursing care to make sure the patients' oral hygiene and nutrition after surgery. The outcome studies showed that we can shorten the total treatment time for 170 days compared to the traditional orthodontic first OGS. Patients are happy when they can improve their facial appearance early and can finish their braces early. The surgery first OGS can benefit the most to the patients with class III anterior open bite and the OSA (obstructive sleep apnea) patients.

Curriculum Vitae

Yu-Ray Chen, MD

Professor Yu-Ray Chen is currently the Honorary Chairman of the Chang Gung Steering Committee, the top leading committee of Chang Gung Group, and Professor of Surgery at the Chang Gung University. He graduated from the National Taiwan University Medical School in 1972 and did his general surgery residency at the National Taiwan University Hospital and plastic surgery training at the Chang Gung Memorial Hospital.

Throughout his career, he was appointed as Visiting Professor in many distinguished institutions including the University of Illinois in Chicago, Washington University in St. Louis, the University of Pennsylvania, the Singapore General Hospital, and the University of Stellenbosch and Tygerberg Hospital in Cape Town, South Africa.

Since 1980, Prof. Chen had performed over seven thousand mid-facial and mandibular osteotomies, and numerous cleft and intracranial reconstructions. Prof. Chen also had developed several modifications of osteotomies in the maxillofacial region. He and his team in Chang Gung Craniofacial Center are one of the first center to practice and promote surgery-first orthognathic surgery with publications on leading journals.

Prof. Chen is a dynamic member of many professional societies. In Taiwan, he had been elected President of the Cleft Palate and Craniofacial Association, the Plastic and Reconstructive Surgical Association, and the Society of Aesthetic Plastic Surgery. Internationally, he had also been elected the President of the International Society of Craniofacial Surgery (1997-1999), the Secretary of the Asian-Pacific Craniofacial Association (1993-1997), the General Secretary of the Asian-Pacific Section of IPRAS (2001-2005) and the Maliniac Lecturer of American Society of Plastic Surgeons (2008).

초청강연 Ⅱ | Invited Lecture Ⅱ

일시(Date) : 10.26 (Fri) 10:00~11:00

Moderator : **김경욱, 김종렬**

Surgery first orthognathic approach using 3D virtual orthodontic and surgical planning

Dr. Masaharu Mitsugi

Kochi Health Science Center, Japan

Surgery First is a challenging approach to patients who need Orthognathic Surgery, with evident advantages for them as: Shorter treatment time, Immediate facial appearance improvement and No negative changes in occlusion and face, since there is no dental decompensation prior to surgery.

This approach provides a very good outcome for patients and is a breakthrough in surgical orthodontics for orthodontists. however orthodontists familiar with conventional approach are hesitant to apply it because of the difficulty of predicting postoperative correction.

This lecture will highlight the specific technique to combine the 3D virtual surgical plan with the orthodontic virtual plan.

Curriculum Vitae

Masaharu MITSUGI, DDS, PhD

Dr. MITSUGI is a Diplomate of the Japanese Society of Oral and Maxillofacial Surgeons.
He specializes in the treatment of patients with dentofacial deformities and other surgical orthodontic needs. He lectures and teaches courses at national and international level and has made numerous contributions to surgical textbooks and scientific journals. He is also a reviewer for the Journal of Oral and Maxillofacial Surgery.

1971-1977: Dental Degree
Hiroshima University Dental School, Japan
1984: PhD
Department of Oral and Maxillofacial Surgery II
Hiroshima University, Japan
1986-2008: Director, Division of Dentistry and Oral-Maxillofacial Surgery,
Kagawa Prefectural Central Hospital, Kagawa, Japan
2008- Present
Attending Surgeon, Senior Consultant
- OMS Takamatsu (Kagawa, Japan)
- Kochi Health Sciences Center (Kochi, Japan)
- Kure Kyosai Hospital (Hiroshima, Japan)

초청강연 Ⅲ | Invited Lecture Ⅲ

일시(Date) : 10.26 (Fri) 11:30~12:30

Moderator : **박재억, 황순정**

Correction of hemimandibular hyperplasia with the assistance of digital technique

Prof. Xiao-Xia Wang

Peking University, China

Objective: To introduce a new surgical protocol to treat hemimandibular hyperplasia (HH) by simultaneous orthognathic surgery and condylectomy under digital guidance. Evaluate effects and precision of correction of HH by this method.

Methods: The investigators implemented a case-series study. 26 patients with HH undergone simultaneous bimaxillary orthognathic surgery and condylectomy from 2016.1-2017.5 were included in this study. Presurgical virtual treatment planning was performed, transferred to the operation room, and realized with assistance of surgical navigation and 3D-print occlusion splints. Postoperative CT data were used to analyze improvement of facial symmetry and verify accuracy of the surgical procedure.

Results: All patients exhibited satisfactory clinical effects: facial asymmetry was corrected as expected. Postoperative validation revealed that the presurgical planning had been achieved more precisely on the unaffected side than on the affected side. Moreover, bilateral mandibular proximal segments revealed a tendency of outward rotation compared with the presurgical planning model. Furthermore, when assessing facial symmetry compared with the presurgical model, deviation of all midline landmarks was <2 mm, average maxillary occlusal plane inclination was <0.2 mm at first molar level, and most of asymmetry index of paired jaw landmarks remarkably decreased after surgery ($p<0.01$).

Conclusion: Simultaneous orthognathic surgery and condylectomy under digital guidance is a realistic and precise method for treatment of HH. Surgical results can be validated during surgery by virtual navigation. However, movement of each bone segment cannot be accurately controlled as planned before surgery.

Curriculum Vitae

Xiao-Xia WANG

Education Background

1988-1996 School of Stomatology, Shandong Medical University, DDS, MS
1998-2001 Peking University School of Stomatology, PhD.
2007-2008 New York University Medical Center, Visiting Scholar

Working Background

Dept. of oral and maxillofacial surgery,
Shandong Medical University Hospital of Stomatology
1994.8-1998.7 Resident

Dept. of oral and maxillofacial surgery,
Peking University School and Hospital of Stomatology
2000.8-2002.8 Resident
2002.9-2006.8 Assistant Professor
2006.9-2015.9 Associate Professor
2015,9- Clinical Professor

Social Work

Committee Member of Chinese Society of Oral and Maxillofacial Surgery (CSOMS), International Faculty of AOCMF

초청강연Ⅳ | Invited Lecture Ⅳ

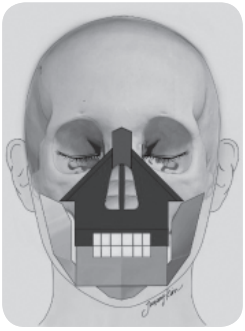
일시(Date) : 10.26 (Fri) 13:30~14:30

Moderator : **박재억, 황순정**

The Beautiful Orthognathic Surgery complying with "The Aesthetic Functionalism"

김재승 교수(Prof. Jaeseung Kim)

Konkuk University Medical Center, Korea



It is hard to define a jaw deformity or a malocclusion as a "disorder" or a "diversity." It makes not only patients but also oral and maxillofacial surgeons and orthodontists confused. To carry out the operation while taking the risks, the meaning and the object of the surgery have to be cleared.

Orthognathic surgery is to enhance both the beauty and the function.

In general, the purpose of surgeries performed at the face can be categorized into one of three, to remove the focus, to restore the fractured or damaged parts or to beautify the facial shape.

However, the orthognathic surgery is the surgery to improve both function and shape of the face.

Thus, a surgeon must not correct the jaw like an ape just to satisfy the bite and moreover must not weaken the jaw just to make attractive face.

Marcus Vitruvius Polio, Roman architect during the 1st century BC, the most important three essential elements of the architecture are " Firmitas, Utilities, and Venustas," which each means safety, function and beauty.

Also, the orthognathic surgery should satisfy the safety, function, and beauty.

First, the surgery should be safe, and so must not harm the patient's health.

Second, the surgery should be functional, and so improve the bite and airway.

Third, the surgery should be aesthetic, and solve socio-psychological problems.

Even though orthognathic surgery is practiced safely and functionally, it cannot satisfy the patient if it reduce the attractiveness. Because it is the surgery of face that represents our identities.

However, we cannot always satisfy all three, safety, function, Aesthetics. We have to concede and compromise among each elements to practice "The Beautiful Orthognathic Surgery", which will be able to improve the patient's quality of life at the end.

Curriculum Vitae

Jaeseung Kim

Present affiliation
Chief of Department of Dentistry, KonKuk University Hospital, Seoul
Chief of Jaw surgery center, KonKuk University Hospital, Seoul
Director of the Institute of Orthognathic Surgery,
Korean association of maxillofacial plastic and reconstructive surgeons

Publications & lectures
- Esthetic Orthognathic Surgery of the Mandibular Prognathism (Jisung, 1999)
- Two Faces of Bimaxillary Orthognathic Surgery (Kyumoonsa, 2012)

- Pharyngeal airway changes after sagittal split ramus osteotomy of the mandible: a comparison between genders, 2010Aug;68(8):1802

- Changes in the upper airway after counterclockwise maxillomandibular advancement in young Korean women with class II malocclusion deformity.
  2013Sep;71(9):1603.

- Aesthetic Strategy in Orthognathic Surgery of The Far East Oriental Face:
  Annual meeting Asian Oral & Maxillofacial Surgery, June 8, 2000

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅰ | Symposium Ⅰ

TOPIC : Orthognathic surgery of facial asymmentry

■ Moderator : **김재승**(건국대 의료원), **김용덕**(부산치대)

Symposium Ⅰ

- Date : 10.26 (Fri) 14:30–15:00
- Speaker : **Prof. Tomonao Aikawa**
- Affiliation : Osaka University, Japan
- Topic : Clinical features and Treatment Strategy of Facial Asymmetry with Unilateral Condylar Hyperplasia: From Six Cases by proportional condylectomy and bimaxillary orthognathic surgery

Symposium Ⅰ

- Date : 10.26 (Fri) 15:00–15:30
- Speaker : **Prof. Michael Yuanchien Chen**
- Affiliation : China Medical University,Taiwan
- Topic : CAD/CAM Orthognathic Surgery for Asymmetry
  – How Precisely Are We Able to Correct –

Symposium Ⅰ

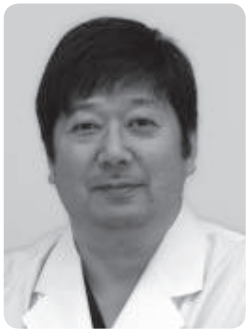
- Date : 10.26 (Fri) 15:30–16:00
- Speaker : **한세진 교수(Prof. Sejin Han)**
- Affiliation : Dankook University, Korea
- Topic : Adjunctive Facial Surgery for Improving the Esthetic Result of Facial Asymmetry

심포지엄 I | Symposium I

일시(Date) : 10.26 (Fri) 14:30–15:00

Moderator : **김재승, 김용덕**

Clinical features and Treatment Strategy of Facial Asymmetry with Unilateral Condylar Hyperplasia: From Six Cases by proportional condylectomy and bimaxillary orthognathic surgery



Prof. Tomonao Aikawa

Osaka University, Japan

Facial asymmetry, driven by unilateral condylar hyperplasia (CH), contains various pathological conditions. According to the classical classification of Obwegeser and Mekek, unilateral hyperactivity of condyle and mandible contains three pathological features, i.e. hemimandibular hyperplasia (HH), hemimandibular elongation (HE), and hybrid form of HH and HE. These three pathological conditions are comprehensively referred as CH. HH and HE affect not only the condyle but also the remaining part of the hemimandible. On the other hand, different pathological condition, isolated condylar hyperplasia without involvement of the remaining part of the mandible, exist. Although, some clinicians strictly separate this condition from classical CH (HH and HE), in this paper, every condylar hyperactivity was referred as CH, and the pathological conditions were subdivided into HH, HE, hybrid, and isolated CH.

The Diagnosis was given by combination of clinical and radiological examinations. The growth activities of condyle were evaluated by bone scintigraphy and/or SPECT. As long as the condyle is active in growth, skeletal asymmetry progress. Thus, condylectomy have been the first choice to remove the growth center of condylar hyperactivity in addition to orthognathic surgery (OGS). For condylectomy, high condylectomy (5 mm resection) or proportional condylectomy (adjusting the condylar length and form to the ideal) can be planned. As an OGS for facial asymmetry with active CH, a two-stage surgery; condylectomy followed by OGS, or a one-stage surgery; simultaneous condylectomy and OGS, can be planned.

We have treated 8 cases of facial asymmetry with CH in the last 10 years. Characteristics of patients and treatments were summarized in the table. Currently, we select a one-stage proportional condylectomy and OGS for treatment of facial asymmetry with CH. The advantages of proportional condylectomy with OGS were adjusting the ramus height, and lesser number of operations. In addition, shaving of mandibular lower border for correcting the remained deformity in HH and HE were planned. All cases were satisfactory in skeletal stability, occlusion, and esthetics.

The clinical features of CH, and efficacy and the skeletal stability of proportional condylectomy and bimaxillary OGS will be reported.

Case	Age	Gender	Type of CH	Affected side	activity	Condylectomy (in length)	OGS	Shaving of lower border	genioplasty
1	24	M	HH	L	inactive	none	2 jaw	+	+
2	26	F	HH + HE	R	active	16 mm	2 jaw	+	none
3	21	F	HH + HE	R	active	7 mm	2 jaw	none	none
4	21	F	HH + HE	R	active	8 mm	2 jaw	+	none
5	38	F	HE	L	active	15 mm	2 jaw	none	none
6	19	F	HE	R	active	10 mm	2 jaw	none	+
7	37	M	isolated CH	R	active	16 mm	2 jaw	none	none
8	18	M	HH	R	active	none	none	+	+

Curriculum Vitae

Tomonao Aikawa, DDS, Ph.D

The First Department of Oral and Maxillofacial Surgery (OMFS), Osaka University Graduate School of Dentistry
1-8 Yamadaoka, Suita, Osaka 565-0871, Japan
Tel: +81-6-6879-2936 Fax: +81-6-6876-5298
Email: aikawat@dent.osaka-u.ac.jp

Education

1983 – 1990 Hiroshima University School of Dentistry, Hiroshima, Japan (DDS)
1990 – 1994 The First Department of Oral and Maxillofacial Surgery (OMFS), Osaka University Graduate School of Dentistry, Osaka, Japan(Ph.D)

Carrer

1994 – 1997 Reserch Fellow, Japan Society of Promotion of Science (Osaka University Graduate School of Dentistry)
1997 – 1998 Clinical Fellow, 1st Dept of OMFS, Osaka University Dental Hospital
1998 – 1999 Chief of Oral and Maxillofacial Surgery, Yao-Tokusyukai General Hospital
1999 – 2001 Research Fellow, Endocrine Unit, Massachusetts General Hospital
2001 - 2003 Clinical Fellow, 1st Dept of OMFS, Osaka University Dental Hospital
2003 – 2009 Assistant Professor, 1st Dept of OMFS, Osaka University Graduate School of Dentistry
2009 – present Associate Professor, 1st Dept of OMFS, Osaka University Graduate School of Dentistry

심포지엄 I | Symposium I

일시(Date) : 10.26 (Fri) 15:00–15:30

Moderator : **김재승, 김용덕**

CAD/CAM Orthognathic Surgery for Asymmetry ~ How Precisely Are We Able to Correct ~

Prof. Michael Yuanchien Chen

China Medical University, Taiwan

Computer Assisted Surgery (CAS) can be categorized into 3 subgroups, *Robotics, Navigation and CAD/CAM* technologies. However, robotics seems to be more practical by now for soft tissue dissection while navigation procedures are generally considered relatively time consuming during peri-operative setting. The outcomes of utilizing computer-aid virtual planning(CAD) and computer-aid manufactured(CAM) cutting / positioning guides as well as powerful ultrasonic apparatus (BoneScalpel TM by Misonix Inc, Farmingdale, NY, USA & BONEMED Surgery Unit TM, VIA-TECH Biomedical. Co. Ltd, Taiwan) with tissue selective cutting characteristics in a series of more than 100 facial asymmetry cases underwent 2-jaw orthognathic surgery in the OMS department of China Medical University Hospital, Taichung City, Taiwan will be presented. Both efficiency and preciseness have been significantly improved by applying CAD/CAM technology in our case series especially for those suffered from obvious asymmetric situations where complicated pitch, roll & yaw are inevitable, in which traditional 2D analysis and prediction are certainly insufficient and not reliable. However, there're still limitations of CAD/CAM technology and not all of them ended up with unperceivable residual asymmetry which definitely required secondary or even tertiary corrective procedures to meet patients' expectations.

Curriculum Vitae

Michael Yuanchien CHEN, DDS., MS.

Current positions:

President, 2017~2019
Taiwanese Association of Oral & Maxillofacial Surgeons(TAOMS).
Chairman,
Dental Department & Division of Oral Maxillofacial Surgery,
China Medical University Hospital, Taichung City, TAIWAN.
Associate Professor,
College of Dentistry, China Medical University, Taichung City, TAIWAN.
Executive Council(Member-At-Large, 2016~2018),
Asian Association of Oral & Maxillofacial Surgeons.
Local Organizing Committee Chairman,
2018 Asian Congress on Oral and Maxillofacial Surgery, Taipei, Taiwan.
Editorial Board Members
Journal of Oral and Maxillofacial Surgery, Medicine and Pathology.

Experiences:

Congress chairman / Course Director

2008	Annual Conference of TAOMS.
2016	Annual Conference of TAOMS.
2017	ACE Forum on OgS at China Medical University, Taichung, Taiwan.
2017	AOCMF Seminar on Advanced Orthognathic Surgery, Taiwan.
	International Committee Chair of TAOMS (2011~2017)

Education:

1980~1986	D.D.S. School of Dentistry, Kaohsiung Medical University, Taiwan.
1993	Advanced Implant Course, University of Alabama at Birmingham, USA.
1998	Autogenous Bone Grafting Course, University of Miami, USA.
2000~2002	M.S. Institute of Medical Science, China Medical University, Taiwan.
2001	Orthognathic Surgery Course, Seoul National University, Korea.

심포지엄 I | Symposium I

일시(Date) : 10.26 (Fri) 15:30–16:00

Moderator : **김재승, 김용덕**

Adjunctive Facial Surgery for Improving the Esthetic Result of Facial Asymmetry

한세진 교수(Prof. Sejin Han)

Dankook University, Korea

No human face is perfectly symmetric in its structure. In fact, most hard and soft tissue facial asymmetries present in the general population exist as subconscious, innate inequities that contribute to the uniqueness of every individual. Alongside averageness, sexual dimorphism, and youthfulness, asymmetry has emerged as one of the four major determinants of attractiveness.

The causes of asymmetries affecting the face are numerous.
: Hemifacial microsomia,
Congenital temporomandibular ankylosis,
Congenital condylar aplasia,
Idiopathic hyper- or hypoplasia,
Traumatic hyper- or hypoplasia,
Clefting conditions,
Bone disease (osteoma or fibrous dysplasia),
Muscle hypertrophy.

They are most easily classified by simplistically separating them into one of three categories: congenital, developmental, or acquired. The origin of facial asymmetry must be correctly evaluated and then the treatment plan must be established as problems of soft tissue and hard tissue.

I have operated patients with facial asymmetry, especially, in middle and low-face by using various aesthetic surgical treatments such as Le fort I osteotomy, sagittal ramus osteotomy, vertical ramus osteotomy, ostectomy of the lateral cortex of the mandible, angle shaving, genioplasty, bone or implant augmentation, rhinoplasty, and musclectomy. I present the management of some of the causes of asymetries of the face.

Curriculum Vitae

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

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

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

Venue : Jikji Hall A

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅱ | Symposium Ⅱ

TOPIC : 3D Soft Tissue Prediction & Analysis

■ Moderator : **김선종**(이화의대), **김창현**(가톨릭의대)

Symposium Ⅱ

- Date : 10.26 (Fri) 14:30–15:00
- Speaker : **김영준 교수(Prof. Youngjun Kim)**
- Affiliation : Korea Institute of Science and Technology, Korea
- Topic : 3D virtual planning simulation technology for cranio–maxillofacial surgery

Symposium Ⅱ

- Date : 10.26 (Fri) 15:00–15:30
- Speaker : **김병호 원장(Dr. Byungho Kim)**
- Affiliation : Smile Future Orthodontic Clinic, Korea
- Topic : Frontal soft tissue change after surgical correction of facial asymmetry

Symposium Ⅱ

- Date : 10.26 (Fri) 15:30–16:00
- Speaker : **국민석 교수(Prof. Min–Suk Kook)**
- Affiliation : Chonnam National University, Korea
- Topic : Facial soft tissue analysis methods for clinical application

심포지엄 Ⅱ | Symposium Ⅱ

일시(Date) : 10.26 (Fri) 14:30–15:00

Moderator : **김선종, 김창현**

3D virtual planning simulation technology for cranio-maxillofacial surgery

김영준 교수(Prof. Youngjun Kim)

Korea Institute of Science and Technology, Korea

Recently, 3-dimensional (3D) virtual planning simulation technologies have been applied to cranio-maxillofacial (CMF) surgeries. For 3D virtual planning for CMF surgeries, 3D medical image software techniques are essential. In this talk, I will introduce the state-of-art 3D medical image software techniques. Main topics of the talk include 3D pre-operative planning, analysis, and prediction. Various applications using the 3D medical image software techniques will be presented including 3D aesthetic analysis simulation for maxillofacial surgery, and cranial/maxillary/mandibularreconstructive surgery. At the end of the talk, ongoing project of my research team will be introduced: AI(artificial intelligence)-based 3D planning software for cranio-maxillofacial reconstruction surgery.

Curriculum Vitae

Youngjun Kim, Ph.D

Dr. Youngjun Kim is a principal researcher in the Center for Bionics at Korea Institute of Science Technology. He is also an Associate Professor at the Division of Bio-Medical Science and Technology, KIST School, UST. He is currently a committee member of Society for Computer Design and Engineering, Korean Society of Imaging Informatics in Medicine, and Korean Society for Simulation Surgery. He researched in the Department of Radiation Oncology at Stanford University as a postdoctoral scholar (2013). He received his BS (2001), MS (2003), and Ph.D. (2009) at Seoul National University. He received awards including the National Research Council of Science and Technology (2018) and Minister of Science, ICT of Science, ICT and Future Planning (2016). In 2017 and 2018, he authored 17 journal papers and a book, VTK programming, and gave more than 50 presentations. He recently transferred 3D medical software technologies to 4 companies. His research interests include 3D simulation, artificial intelligence, 3D printing, virtual reality, augmented reality for medicine.

심포지엄 Ⅱ | Symposium Ⅱ

일시(Date) : 10.26 (Fri) 15:00–15:30

Moderator : **김선종, 김창현**

Frontal soft tissue changes after surgical correction of facial asymmetry

김병호 원장(Dr. Byungho Kim)

Smile Future Orthodontic Clinic, Korea

Patients undergoing orthognathic surgery generally expect that all parts of the face, especially asymmetry, will be fully improved. However, orthognathic surgery of facial asymmetry has its limitations. The main reason is as follows.

1) Asymmetry is present in both the lower and upper face features.
2) It is difficult to define the midsagittal reference planes and quantitatively evaluate results before and after treatment.
3) It is difficult to predict the shape and amount of soft tissue changes according to transverse changes in the hard tissue.

In the evaluation and planning of facial asymmetry, as the use of 3D cone beam CT became common, the setting of the midsagittal reference plane became very accurate. However, skeletal and clinical evaluations are often inconsistent. Therefore, clinical images and 3D CT should be used together when evaluating facial asymmetry.

There are cases in which asymmetry of the skeleton evaluated on the midsagittal plane is evaluated differently from clinical examination results. This usually occurs in cases where the height difference between the left and right eyes is large or the head posture is habitually inclined. In many cases, we observe a tendency for the posture of the head to return correctly in the direction of decreasing the height difference between the left and right eyes after asymmetric surgery. Therefore, analysis of facial asymmetry based on vertical bisector of interpupillary line has advantages in evaluating direction and amount of facial asymmetry. However, if the tip of the nose is tilted to one side or if the philtrum is shifted to one side, the lower reference using the lower structure (columella, philtrum) of the face must be evaluated at the same time. This is because, based on only the upper reference (vertical bisector of the interpupillary line), it may be evaluated differently from the asymmetric aspect seen in the small range of view of the lower face. In addition, since columella and philtrum are structures that are altered by asymmetric surgery, it is important to predict their postoperative change patterns.

I would like to present the results of the comparison between before and after asymmetric surgery using clinical photographs and 3D Cone Beam CT superimposition.1. Setting the midsagittal reference plane (upper and lower reference)
2. Change of head posture according to facial asymmetric surgery
3. Changes of columella and philtrum following surgical skeletal changes

Curriculum Vitae

Byoung-Ho Kim

Position Title

Director, Smile Future Orthodontic Clinic

Education

College of Dentistry, Seoul National University, Seoul, Korea

1999	Ph.D. in orthodontics
1994	Master of Dental Science in orthodontics
1991	Doctor of Dental Surgery
1991 - 1994	Internship and residency in Department of orthodontics, Seoul National University Dental Hospital

Professional Experiences

1998 – 1999	Fellow Doctor, Department of Orthodontics, Seoul National University Dental Hospital
2001- present	Clinical professor, Department of Orthodontics, College of Dentistry, Seoul National University
2006	Visiting scholar, Department of Orthodontics, UCLA
2011- 2012	President, Korean Foundation of Gnatho-Orthodontic Research
2017- present	Academic director, Korean Academy of Orthodontics and Orthognathic Surgery
2016	Kohwang Academic Award, Korean Association of Orthodontics

심포지엄 Ⅱ | Symposium Ⅱ

일시(Date) : 10.26 (Fri) 15:30–16:00

Moderator : **김선종, 김창현**

Facial soft tissue analysis methods for clinical application

국민석 교수(Prof. Min-Suk Kook)

Chonnam National University, Korea

The soft tissue analysis of the face can be used very usefully in the planning of preoperative orthognathic surgery as well as in the hard tissue analysis and in the evaluation of postoperative evaluation and prediction of facial growth. In the past, cephalic radiographs were used to perform soft tissue analysis of the maxillofacial region. However, this technique is focused on two - dimensional and hard tissue analysis and has many limitations. Therefore, many oral and maxillofacial surgeons need to construct and analyze soft tissue three - dimensionally.
Digitizers, 3D CTs, 3D scanners, stereo cameras, etc. are known as methods for analyzing soft tissues in the maxillofacial region. Each method has merits and limitations, and it can be an effective method if it meets the research purpose and method.

The 3D CT method has the advantage of being able to reproduce and analyze soft tissues at the same time as the hard tissue, but it is not focused on soft tissues and thus has limitations in reproducing accurate soft tissues. Stereo cameras have the advantage of short shooting time, but they have disadvantages of reproducibility difference according to shooting distance and angle with the subject. In addition, 3D scan, which has recently been commercialized, has excellent advantages in accuracy and reproducibility, but has a drawback in that it takes a long time to photograph relatively. In recent years, many studies have been conducted and commercialized in order to overcome these drawbacks.

By complementing these advantages and disadvantages, it is possible to measure the amount of change before and after surgery by superimposing hard tissue and soft tissue, and analysis methods with better accuracy and reproducibility are being developed.

In this symposium, I would like to talk about the literature review and experiences of soft tissue analysis of the maxillofacial region.

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
E-mail: omskook@jnu.ac.kr,

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

2017. 4.- Present Professor
Department of Oral and Maxillofacial Surgery
Chonnam National University, Gwangju, Korea

2017. 2.- Present 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

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅲ | Symposium Ⅲ

TOPIC : Controversies in Orthognathic Surgery

■ Moderator : **오희균**(전남치대), **김철환**(단국치대)

Symposium Ⅲ

- Date : 10.26 (Fri) 16:30–17:00
- Speaker : **Prof. Chih-Yu Peng**
- Affiliation : Chung Shan Medical University, Taiwan
- Topic : Condylar Position During IVRO

Symposium Ⅲ

- Date : 10.26 (Fri) 17:00–17:30
- Speaker : **Prof. Koichiro Ueki**
- Affiliation : Yamanashi University, Japan
- Topic : Surgical approach for anterior open bite and post-operative condylar change

Symposium Ⅲ

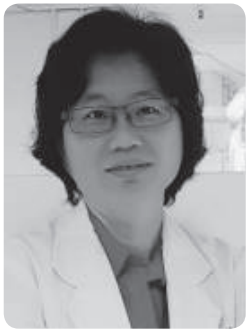
- Date : 10.26 (Fri) 17:30–18:00
- Speaker : **권대근 교수(Prof. Tae-Geon Kwon)**
- Affiliation : Kyungpook National University, Korea
- Topic : 3D-CAD/CAM fabricated surgical wafer has hidden costs:Evaluation of outcomes and considerations for virtual surgical planning

심포지엄 Ⅲ | Symposium Ⅲ

일시(Date) : 10.26 (Fri) 16:30–17:00

Moderator : **오희균, 김철환**

Condylar Position During IVRO



Prof. Chih-Yu Peng

Chung Shan Medical University, Taiwan

Mandibular prognathism has been shown to have a relatively high prevalent in Asian people. The most common surgical methods for mandibular prognathism include the intraoral vertical ramus osteotomy (IVRO) and sagittal split ramus osteotomy (SSRO). The IVRO has several advantages: results in minimal inferial alveolar nerve injury, bleeding. IVRO is also a preferred technique for treating patients with symptomatic temporomandibular joint (TMJ) disorders. IVRO improves the discs-condyle relationship in patients with mandibular deformities, providing good postoperative stability and patient satisfaction. However, IVRO has some disadvantage compared with SSRO. The IVRO technique has restricted surgical field during the procedure and hard to apply rigid interosseous fixation. The period of intermaxillary fixation becomes longer than SSRO. The most troublesome complication is condylar displacement or luxation from the glenoid fossa. The reduction can be performed immediately after surgical procedure.

In this report, I will present review articles and my own experience with condylar position during IVRO. And I will introduce a “LASSO” technique that can control the orientation of proximal segment and prevented distal displacement of proximal segment during / following intraoral vertical ramus osteotomy

Curriculum Vitae

Chih-yu PENG

DDS., Kaohsiung Medical University, School of dentistry
MD. Chung Shan Medical University, College of Oral Medicine, School of Dentistry
PhD. Chung Shan Medical University, College of Oral Medicine, School of Dentistry

Associate Professor of Chung Shan Medical University, College of Oral Medicine, School of Dentistry
Chairman, Department of Oral and Maxillofacial Surgery, Chung Shan Medical University Hospital
Clinical assistant professor, Department of Oral and Maxillofacial Surgery, Kaohsiung Medical University, School of dentistry

Membership in professional organization
Member and specialist of Taiwan Association of Oral and Maxillofacial Surgeons
Member and specialist of Taiwan Head and neck society
Member of Committee of Taiwan Association of Oral and Maxillofacial Surgeons Board
Chairmen of information committee of ROC Association of Oral and Maxillofacial Surgeons
Member and specialist of Academy of Dental Implantology, Republic of China
Director, member and specialist of Taiwan Academy of Implant Dentistry
Member of Committee of Taiwan Academy of Implant Dentistry Board

심포지엄 Ⅲ | Symposium Ⅲ

일시(Date) : 10.26 (Fri) 17:00–17:30

Moderator : **오희균, 김철환**

Surgical approach for anterior open bite and post-operative condylar change

Prof. Koichiro Ueki

Yamanashi University, Japan

It is well- known that open bite is vertical mal-occlusion and the treatment for anterior open bite is very difficult. Generally, open bite cases have mandibular movement disorder, masticatory disturbance, dysphagia, dysarthria, oral parafunction such as tongue habit. It is considered that they are causes or results of open bite. Post-operative relapse in open bite after de-bonding of orthognathic device occurs most frequently in comparison with other jaw deformity.

When open bite is mild and there are no abnormal differences in size, position and shape between maxilla and mandible, orthodontic device with multi-loop wire or anchor screw and plate can establish the ideal occlusion. However, open bite is severe and there are large differences in size, position and shape between maxilla and mandible, orthognathic surgery or surgical assist should be applied.

There are some variations in planning including surgical procedure, direction and position of maxillo-mandibular segments for Class III high angle case and Class II high angle case. We determine the surgical planning to prevent stretching the pterygo-masseter sling involving environmental ligaments and masticatory muscle, and to maintain the tongue space.

When SSRO alone is performed to correct anterior open bite, posterior site of the distal segment can move inferiorly and stretch the pterygo-masseter sling, even if the short lingual cut is selected. Over detachment and stretch of muscles and ligaments can cause some complications including intra-operative bleeding or hypoesthesia etc. Combination with superior impaction at the posterior site of maxillary segment is more favorable to expect better stability. After maxillary impaction, mandibular counter-clockwise rotation can frequently occur in Class II open bite. However, it has been reported that the counter-clockwise rotation could be a cause of progressive condylar resorption (PCR) and it could induce post-operative relapse, in previous studies.

Thus, surgical treatment for open bite, especially Class II high angle cases, is still difficult and established method does not exist. I would like to show the knowledge obtained by previous researches and my experiences.

Curriculum Vitae

Koichiro Ueki, DDS, PhD

1993.3. DDS, College of dentistry, Hokkaido University
1998.3. PhD, Graduate school of medicine, Kanazawa University
1998.4. Clinical fellow, Department of oral and maxillofacial surgery, school of medicine, Kanazawa University
2007.5. Assistant, Department of oral and maxillofacial surgery, school of medicine, Kanazawa University
2011.10. Lecturer, Department of oral and maxillofacial surgery, school of medicine, Kanazawa University
2012.10. Professor, Department of Oral and maxillofacial Surgery, Division of Medicine, Interdisciplinary Graduate School, University of Yamanashi
2018.10. Present

심포지엄 Ⅲ | Symposium Ⅲ

일시(Date) : 10.26 (Fri) 17:30–18:00

Moderator : **오희균, 김철환**

3D-CAD/CAM fabricated surgical wafer has hidden costs:Evaluation of outcomes and considerations for virtual surgical planning

권대근 교수(Prof. Tae-Geon Kwon)

Kyungpook National University, Korea

For treatment of simultaneous maxillary and mandibular osteotomies for the correction of dentofacial deformities, the intermediate splint is the one of the most important guides for the surgery. Especially in cases with overlap between the upper and lower dentitions in planning, virtual autorotation of the mandible using 3D virtual planning has definitive advantages over conventional articulator model surgery. In this presentation, we evaluated the outcomes of the surgery performed with two different virtual 3D planning method and compared the results with the conventional method. Our experience and most of the previous results in using 3D-printed intermediate wafer for maxillary mobilization showed the favorable results. However, these do not necessarily mean that the surgical accuracy of the 3D printed wafer is dominantly better than conventional model surgery. Moreover, it is needed to maintain conventional model surgery system as a “back-up” for the unpredicted errors in 3D planning. In this lecture, various consideration factors for 3D virtually planned intermediate splints for bimaxillary orthognathic surgery will be discussed.

Curriculum Vitae

Tae-Geon Kwon, DDS, PhD

Biography:

Prof. Kwon completed his undergraduate studies in Dentistry at Kyungpook National University and trained at Dept. of Oral & Maxillofacial Surgery in Kyungpook National University Hospital. After the resident training, he was a visiting scholar of Freiburg University, Germany and studied at Osaka University, Japan. After returning from Japan, he became to be an assistant professor at the Dept. of Oral surgery in College of Medicine in Keimyung University, Korea. Then, he became to be an associate professor at the Dept. Oral & Maxillofacial Surgery, School of Dentistry in Kyungpook National University in 2003. He carried out post-doctoral research at University of Michigan, Ann Arbor from 2007 to 2009, focused on craniofacial bone regeneration. He has been full professor since 2011 and currently serving as the head of the same department.

Research:

Dr. Kwon's main research interests have been the computer-simulated surgical treatment for dentofacial deformity and development of strategy for craniofacial bone regenerations. Work in progress in several areas including : 1) Three-dimensional evaluation of dentofacial deformity and evaluation of surgical outcomes after asymmetric patients, 2) Developing bone regeneration strategy for refractory bone defect by using the hematopoietic stem cell mobilization, 3) Investigation of pathophysiological mechanism of MRONJ

Venue : Jikji Hall A

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅳ | Symposium Ⅳ

TOPIC : Medical insurance system

■ Moderator : **김형준**(연세치대)

Symposium Ⅳ

- Date : 10.26 (Fri) 16:30–17:00
- Speaker : **권경환 교수(Prof. Kyung-Hwan, Kwon)**
- Affiliation : Wonkwang University, Korea
- Topic : 구강악안면외과의 국민건강보험 수가체계 임상가이드라인

Symposium Ⅳ

- Date : 10.26 (Fri) 17:00–17:30
- Speaker : **김재영 교수(Prof. Jae-Young Kim)**
- Affiliation : Yonsei University, Korea
- Topic : 구강악안면외과 외래 보험진료 (행위별수가 및 고시내용)

Symposium Ⅳ

- Date : 10.26 (Fri) 17:30–18:00
- Speaker : **변수환 교수(Prof. Soo-Hwan, Byun)**
- Affiliation : Hallym University, Korea
- Topic : 구강악안면외과 외래 보험진료(사례별 설명)

심포지엄 Ⅳ | Symposium Ⅳ

일시(Date) : 10.26 (Fri) 16:30–17:00

Moderator : **김형준**

구강악안면외과의 국민건강보험 수가체계 임상가이드라인

권경환 교수(Prof. Kyunghwan Kwon)

Wonkwang University, Korea

한국의 대내외 경제사정과 국민건강보험제도의 변화에 맞추어서 구강악안면외과의 진료영역 변화가 예측되고 있습니다. 구강악안면외과 보험연구회(대한구강악안면외과학회와 대한악안면성형재건외과학회 연합 보험위원회– 국가보험제도 정책 수립과 정부의 구강악안면외과와 관련 법률 제도적 문제를 연구하는 연구회, 구보연)에서는 제 57차 대한악안면성형재건외과학회 정기학술대회에 맞추어 외래 환자에 대한 국민건강보험 수가제도를 정리하여 발표하고자 합니다.
국민건강보험제도 중에서 구강악안면외과에 대한 영역을 다시 한번 되새길 수 있는 기회가 되었으면 합니다. 이번에는 우리 위원회가 구강악안면외과의 외래진료 영역에 중심으로 총론, 고시, 사례보고 형태로 준비를 하였습니다. 구강악안면외과의 보험제도를 알기쉽고 임상에 적용할 수 있는 노하우를 공개하고자 합니다. 다음 항목을 정리하여 발표하고자 합니다; 발치(차–41), 수술후처치(차–21), 발치와재소파술(차–42), 치조골성형수술(차–43), 구내소염술(차–45), 구강내열상봉합(차–47), 협순소대성형술(차–50), 설소대성형술(차–51), 치근낭적출술(차–56), 치근단절제술(차–59), 구강상악동누공폐쇄술(차–62), 치아재식술(차–63), 구강내양성종양적출술(자–220), 치은판절제술(차–66), 치은–치은부 병소 또는 종양절제술[Epulis포함](차–67), 탈구치아정복술[1치당](차–69), 잠간고정술(차–34), 골융기절제술(차–73), 낭종강 감압치술[고무인상제를 이용한 경우](처–21), 악관절강 세척술(처–44), 절개생검(나–853), 치과침유마취[1/3악당] (바–8), 치과전달마취(바–9).

In accordance with the domestic economic situation in Korea and the changes in the national health insurance system, changes in the medical care area of oral maxillofacial surgery are being predicted. The Oral and Maxillofacial Surgery Insurance Committee organized the prescriptions of outpatient treatment out of the national health insurance of oral and maxillofacial surgery in accordance with the 57th congress of KAMPS

We would like to take this opportunity to reconsider the area of Oral and Maxillofacial Surgery among the national health insurance system. On this time, our committee prepared in the form of general report, notification, case report mainly in the outpatient department of oral and maxillofacial surgery. We want to disclose know-how that is easy to understand insurance system of oral and maxillofacial surgery and can apply to clinic. We would like to summerized the following idems; Surgical extraction(cha-41), postoperative treatment (cha-21), curettage for extraction socket (cha-42), alveolar bone surgery-alveoloplasty (cha-43) 47), Buccal frenectomy(cha-50), Lingual frenectomy (cha-51), Periapical cyst enucleation (cha-56), Apicoectomy (cha-59), oroantral fistular closure (cha-63), intraoral benign tumor resection (cha-220), gingiva resection-gingivectomy (cha-66), gingival-gingival lesion or tumor resection [including Epulis] (cha-67), replantation for avulsed teeth(cha-69), temporal wire and resin fixation (cha-34), exostosis removal and resection (cha-73), cystic decompression(using silicon and Rubber tube) for Large cystic lesion (chu-21), Arthrocentesis(chu-44), Incisional biopsy(na-853), infiltration in dentalanesthesia (ba-8), Block anesthesia(ba-9)

구강악안면외과 보험진료 (외래) 총론

항목 (분류번호)		코드	상대가치점수(점)
발치 (차-41)	유치	U4411	28.93
	전치	U4412	56.93
	구치	U4413	94.02
	난발치	U4414	204.90
	단순매복치	U4415	314.85
	복잡매복치	U4416	553.28
	완전매복치	U4417	763.01
수술후 처치 (차-21)	단순처치	U2211	17.97
	대수술후 처치	U2212	91.45
	수술후 염증성처치, 배액관교환 등	U2213	138.17
	후출혈 처치	U2214	179.14
발치와재소파술 (차-42)		U4420	102.52
치조골성형수술 [1치당] (차-43)		U4430	112.44
구내 소염술 (차-45)	치은농양, 치관주위농양	U4454	92.31
	치조농양, 구개농양	U4455	96.32
	설 또는 구강저농양 [이하극, 설하극, 악하극 농양 등]	U4456	223.05
	악골골염, 골수염 등	U4457	214.75
구강내열상봉합술 (차-47)	치은, 구강전정, 협부 2.5cm 이하	U4474	127.97
	치은, 구강전정, 협부 2.5cm 초과	U4475	358.97
	혀, 구강저, 구개부 2.5cm 이하	U4476	413.58
	혀, 구강저, 구개부 2.5cm 초과	U4477	475.80
협순소대성형술 (차-50)	간단	U4501	113.48
	복잡	U4502	271.32
설소대성형술 (차-51)	간단	U4511	389.09
	복잡	U4512	761.57
치근낭적출술 (차-56)	1/2치관크기 이상	U4561	253.37
	1치관크기 이상	U4562	310.79
	2치관크기 이상	U4563	412.28
	3치관크기 이상	U4564	1,439.10

항목 (분류번호)		코드	상대가치점수(점)
치근단절제술 (차-59)	전치	U4591	352.62
	구치	U4592	481.62
구강상악동누공폐쇄술 (차-62)	전진피판	U4621	687.13
	유경피판	U4622	946.54
치아재식술 [1치당] (차-63)		U4630	337.46
구강내양성종양적출술 (자-220)	양성	Q2201	1,202.74
	양상 (구강저)	Q2204	1,443.79
	유두종 등을 간단하게 제거	Q2202	609.53
	유두종 등을 간단하게 제거 (구강저)	Q2205	753.73
	악성 [림프절청소포함]	Q2203	7,480.07
	악성 [림프절청소포함] (구강저)	Q2206	8,574.67
치은판절제술 (차-66)		U4660	44.68
치은, 치조부 병소 또는 종양절제술 [Epulis 포함] (차-67)		U4670	359.65
탈구치아정복술 [1치당] (차-69)		U4690	110.36
잠간고정술 (차-34)	3치 이하	U2341	212.45
	4치 이상	U2342	295.21
골융기절제술 (차-73)	하악설측, 상악협측	U4731	406.88
	구개골	U4732	417.13
치과임플란트 제거술 (차-98)	단순	U4981	94.02
	복잡	U4982	763.01
낭종강 감압장치술 [고무인상제를 이용한 경우] (처-21)		UX021	174.60
악관절강 세척술 (처-44)		UX044	1,049.31
절개생검 (나-853)	기타부위	C8532	475.76
치과침윤마취 [1/3악당] (바-8)		L0800	15.96
치과전달마취 (바-9)	비구개신경블록	L0901	41.75
	이신경블록	L0902	40.84
	후상치조신경블록	L0903	40.91
	안와하신경블록	L0904	53.01
	하치조신경블록	L0905	52.26

2018.3 건강보험 요양급여비용 참고

Curriculum Vitae

Kyung-Hwan, Kwon DDS, PhD

Education

Collage of Dentistry, Wonkwang univesity, Korea DDS
Oral and maxillofacial surgery, Graduate School of Dentistry, Chonnam national university, Korea. Ph.D.
Residentship in Oral and maxillofacial surgery, Wonkwang dental hospital

Career

Taxas A & M university, Visiting professor of Bayor Dental Hospital, Oral and maxillofacial surgery(rhBMP-2 tissue engineering, orthognathic surgery)
Director of Wonkwang Dental hospital

Present

Professor, Department of Oral and Maxillofacial Surgery, Wonkwang Dental Hospital
Disability Rating Judge Committee member (Dental representative), Health and Welfare Department,
Dental member (Oral and maxillofacial surgery representative), Korea Medical Dispute Mediation and Arbitration Agency,
Insurance Direcor, Korean Association of Maxillofacial Plastic and Reconstructive Surgery (KAMPRS)
Public Relations Director, Korean Association of oral and maxillofacial surgery (KAOMS)
Lagal Director, Korean Academy of Laboratory and Diagnostic Dentistry

심포지엄 Ⅳ | Symposium Ⅳ

일시(Date) : 10.26 (Fri) 17:00–17:30

Moderator : **김형준**

구강악안면외과 외래 보험진료 (행위별수가 및 고시내용)

김재영 교수(Prof. Jae-Young Kim)

Yonsei University, Korea

최근 몇 년간 치과영역에서의 보험진료가 많이 확대되었고 그 중요성을 더해가고 있습니다. 2017년 문재인 대통령은 2022년까지 건강보험 보장성을 강화한다는 이른바 '문재인 케어'를 발표한 바 있습니다. 이러한 정부의 정책과 더불어 향후 치과에서도 급여 항목이 확대될 것이며, 보험진료의 중요성은 더욱 증가할 것으로 예상됩니다. 이에 발맞추어 구강악안면외과 보험연구회 (대한구강악안면외과학회와 대한악안면성형재건외과학회 연합 보험위원회, 구보연)에서는 구강악안면외과 진료 영역에 대한 보험항목을 정리하고자 하였습니다.

1977년 국민건강보험제도가 본격적으로 실시된 이래, 보험제도는 많은 변화를 거쳐왔고 현재에도 이러한 변화는 진행중에 있습니다. 이러한 변화들은 '고시'의 형태로 우리에게 전달되지만 구체적인 내용을 잘 알지 못한 채 진료에 임하고 있는 것이 현실입니다.

본 발표에서는 구강악안면외과 외래진료 영역을 중심으로 행위별수가와 관련된 고시들에 대해 알아보고 이를 통해 외래진료 보험청구에 도움이 되고자 합니다.

In the past few years, national insurance system in the dental field has expanded and is becoming more important. In 2017, President Moon Jae-in announced the so-called "Moon Jae-in Care", which aims to strengthen health insurance coverage by 2022. In addition to these government policies, salary items will be expanded in the future, and the importance of insurance treatment is expected to increase even more. The Oral and Maxillofacial Surgery Insurance Committee would like to summarize the national insurance system of oral and maxillofacial outpatient treatment.

Since the National Health Insurance System was implemented in earnest in 1977, the insurance system has undergone many changes and this change is still underway. These changes are communicated to us in the form of 'notice', but reality is that we are working on medical care without knowing the specific details.

The purpose of this presentation is to explain the notification and cases and to help for insurance charging regarding outpatients of 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, M.S.D (2014.3~2017.2)

Professional Records

2006.3~2010.2 : Intern/ Residentship, Dept. of Oral and Maxillofacial Surgery, Yonsei University College of Dentistry
2013.5~3014.2 : Fellow, Dept. of Oral and Maxillofacial Surgery, Yonsei University College of Dentisty
2014.3~2015.2 : Clinical & research assistant professor, Dept. of Oral and Maxillofacial Surgery, Gangnam severance Hostpital, Yonsei University College of Dentistry
2015.3~ : Clinical assistant professor, Dept. of Oral and Maxillofacial Surgery, Gangnam severance Hostpital, Yonsei University College of Dentistry

심포지엄 Ⅳ | Symposium Ⅳ
일시(Date) : 10.26 (Fri) 17:30–18:00

Moderator : **김형준**

구강악안면외과 외래 보험진료(사례별 설명)

변수환 교수(Prof. Soo-Hwan, Byun)

Hallym University, Korea

치과 분야에서의 국민건강보험 영향이 증가하고 있습니다. 의과계에서는 신포괄수가제라는 새로운 보험제도가 시험사업을 하고 있는 상황이고 이러한 새로운 제도들이 치과계에 적용되는 것은 멀지 않은 미래라고 생각됩니다. 특히 구강악안면외과 영역에서는 다양한 변화가 예상되며 이에 대한 학회차원의 준비와 노력이 필요합니다. 이를 위해 구강악안면외과 보험연구회(대한구강악안면외과학회와 대학악안면성형재건외과학회 연합 보험연구회, 구보연)에서는 제57차 대한악안면성형재건외과학회 종합학술대회를 맞이하여 구강악안면외과 외래 환자의 보험진료에 대한 내용을 정리하고자 합니다.

이번 기회를 통해 외래 보험 진료의 총론, 고시내용, 사례 분석을 통해 의견을 공유하고 변화하는 보험진료체계에 대한 준비를 함께 하고자 합니다.

The influence of national health insurance system in dental field is increasing. The new health insurance system(new DRG) is testing in the medical field, and it is not far from the future that this new system is applied to the dental field. Various changes are expected especially in oral and maxillofacial department. For these reasons, the Oral Maxillofacial Surgery Insurance Committee(Korean Association of Oral and Maxillofacial Surgeons/Korean Association of Maxillofacial Plastic and Reconstructive Surgeons) would like to organize the national health insurance system of outpatient department in oral & maxillofacial surgery through the 57th Congress of Korean Association of Maxillofacial Plastic and Reconstructive Surgeons.

We will be able to share opinions with general review and case analysis of outpatient insurance system, and prepare for the changing national health insurance system.

Curriculum Vitae

BYUN SOO HWAN

Head Professor, Dentistry, Hallym University Dongtan Hospital
Licensed as a Specialist of Oral & Maxillofacial Surgery in the Republic of Korea
PhD, Oral & Maxillofacial surgery, School of Dentistry, Seoul National University
Fellowship, Oral & Maxillofacial surgery, Seoul National University Dental Hospital
Residentship, Oral & Maxillofacial surgery, Seoul Asan Medical Center

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅴ | Symposium Ⅴ

TOPIC : Multidisciplinary approach for obstructive sleep apnea

■ Moderator : **고승오**(전북치대), **권용대**(경희치대)

Symposium Ⅴ

- Date : 10.27 (Sat) 09:00–09:30
- Speaker : **김지현 교수(Prof. Jee Hyun Kim)**
- Affiliation : Dankook University, Korea
- Topic : Diagnosis and treatment of obstructive sleep apnea : A perspective of Neurology

Symposium Ⅴ

- Date : 10.27 (Sat) 09:30–10:00
- Speaker : **김혜경 교수(Prof. Hye-Kyung, Kim)**
- Affiliation : Dankook University, Korea
- Topic : Clinical pearls for the best approach of oral appliance in OSA: Indication and Patient selection

Symposium Ⅴ

- Date : 10.27 (Sat) 10:00–10:30
- Speaker : **최진영 교수(Prof. Jin-Young Choi)**
- Affiliation : Seoul National University, Korea
- Topic : Individualized Treatment planning for Asian Patients with obstuctive sleep Apnea syndrome: conventional MMA and modified MMA

심포지엄 Ⅴ | Symposium Ⅴ

일시(Date) : 10.27 (Sat) 09:00–09:30

Moderator : **고승오, 권용대**

Diagnosis and treatment of obstructive sleep apnea : A perspective of Neurology

김지현 교수(Prof. Jee Hyun Kim)

Dankook University, Korea

Sleep-disordered breathing (SDB) is very common sleep disorder among general population. Patients with neurologic condition are more prone to develop SDB including obstructive sleep apnea and central sleep apnea. They could have more significant clinical impacts from SDB. Recent data reveals more evidences that sleep significantly affects cognition, mood and performance. In this talk, firstly, diagnosis of obstructive sleep apnea and common treatment modalities will be reviewed. Secondly, complicated SDB cases in neurology will be presented. Lastly, the clinical impact of SDB on neurodegenerative disease will be reviewed.

Curriculum Vitae

Jee Hyun Kim, MD, PhD

Associate professor, Dept. of Neurology
Director of Sleep laboratory and Sleep clinic
Dankook University College of Medicine,
Dankook University Hospital, Cheonan, Republic of Korea

Education:

1992 – 1998 Ewha Womans University School of Medicine
2003 – 2006 Ewha Womans University Graduate School, Ph.D.

Postgraduate Training and professional experiences

1999 – 2003 Department of Neurology, Residency
Ewha Womans University Hospital, Seoul, Korea
2003 – 2005 Fellowship in Neurology, (Epilepsy and sleep disorder section)
Samsung Medical Center, Seoul, Korea
2006 - 2007 Postdoctoral fellowship in Stanford sleep clinic, Stanford University,
CA, USA (Principal investigator Christian Guilleminault)
2016.3-2017.2 Visiting Scientist, Division of Sleep and Circadian Disorders,
Department of Medicine and Neurology, Brigham and Women's Hospital and Division of Sleep Medicine, Harvard Medical School

Licensure & Board Certification:

2003 Korean Board of Neurology
2006 Certified International Sleep Specialist Board (AASM)

Professional Societies:

Korean Sleep Research Society, member & board (Chair of scientific committee)
Korean Society of Sleep Medicine, member & board
American Association of Sleep Medicine, member

심포지엄 Ⅴ | Symposium Ⅴ

일시(Date) : 10.27 (Sat) 09:30–10:00

Moderator : **고승오, 권용대**

Clinical pearls for the best approach of oral appliance in OSA: Indication and Patient selection

김혜경 교수(Prof. Hye-Kyung, Kim)

Dankook University, Korea

The third edition of the International Classification of Sleep Disorders (ICDS-3) identified seven major categories consisting of insomnia disorders, sleep-related breathing disorders, central disorders of hypersomnolence, cardiac rhythm sleep-wake disorders, sleep-related movement disorders, parasomnias, and other sleep disorders. Among them, obstructive sleep apnea (OSA) is one of the major phenotypes of sleep-related breathing disorders. In terms of mechanical view, OSA is a disease associated with manifestation of ever-increasing resistance to airflow in upper airway cause by intermittent collapse of the upper airway during sleep.

Undiagnosed and untreated OSA may lead to a variety of cardiometabolic disorders. Long-term observation study confirmed a clear association between OSA and cardiovascular disease. Oral appliances (OAs) are indicated as a primary treatment option for snoring and mild to moderate OSA and also being implemented as a noninvasive alternative for patients with severe OSA who are unwilling to or unable to tolerate continuous positive airway pressure (CPAP). Currently, CPAP is considered first-line therapy for the management of sleep-disordered breathing in both adults and children but has low adherence rates. Therefore, OAs with better therapeutic compliance play an important role in the treatment of patients with OSA. Unfortunately, it is well known that OAs are not effective in all OSA patients.

In this lecture, clinical pearls for the best approach of OAs in OSA will be discussed. Particularly, indication and patient selection for OAs will be emphasized.

References

1. American Academy of Sleep Medicine. International Classification of Sleep Disorders. 3rd ed. Darien, IL: American Academy of Sleep Medicine; 2014
2. Khayat R, Pleister A. Consequences of obstructive sleep apnea: cardiovascular risk of obstructive sleep apnea and whether continuous positive airway pressure reduces that risk. Sleep Med Clin 2016;11:273-86.
3. Ramar K et al. Clinical Practice Guideline for the Treatment of Obstructive Sleep Apnea and Snoring with Oral Appliance Therapy: An Update for 2015. J Clin Sleep Med. 2015;11:773-827.

Curriculum Vitae

Kim, Hye-Kyoung (DDS, PhD)

2009 DDS, Department of Dentistry, Dankook University (학사학위취득)
2013 Completion of resident course, Department of Oral Medicine and Orofacial Pain, Dankook University Dental Hospital (구강내과 전공의 수료)
2013 Specialist of Oral Medicine and Orofacial Pain certified by Ministry of Health and Welfare, Korea (구강내과 전문의 취득)
2015 PhD, Department of Dentistry of Graduate School, Dankook University (박사학위 취득)
2017 Assistant professor, Department of Oral Medicine and Orofacial Pain, College of Dentistry Dankook University (단국대학교 치과대학 구강내과학교실 조교수)
2018 Diplomate, American Board of Orofacial Pain (미국 구강안면통증 전문의)

심포지엄 Ⅴ | Symposium Ⅴ

일시(Date) : 10.27 (Sat) 10:00–10:30

Moderator : **고승오, 권용대**

Individualized Treatment planning for Asian Patients with obstuctive sleep Apnea syndrome: conventional MMA and modified MMA

최진영 교수(Prof. Jin-Young Choi)

Seoul National University, Korea

폐쇄성 수면 무호흡 (Obstructive Sleep Apnea, OSA) 은 반복적인 상기도 폐쇄에 의해 일시적인 무호흡 (temporary cessation of breathing, apnea)과 얕은 호흡 (shallow breathing, hypopnea) 이 발생되는 수면 질환 (sleep disorder)이다.
대표적인 OSAS 의 치료법으로는 지속적인 비강 양압기 사용 (nasal continuous positive airway pressure, nCPAP), 구강내장치 (oral appliance)와 같은 비외과적 치료와, 구개수구개인두 성형술(Uvulo Palato Pharygo Plasty UPPP), 설기저부 절제술(tongue base reduction, TBR), 이설근 전진술(Genioglossus Advancement GA) 양악 전진술 (MaxilloMandibular Advancement, MMA), 기관절개술 (tracheostomy) 등의 외과적 치료를 생각할 수 있다.

이중 MMA는 인두와 하인두의 기도 공간 (pharyngeal and hypopharyngeal airway space) 을 확장하여 흡기시 음압에 의한 상기도 폐쇄를 줄일 수 있으며, 성공률이 75%–100%일 정도로 지금까지 알려진 외과적 치료법중 성공률이 가장 높은 술식으로 알려져있다.

한편 MMA 의 양을 결정할 때 서양인의 경우 8–12 mm 정도의 전진이 추천된다. 그러나 동양인은 진단시 코가 낮고 입술이 돌출되어 있는 경우가 많아 백인에서 사용되는 것과 동일한 양의 전진은 얼굴의 심미성을 해칠 수 있다.
그러므로 양악 전진술을 요하는 한국을 비롯한 극동아시아의 수면무호흡 환자에서는 외모의 악화없이 양악전진술의 양을 결정하는 것이 중요하다. 양악전진술을 요하는 환자에서 외모분석을 통하여 전통적인 양악전진술(conventional MMA) 과 분절 골절단술을 동반하는 변형된 양악전진술(modified MMA)을 주치료법으로하는 개별화된 치료계획을 세워 치료함으로써 수술후 수면치료효과와 심미적 효과를 거둘 수 있다.

본 강의에서는 턱교정 수술이 상기도변화에 미치는 영향, 폐쇄성 수면 무호흡치료를 위한 양악전진술을 포함하는 외과적 치료, 외모분석을 통한 개별화된 치료계획의 적용 사례 및 그 결과에 대해 설명하고 토론하고자한다

Curriculum Vitae

Jin-Young Choi DDS, MD, PhD

1985- Doctor of Dental Surgery, Seoul National University (DDS)
1988- Internship and Residency in Oral and Maxillofacial Surgery, Seoul National Universiry Hospital
1992- Master of Science in Dentistry, Seoul National University Graduate School
1997-Medical Doctor in Medical school Georg-August University, in Goettingen Germany (MD)
1998- Dr.med. Georg-August University, in Goettingen, Germany
1998-present –Lecturer, Assistant professor, Associate professor, Professor in Dept. of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University
2001.2-2002.1-visiting professor School of biology Manchester University England
2005.- 2009 - Director in Dentofacial Deformity Clinic in Seoul National University Dental Hospital
2011.-2013 Director in dept. of Oral &Maxillofacial Surgery, School of Dentistry, Seoul National University
2011.-2013 Director in dept. of Oral &Maxillofacial Surgery School of Dentistry, Seoul National University Dental Hospital
2010.5-2013.5 Director in dept. Education and research in Seoul National University Dental Hospital
2013.5.-2013.6- visiting professor in sleep center in Stanford University Hospital
2017.2.13-present Director in dept. of Oral &Maxillofacial Surgery, School of Dentistry, Seoul National University
2017.8.-9 Visiting professor Maaya Center for craniofacial Deformity in BGS Global Hospital in Bangalore India
2017, 56th Congress Chairman in Korean Association of Maxillofacial Surgeons (11.3-11.4)
President: Korean Academy of Maxillofacial Aesthetic surgery
Former President: Korean Association of Dental Sleep Medicine
Former President: Korean Association of Cleft Lip and Palate
02.06.2018 –현재 Honorary professor in Tashkent State Dental Institute
Trust board in ICPF (Iinternational Cleft Palate Foundation)

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

심포지엄 Ⅵ | Symposium Ⅵ

TOPIC : Aesthetic Adjucts Therapy

■ Moderator : **차인호**(연세치대), **이진규**(M 치과의원)

Symposium Ⅵ

- Date : 10.27 (Sat) 11:00–11:30
- Speaker : **김희진 교수(Prof. Hee-Jin Kim)**
- Affiliation : Yonsei University, Korea
- Topic : Essential Clinical Anatomy of the Face for Non-Invasive Procedures : focusing on surface and layered anatomy for minimally-invasive procedures

Symposium Ⅵ

- Date : 10.27 (Sat) 11:30–12:00
- Speaker : **김지수 원장(Dr. Jisoo Kim)**
- Affiliation : Dr. Youth clinic, Korea
- Topic : Minimal invasive aesthetic procedures using ultrasound

Symposium Ⅵ

- Date : 10.27 (Sat) 12:00–12:30
- Speaker : **최지윤 교수(Prof. Ji Yun Choi)**
- Affiliation : Chosun University, Korea
- Topic : Surgical facial rejuvenation

심포지엄 Ⅵ | Symposium Ⅵ

일시(Date) : 10.27 (Sat) 11:00–11:30

Moderator : **차인호, 이진규**

Essential Clinical Anatomy of the Face for Non-Invasive Procedures : focusing on surface and layered anatomy for minimally-invasive procedures

김희진 교수(Prof. Hee-Jin Kim)

Yonsei University, Korea

The BoNT-A and filler injection are widely-applied techniques for managing masseteric hypertrophy, gummy smiling, several facial wrinkles, volume augmentation, and facial asymmetry that includes the asymmetrical smile. However, inaccurate injections sometimes may result in mild side effects such as bleeding, bruising, or muscle bulging along with more serious side effects including skin necrosis and blindness. Recently, wide ranges of cadaveric studies have been published to prevent these side effects from occurring while optimizing results. In addition to various anatomical studies, the ultrasound (US)-guided injection technique has been suggested as a method that is safer than other techniques and leads to more accurate injections into the targeted area with less complications.

Anatomically, the face is the most complicated structure of the human body. Especially, the structure of facial muscles including nerves and vessels is very variable and has the racial differences. Recently, the importance on the facial anatomy has been reconsidered as the interest on the facial aesthetics is increasing. The aesthetic physicians should understand the anatomy of the facial musculature. Through this lecture, I would like to show the 3-dimensional layered facial anatomy and the individual variations of the face related to minimally-invasive procedures for the safe and efficient clinical applications.

To avoid the serious complications after the injection, the detailed vascular anatomy of the face is essential. In this presentation, I would like to show (1) the whole running courses of the facial artery (FA) and superficial temporal artery (STA), (2) the origin and nature of the angular artery, (3) the layered location of supratrochlear and supraorbital artery at the forehead, (4) the vasculatures of the nose, and (5) the courses and distribution patterns of the labial artery around upper and lower lip. In every item of my presentation, the clinical importance of each area will be raised. In addition, I would like to suggest some injection techniques to reduce the vascular problems related with filler Injection.

Through my talks, I would like to introduce the US anatomical findings of the facial layers and provide the reference images on each landmark of the face. Therefore, an in-depth morphological study using an US imaging system can yield depth and orientation on the facial muscles, blood vessels, and fascial structures of the facial area that were previously impossible to obtain.

Curriculum Vitae

Hee-Jin KIM / DDS, PhD

Affiliation
Professor
Division in Anatomy & Developmental Biology
Department of Oral Biology, Yonsei University College of Dentistry
Director
/ Brain Korea 21 Plus Project for Interdisciplinary Oral Science Graduate Program, Applied Life Science
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A brief education and professional history
Yonsei University College of Dentistry (1984~1991)
Yonsei University Graduate School (1991-1997)
Faculty Exchange at Lille II Universite, France (2003-2005)
Adjunct Professor of Tokyo Dental College, Japan
Emeritus Professor of Binzhou Medical University, China
Editor in Chief / Anatomy & Cell Biology
Associate Editor / Surgical and Radiologic Anatomy
Editorial Board / Clinical Anatomy
Associate Editor / European J Clinical Anatomy
Sectional Editor / International Scholarly Research Notices
Editorial Board / Journal of Oral Biosciences
Vice President / Korea Student Cycling Federation
Vice President / Seoul Archery Association

심포지엄 Ⅵ | Symposium Ⅵ

일시(Date) : 10.27 (Sat) 11:30–12:00

Moderator : **차인호, 이진규**

Minimal invasive aesthetic procedures using ultrasound

김지수 원장(Dr. Jisoo Kim)

Dr Youth clinic, Korea

Recently, aesthetic procedures have been gaining with huge popularity because it can be performed very simple and effectively, so a lot of aesthetic physicians and patients prefer minimal invasive procedures such as Botulinum toxin, filler, and thread than aesthetic plastic surgeries.

However, minimal invasive procedures are not very simple in terms of complication. For example, filler rhinoplasty is very simple comparing to open rhinoplasty surgery when it comes to techniques and complexities, but inadvertent intra arterial injection of filler can cause devastating complications such as blindness, stroke, and skin necrosis. Unlike surgeries, minimal invasive procedures are performed blindly. There are lots of blood vessel network beneath skin, due to diverse variations, it is not possible for physician to avoid blood vessel perfectly when they perform minimal invasive procedures.

Besides, well known safe and effective Botulinum toxin injection, it is important to identify exact target. With regards to thread, insertion of thread into right plane is essential for optimal outcomes.

In the meantime, diagnostic ultrasound is very useful tool for minimal invasive procedures. Physicians are able to identify structures below skin, and blood vessels on target area they wanted to inject. And besides, even normal structures vary. But, there are no consensus and guideline of usage of facial ultrasound in the field of aesthetics. At this time, I would like introduce how to use diagnostic ultrasound for minimal invasive procedures.

Curriculum Vitae

Dr. Jisoo Kim, South Korea
M.D., Cosmetic surgeon

Present affiliation
Director of Dr. Youth clinic
CTO of YS bio, Dr. Youth cosmetics
Ph D candidate, Seoul National University College of Medicine Graduate school
Executive Committee, Korean Academy of Aesthetic Medicine
Executive Committee, Korean Association of Essential oil, Aroma and Spa
American Academy of Anti-aging Medicine

Work experience
Former Medical affairs, Allergan, Korea, Chief doctor trainer
Advisory board and key doctor, Merz, Allergan, Medytox, N-finders

Publications & lectures
Clinical anatomy for toxin and filler (Hanmi publishing, 2014)
Clinical anatomy of the face for filler and botulinum toxin injection (Springer, 2016)

심포지엄 Ⅵ | Symposium Ⅵ

일시(Date) : 10.27 (Sat) 12:00–12:30

Moderator : **차인호, 이진규**

Surgical facial rejuvenation

최지윤 교수(Prof. Ji Yun Choi)

Chosun University, Korea

The appearance of the eyelid and periorbital region is among the most important aesthetic unit of the face. This region projects a person's mood and is the most frequently watched area by the casual observer. The shape and position of the eyebrows contribute greatly to the overall appearance of the upper one-third of the face.

An aesthetic, youthful appearance of the orbit and eyelids requires a well-supported and positioned brow. Ptosis of the eyebrows and peribrow soft tissues is often a part of the normal aging process. The eyebrows may descend below the level of the supraorbital rims, affecting the function and appearance of the upper eyelids.

The goal of the brow-lift procedure is to restore a youthful position to the brow and to improve the aesthetics and function of the upper face and eyelids. When brow ptosis exists and is not surgically corrected, upper blepharoplasty alone can exacerbate brow ptosis and impart a tired or sad appearance to the eyes

The endoscopic approach to brow lifting proceeds as follows:

_ First, 3 incisions are made: 1 in the midline and 2 bilaterally at the level of the lateral brow in line with the proposed vector of suspension.

_ The incisions are made just behind the hairline and are roughly 1 to 1.5 cm long.

_ The initial 3 incisions are made through all layers of the scalp.

_ The forehead periosteum is elevated from the hairline to approximately 2 cm above the orbital rim.

Care must be taken not to damage the periosteum because it may impair visualization and durability of resuspension. At this point, a 30-endoscope with a protective sheath is introduced near the supraorbital rim for further elevation of the flap.

The supraorbital neurovascular bundle should be directly visualized and preserved with careful dissection.

10% of the population has the nerve and vessels exiting through a true foramen, rather than a notch. At this point, resection or lysis of the corrugators superciliary muscle may be performed. Some surgeons also perform a radial myotomy of the orbicularis oculi muscle deep to the brow.

Lateral release of the periosteum is performed at the arcus marginalis at the level of the orbital rim. The two temporal incisions are made overlying the temporalis muscle. The position of these incisions corresponds with the vector of pull needed for the desired brow position.

Beveling of the incision is performed for follicle preservation.

_ The incision is carried down through skin, subcutaneous tissue, and temporoparietal fascia.

_ The dissection plane proceeds deep to the temporoparietal fascia, just on top of the superficial layer of deep temporal fascia overlying the temporalis muscle extending down to the level of the lateral canthus.

Dissection may be performed under direct visualization. The lateral subgaleal and medial subperiosteal planes of dissection are connected by dividing the conjoint tendon at the superior temporal line. The conjoint tendon connects the

superficial and deep layers of temporalis fascia and their medial extension, the pericranium, as well as the junction of the temporoparietal fascia laterally and the galea medially . The sentinel vein may be visualized laterally and is a marker for the frontal branch of the facial nerve. This vein is an extension of the internal maxillary vein and should be preserved.

_ Extension of this dissection is performed inferiorly to the orbital rim to ensure full release of the arcus marginalis.

_ After complete elevation and release of the brow-forehead complex, suspension is performed bilaterally in the temporal and lateral brow regions.

_ The temporal area is first suspended.

_ The temporoparietal fascia is suspended to the deep temporal fascia with a 2-0 monofilament absorbable suture.

_ Resuspension of the brow and forehead skin is performed next at the incisions made in line with the lateral brow

The fundamental goal of rhytidectomy, or facelift surgery, is to provide a more youthful facial appearance by elevating soft tissues that often descend with aging.

The deep plane rhytidectomy, as initially described by Skoog and termed by Hamra, involves an initial preauricular subcutaneous dissection but transitions to a dissection deep to the SMAS layer. The SMAS layer is elevated completely attached to the overlying skin. The theoretical advantage of this technique is a thicker skin flap that is better vascularized and has less chance of creating skin necrosis.

Hamra's description of the deep plane rhytidectomy uses a subcutaneous dissection in the immediate preauricular area. The sub-SMAS dissection plane is not initially entered because the deep and superficial fascias are fused in the immediate preauricular area. This anatomic point was made by Mitz and Peyronie in the original description of the SMAS in 1976. For this reason, it is difficult to precisely enter the sub-SMAS dissection plane in the immediate preauricular plane. Hamra uses a line extending from the lateral canthus to the angle of the mandible. Posterior to this line, the dissection plane is subcutaneous, and anterior to this line, the dissection is in the sub-SMAS layer. The SMAS layer is released from its ligamentous attachments in the midface and vertically sutured to provide lasting rejuvenation of the face.

Curriculum Vitae

Ji Yun Choi

Prof. Ji Yun Choi is a noted ENT and facial plastic surgeon from South Korea. He is a associate Professor of Department of Otorhinolaryngology Chosun University College of Medicine, Gwangju, Korea. He is a member of the Korean Society of Facial Plastic and Reconstructive Surgery and Korean Society of the Otolaryngology and Head and Neck Surgery. He had a fellowship as a visiting professor at University California Medical Center in Sacramento, USA. He passed the board examination of American Board of Facial Plastic and Reconstructive Surgery(2013) and International Board of Cosmetic Surgery(2007). Every year he has been organized "The International Chosun Aging Face Symposium" focused on surgical facial rejuvenation. He has been published 50 papers and 3 facial plastic books. He had over 100 live surgeries and over 100 major presentation for rhinoplasty,blepharoplasty, facelift, browlift and reconstructive surgeries internationally.

Venue : Grandball Room B

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

런천세미나 | Luncheon Seminar

■ Moderator : **김경원**(오스템 교육연구원), **이정근**(아주의대)

Luncheon Seminar

- Date : 10.26 (Fri) 12:30~13:30
- Speaker : **김종엽 원장(Dr. Jongyub Kim)**
- Affiliation : Boston SMart Dental (Private practice, Seoul, Korea)
- Topic : Introducing brand new intra-oral scanner i-500 and its clinical applications

런천세미나 | Luncheon Seminar

일시(Date) : 10.26 (Fri) 12:30~13:30

Moderator : **김경원, 이정근**

Introducing brand new intra-oral scanner i-500 and its clinical applications

김종엽 원장(Dr. Jongyub Kim)

Boston SMart Dental (Private practice, Seoul, Korea)

Many different kinds of intra-oral scanners have been introduced in our field and are actively used by some clinicians. Accuracy is an important factor when we choose an intra-oral scanner but also consistency is important, too. Recognized as excellent intraoral scanners in the market and articles have something in common such as powderless, video rate data taking with color display, etc.

Intra-oral scan data are transmitted to and used with CAD/CAM software for designing various restorations and recently with 3D printing, these data can be used in wider range for models, appliances, castable patterns and more.

Intra-oral scan data itself has meaning of record, since it is easy to compare before and after treatments in orthodontics as well as oral and maxillofacial surgery.

In this presentation, I'm going to introduce brand new intra oral scanner i-500 from domestic scanner manufacturer, MEDIT corp. and share how it's being used in clinical cases.

Curriculum Vitae

Jongyub Kim, DDS, MS, Ph.D

Boston SMart Dental (Private practice, Seoul, Korea)

Dr. Jongyub Kim graduated from Dan-kook University Dental School in 1996. He finished oral and maxillofacial surgery residency at the same institution from 1996 to 2000. He also had postdoctoral prosthodoctics training at Boston University, Henry M. Goldman school of Dental Medicine from 2004 to 2007. Dr. Kim is a Korean Board-certified Prosthodontist.

Presently, he is serving as a board member of Korean Academy of Prosthodoctics, Korean Academy of Oral and Maxillofacial Implantology, Korean Academy of Digitalized Dentistry, etc. And He is working as an adjunct professor of Catholic university medical school, Dan-kook university dental school, Ehaw women's university medical school, Korea university medical school, etc.

He in a co-author of 'Minimally Invasive Sinus Surgery (Well publishing)' published in 2016.

As a trained Oral surgeon and Prosthodontist, his practice is mainly focus on Implant dentistry and Digital restorative dentistry.

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Keynote Presentation

DAY 1

- Date : 10.25 (Thu) 14:00~14:15
- Speaker : 송재민 교수 (Prof. Jae-Min Song) [Trauma & Orthognathic surgery]
  이주민 원장(Dr. Ju Min, Lee) [Orthognathic surgery]
  이정우 교수 (Prof. Jung-Woo Lee) [Tumor & Reconstruction]

DAY 2

- Date : 10.26 (Fri) 08:00~08:15
- Speaker : 유재식 교수 (Prof. Jae-Seek You) [Implant]
  김수호 교수 (Prof. Soo-Ho Kim) [TMJ]
  최소영 교수 (Prof. So-Young Choi) [Basic research]

DAY 3

- Date : 10.27 (Sat) 08:00~08:15
- Speaker : 김봉철 교수 (Prof. Bong Chul Kim) [Dentoalveolar surgery]
  정승곤 교수 (Prof. Seunggon Jung) [Deformity]
  박성민 교수(Prof. Sung Min Park) [Infection]

Keynote Presentation Day 1
일시(Date) : 10.25 (Thu) 14:00~14:15

Risk Factors for hypoesthesia of Operative Facial bone Fractures

송재민 교수(Prof.Jae-Min Song)

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

Purpose: The aim of this study was to investigate the incidence of hypoesthesia in patients with facial bone fractures, and to identify the relationships between post-traumatic hypoesthesia and risk factors, including general and fracture-related characteristics.
Materials and methods: A total of 437 patients who underwent surgery for facial bone fractures were included. Clinical neurosensory testing was performed at different time points (post-trauma and 1 week, 1 month, and 6 months after surgery). The results of these assessments were compared between characteristics and fracture sites.
Results: The hypoesthesia incidences were highest in the mandible (19.1%), maxilla (18.3%), and orbit (8.5%). Sensation was recovered by 97.3% of all patients by 6 months after surgery. Risk factors for hypoesthesia were direct nerve injury ($p = .002$), distance (≤ 10 mm) between the fracture and nerve foramen ($p = .002$), the amount of bony displacement ($p = .035$), and age ($p = .004$). There were significant differences among the fracture sites.
Conclusion: Post-traumatic hypoesthesia increased temporarily after surgery but most patients recovered by 6 months postoperatively. Recovery from postoperative hypoesthesia was related to the fracture site and pattern. Cases in which the patient did not recover involved direct nerve injury.

Keynote Presentation Day 1
일시(Date) : 10.25 (Thu) 14:00~14:15

Orthognathic Surgery; What is 'SATISFACTION'?

이주민 원장(Dr. Ju Min, Lee)

JUM Oral and Maxillofacial Surgery Clinic

최근 십수 년 사이, 악교정 수술 중 혈압의 세밀한 조절, 술기의 발전 등으로 출혈, 부종 등이 최소화되어 입원 및 회복 기간도 대폭 단축되었다. 또한 술자에 따른 술기의 차이도 거의 없고, 숙련된 구강악안면외과 의사가 수술을 시행할 경우, 악교정 수술에 소요되는 시간도 일정한 편이다.

최근에는 각종 3D 스캐너, 3D CT 등의 'digital tool'을 이용하여 3차원적인 진단, 분석이 가능할 뿐 아니라, 수술 후 변화까지도 미리 예측할 수 있게 되었다.

다만, 모든 악교정 수술을 하는 외과의사가 자신이 원하는 결과는 낼 수 있다는 전제 하에, 술자에 따라, 혹은 술자와 환자 간에 수술 전후 환자의 안모평가, 이상적인 안모에 관한 개념은 다소 차이가 있을 수 있는데, 이번 발표에서는 개원가에서 악교정 수술 이후 환자가 표현하는 만족과 불만족의 경계에서 술자가 느끼는 고민에 관해 허심탄회하게 얘기해 보려고 한다.

Keynote Presentation Day 1
일시(Date) : 10.25 (Thu) 14:00~14:15

Computer assisted simulation surgery and surgical guides for oral and maxillofacial reconstructive surgery

이정우 교수(Prof. Jung-Woo Lee)

Department of Oral and Maxillofacial Surgery, School of Dentistry, KyungHee University

Functional and esthetic maxillofacial reconstruction is challenging. This is very difficult to effectively reconstruct the defect due to the complicated anatomy of the oral maxillofacial region. To overcome this problem, there have been many trials, for example, 3D virtual simulation and surgical guides using computer. This method represents a three - dimensional model based on computer tomographic (CT) data and simulates the 3D image on a computer before performing the actual operation. To transfer the simulation, surgical guides are fabricated using a 3D printer. However, commercial medical simulation software is expensive and the learning curve of this engineering is inevitable for its intended use. For this reason, most of the simulation is processed by the company. Therefore, communication between the engineer of the company and the surgeon is essential and even small differences in communication can have adverse effects on the outcome of the surgery. In some cases, the duration of the surgical simulation and guide fabrication may take long time. For this reason, we propose a method of direct surgical simulation and designing guides by the operator and actual operation. This method takes a long time until the operator gets used to the software, and the time for the surgical simulation is also high. However, there are the many advantages.

Acknowledgment: This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2017R1D1A1B04030398)

Keynote Presentation Day 2
일시(Date) : 10.26 (Fri) 08:00~08:15

Past and Present of Dental Implant

유재식 교수(Prof. Jae-Seek You)

Dept. of Oral and Maxillofacial Surgery, school of Dentistry, Chosun university

Implants are of great interest in majority of dental fields not just in oral & maxillofacial surgery field. Implants have been developed remarkably until the present date and many companies as well as dentists are still conducting researches for further developments.

However, in the case of oral &maxillofacial surgeons, there are many operations which require general anesthesia as well as outpatient operations, thus it is true that the scope of surgery to be responsible is so broad that the surgeons can not spend sufficient amount of time in the study of implant. Implantology should be treated with interest from the perspective of current residents in oral and maxillofacial surgery and it is also very important for the local specialists who majored in oral and maxillofacial surgery.

In the past, implants have been actively studied regarding the surface treatment of implants. Nowadays , there have been many developments during 30 years of time ever since implant was commercialized in Korea, reaching the advent of digital guided implant surgery today.

Today, I would like to explore the current status of implant technology and related developments. It would be grateful if this presentation be able to provide general interest about implantology to the audiences who are mostly current residents.

Keynote Presentation Day 2
일시(Date) : 10.26 (Fri) 08:00~08:15

Imaging and Differential Diagnosis of Temporomandibular Joint Disorder

김수호 교수(Prof. Soo-Ho Kim)

Department of Oral and Maxillofacial Surgery, Guro Hospital, Korea University

The temporomandibular joint(TMJ) shows the most complicated movement of the body joints, and temporomandibular joint disorder(TMD) is a comprehensive term which refers to broad clinical problems of the masticatory muscles and TMJ when various factors such as inflammatory, traumatic, iatrogenic, genetic, and systemic factors exceed the physiologic tolerance. The diagnostic criteria of TMD is mostly based on Bell's and Okeson's criteria, and various imaging and non-imaging techniques have been used so far.

TMD is usually known as a self-limiting disease, however, patients show diverse courses of disease progression in history taking. There are many surgical and non-surgical treatment options treating TMD, but sometimes symptoms are difficult to manage despite of various treatment for long time, leading to chronic orofacial pain and detriment of quality of lives. Therefore, exact diagnosis in early stage of disease is a top priority. This presentation will discuss about the efficacy of imaging techniques used in TMD diagnosis and differential diagnosis of various clinical cases.

Keynote Presentation Day 2
일시(Date) : 10.26 (Fri) 08:00~08:15

Basic Research of Oral Squamous Cell Carcinoma

최소영 교수(Prof. So-Young Choi)

Department of Oral & Maxillofacial Surgery,
School of Dentistry, Kyungpook National University

Most of the oral cancer is squamous cell carcinoma, and the invasion and metastasis to adjacent tissues are high. Despite the development of multiple diagnostic techniques and various treatment methods, the 5 - year survival rate is still low. Research on early diagnosis methods, histopathological studies, clinical features and prognosis have been performed by oral and maxillofacial surgeons and oral and maxillofacial pathologists. However, there is less interest in the study of oral squamous cell carcinoma in the basic field when compared with other cancers, and the basic research linked to clinical studies is also less than other cancers.

In the basic study on oral squamous cell carcinoma, it is necessary to have active ideas of oral and maxillofacial surgeons who directly treat patients and more active research can be conducted if the clinician has a lot of interest in basic research. In this lecture, we will discuss basic research methods of oral squamous cell carcinoma which can have interest as a clinician.

Keynote Presentation Day 3
일시(Date) : 10.27 (Sat) 08:00~08:15

What happens in the extraction?

김봉철 교수(Prof. Bong Chul Kim)

Daejeon Dental Hospital, Wonkwang University College of Dentistry

I'd like to share my daily life beginning with the extraction and ending with the extraction.

Keynote Presentation Day 3
일시(Date) : 10.26 (Fri) 08:00~08:15

Secondary correction in cleft lip

정승곤 교수(Prof. Seunggon Jung)

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

For most of cleft lip and palate patients, a single operation would not suffice for total correction of the deformity. It is assumed that secondary deformities resulted from scar of primary surgery, problem of supporting structure, and developmental deterioration of adjacent soft tissue. Severity of secondary deformities is influenced by types and severity of primary cleft, timing of primary surgery, dexterity and experience of operator, extent and shape of scar, and growth pattern.

Secondary deformities appear in forms of undesirable scar, deficiency of tissue, vertical disharmony of lip, horizontal deficiency of lip, deformation of orbicularis oris, deformation of philtrum, and deformation of vermilion. Those can be corrected by means of Z-plasty, W-plasty, V-Y advancement, reoperation, Abbe flap, according to the shape and severity.

In this presentation, secondary deformities and its correction procedures will be reviewed and discussed.

Keynote Presentation Day 3
일시(Date) : 10.27 (Sat) 08:00~08:15

Dental Procedures and the Risk of Infective Endocarditis

박성민 교수(Prof. Sung Min Park)

Department of Oral and Maxillofacial Surgery, College of Dentistry, Dankook University

Infective endocarditis(IE) is a serious infection occurring on the endothelial surfaces of the heart, especially at the valves which is associated with significant morbidity and mortality. Clinical features of IE are non-specific and include high fever loss of weight, lethargy, shortness of breath, heart murmurs and possibly skin manifestations. Oral commensal bacteria are the important etiologic agents in this disease. Common dental procedures, even non-surgical dental procedures, can often cause bacteremia of oral commensals. Oral and maxillofacial surgeon need to know the evidence, pathogenesis, and prevention of infective endocarditis.

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Oral Presentation Schedule

제57차
대한악안면성형재건외과학회
종합학술대회 및 정기총회

10월 25일(Thu) 그랜드볼룸 A Trauma &Orthognathic

KS (25-A) 14:00~14:15

안면골 골절 수술과 관련된 감각이상에 대한 연구

송재민[1], 이재열[*], 황대석, 김용덕, 신상훈, 김욱규
부산대학교 치의학전문대학원
구강악안면외과학교실

Risk Factors for hypoesthesia of Operative Facial bone Fractures

Jae-Min Song[1] Jae-Yeol Lee[*] Dae-Seok Hwang,
Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim
Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University

O1 (25-A) 14:15~14:24

하악골 과두경부 골절의 관혈적 내고정술에 사용된 생체 흡수성 판과 금속판의 비교연구

임세정[1*], 전도현[1], 이수호[2], 서정민[2], 손장호[1], 조영철[1], 성일용[1]
[1]울산대학교 의과대학 울산대학교병원
구강악안면외과학교실
[2]울산대학교 의과대학 울산대학교병원
통합치의학과

Surgical treatment of mandibular subcondylar fracture: a comparative study of bioabsorbable and titanium plates

Se-Jeong Lim[1*], Do-Hyun Jeon[1], Su-Ho Lee[2], Jung-Min Seo[2], Jang-Ho Son[1], Yeong-Cheol Cho[1], Iel-Yong Sung[1]
[1]Department of Oral and Maxillofacial Surgery, Ulsan University Hospital, University of Ulsan College of Medicine
[2]Department of Advanced General Dentistry, Ulsan University Hospital, University of Ulsan College of Medicine

O2 (25-A) 14:24~14:33

인상재 없는 악교정 수술 : Digilog approach(14증례)

안태웅[*1], 윤선웅[1], 유길화[1], 설가영[1], 박철민[1], 오민석[1], 강나라[1]
백민정[2], 하태영[2], 정길용[2]
선치과병원 구강악안면외과[1]
선치과병원 교정과[2]

The Alginate-free Approach(Digilog) in Orthognathic Surgery: Case Report(14cases)

Tae-Woong Ahn[*1], Sun-Ung Yoon[1], Kil-Hwa Yoo[1], Ka-Young Seol[1], Chul-Min Park[1], Min-Seok Oh[1], Na-Ra Kang[1]
Min-Jung Paek[2], Tae-Young Ha[2], Kil-Yong Jung[2]
[1]Dept. of Oral and Maxillofacial surgery, Sun Dental Hospital
[2]Dept. of Orthodontics, Sun Dental Hospital

O3 (25-A) 14:33~14:42

하악 우각부 및 하악과두부 골절 발병률에 미치는 하악 제3 대구치의 영향에 관한 연구

조현미[*], 이백수, 권용대, 최병준, 오주영, 이정우, 정준호, 황보연
경희대학교 치의학전문대학원 구강악안면외과학교실

Effect of lower third molars on the incidence of mandibular angle and condylar fractures

Hyun Mi Jo[*], Baek Soo Lee, Yong Dae Kwon, Byung Joon Choi, Joo Young Ohe, Jung Woo Lee, Jun Ho Jung, Bo Yeon Hwang
Dept. of Oral & Maxillofacial surgery, Kyung Hee University School of Dentistry

O4 (25-A) 14:42~14:51

3년간 안면외상 및 악교정수술 환자의 소형금속판의 제거

김희진[*], 김수관, 문성용, 오지수, 유재식, 최해인, 신나라
조선대학교치의학전문대학원 구강악안면외과학교실

Removal of miniplates following facial trauma and orthognathic surgery: a 3-year sudy
Hee-jin Kim*, Su-Gwan Kim, Seong-Yong Mon, Ji-Su Oh, Jae-Seek You, Hae –In Choi, Na-Ra Shin
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chosun University

O5 (25-A) 14:51~15:00
상악골 재위치 장치의 정확도 평가
강민혜*, 조진용, 김진우, 류재영, 김성범
가천대 길병원 구강악안면외과

Accuracy evaluation of maxillary repositioning device
Min-Hye Kang*, Jin-yong Cho, Jin Woo Kim, Jaeyoung Ryu, Sungbeom Kim
Dept. of Oral & Maxillofacial Surgery, Gachon University Gil Medical Center, South Korea

10월 25일(Thu) 직지홀 A Orthognathic Surgery

KS (25-B) 14:00~14:15
악교정 수술; '만족'이란 무엇인가
이주민*
줌구강악안면외과의원

Orthognathic Surgery; What is 'SATISFACTION'?
Ju Min, Lee*
JUM Oral and Maxillofacial Surgery Clinic

O6 (25-B) 14:15~14:24
안면비대칭 환자의 하악지 수직 골절단술(VRO)을 동반한 악교정 수술 후 하악 과두의 골 침착 양상 및 영향인자 분석
김보라*, 용해성, 정철희, 장효원, 허종기
연세대학교 치과대학 구강악안면외과학 교실(강남세브란스병원)

Evaluation of the condylar bone apposition and affecting factors after mandibular vertical ramus osteotomy in facial asymmetry patient
Bola KIM*, Hae-Seong YONG, Cheol-Hee JEONG, Hyo-Won JANG, Jong-Ki HUH
Depart Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital,
Yonsei University colleges of Dentistry,
Seoul, South Korea

O7 (25-B) 14:24~14:33
CAD/CAM surgical guide와 customize titanium plate를 사용한 시상분할절골술시 근심 골편 이동의 정확성
이승현[a], 우재만[b], 최진영[a]
[a]*서울대학교 구강악안면외과학 교실*
[b]*제주대학교병원 치과*

The postoperative accuracy of proximal segment in sagittal split ramus osteotomy using CAD/CAM fabricated surgical guides and customize titanium plates
Seung-Hyun Rhee[a], Jae-Man Woo[b], Jin-Young Choi[a]
[a]*Department of Oral and Maxillofacial Surgery, Seoul National University, Dental Hospital, Seoul, Korea*
[b]*Department of Dentistry, Jeju National University Hospital, Jeju, Korea*

O8 (25-B) 14:33~14:42
관절와 깊이와 하악과두 크기에 따른 하악골의 시상분할 하악지 골절단술 후 하악과두 변위 비교
유강희*[1], 양훈주[2], 권익재[1], 황순정[1,2]

1서울대학교 치의학대학원 구강악안면외과
2서울대학교 치과병원 턱교정수술센터

Comparison of condylar displacement after SSRO depending on the depth of glenoid fossa and condylar volume in relation to glenoid fossa volume

Kang Hee YU[*1], Hoon Joo YANG[2], Ik Jae KWON[1], Soon Jung HWANG[1,2]
[1]Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University
[2]Orthognathic Surgery Center, Seoul National University Dental Hospital

O9 (25–B) 14:42~14:51 **3차원 시뮬레이션 시스템을 이용한 악교정 수술에서 수술 정확도에 대한 연구 : 원심 골편과 근심 골편의 관계 및 교합 평면 분석**

오현준[*1], 이용찬[2], 손홍범[3], 서병무[1]
[1]서울대학교 치과병원 구강악안면외과
[2]베스티안 서울병원 구강악안면외과
[3]이튼 치과병원 교정과

Study on accuracy of orthognathic surgery using 3–dimensional simulation system : analysis of distal & proximal segments, and occlusal plane

Hyun Jun Oh[*1], Yong-Chan Lee[2], Hong-Bum Sohn[3], Byoung-Moo Seo[1]
[1]Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital
[2]Department of Oral and Maxillofacial Surgery, Seoul Bestian Hospital
[3]Department of Orthodontics, Eton Dental Hospital

O10 (25–B) 14:51~15:00 **양악수술이 임플란트 골유착에 미치는 영향에 대한 다기관 코호트 성향분석 연구**

김진우[1,7], 이 호[2,7], 임호경[3,7], 김주원[4,7], 변수환[5,7], 최영준[6], 이의룡[*6,7]
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Orthognathic surgery deteriorates the osseointegration of dental implants: a propensity–matched multi–center cohort study

Jin-Woo Kim[1,7], Ho Lee[2,7], Ho-Kyung Lim[3,7], Ju-Won Kim[4,7], Soo-Hwan Byun[5,7], Young-Jun Choi[6], Ui-Lyong Lee[*6,7]
[1]Department of Oral and Maxillofacial Surgery, Ewha Womans University Medical Center, Seoul, Korea
[2]Department of Oral and Maxillofacial Surgery, Section of Dentistry, Seoul Metropolitan Government - Seoul National University Boramae Medical Center, Seoul, Korea
[3]Department of Oral and Maxillofacial Surgery, Korea University Medical Center, Guro Hospital, Seoul, Korea
[4]Department of Oral and Maxillofacial Surgery, Pyeong-chon Sacred Heart Hospital, Hallym University Medical Center, Kyonggi-do, Korea
[5]Department of Oral and Maxillofacial Surgery, Dongtan Sacred Heart Hospital, Hallym University Medical Center, Kyonggi-do, Korea
[6]Department of Oral and Maxillofacial Surgery, Chung-Ang University Hospital, Seoul, Korea
[7]Research Society of Gangnam Oral and Maxillofacial Surgeons, Seoul, Korea

10월 25일(Thu) 우암홀 Tumor & Reconstruction

KS (25–C) 14:00~14:15 **Computer assisted simulation surgery and surgical guides for oral and maxillofacial reconstructive surgery**

이정우[*]
경희대학교 치과병원 구강악안면외과

Computer assisted simulation surgery and surgical guides for oral and maxillofacial reconstructive surgery

Jung-Woo Lee*

Department of Oral and Maxillofacial Surgery, School of Dentistry, KyungHee University

O11 (25-C) 14:15~14:24 Retrospective study about temporomandibular joint dislocation after fibula reconstruction surgery

Bakri, Mohammed Mousa[*1,2], Jong-Ho Lee[1]

[1]*Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University, Korea.*

[2]*Department of Oral and Maxillofacial Surgery, School of Dentistry, Jazan University, Saudi Arabia.*

O12 (25-C) 14:24~14:33 구강암환자에서 염증반응 생체표지자의 예후인자로서의 가치

이상훈*, 권순모, 남웅

연세대학교 치과대학 구강악안면외과학교실

Prognostic value of preoperative inflammatory response biomarkers in oral squamous cell carcinoma

Sanghoon Lee*, Sun-Mo Kwon, Woong Nam

Department of Oral and Maxillofacial Surgery, Yonsei University College of Dentistry, Seodaemoon-gu, Seoul, Republic of Korea

O13 (25-C) 14:33~14:42 Nerve Sliding Technique 을 활용한 하치조신경 문합술 시행 후 감각회복 평가

강상규[1*], 정한울[1], 이종호[1]

[1]*서울대학교 치과병원 구강악안면외과*

Sensory outcome of inferior alveolar nerve microsurgery using Nerve Sliding Technique

Sang-Kyu Kang[1*], Han-Wool Choung[1], Jong-Ho Lee[1]

[1]*Department of Oral and Maxillofacial Surgery, Seoul National University*

O14 (25-C) 14:42~14:51 피부침습을 동반하여 하악에 발생한 편평세포암종의 DCIA flap을 이용한 복합재건

김효준*, 김수관, 문성용, 오지수, 유재식, 정희석

조선대학교 치과대학 구강악안면외과학 교실

Composite recosntrcution with DCIA flap for mandibular squamous cell carcinoma with skin invasion

Hyo-Joon Kim*, Su-Gwan Kim, Seong-Yong Moon,
Ji-Su Oh, Jae-Seek You, Jung Hee-Suk

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

O15 (25-C) 14:51~15:00 미세수술 재건: 110 증례 성공률 및 합병증 분석

홍준희*, 안강민

울산대학교 의과대학 구강악안면외과 서울아산병원

Microvascular reconstruction: analysis of success rate and complications in 110 cases

Jun-Hee Hong*, Kang-Min Ahn

Department of oral and maxillofacial surgery, College of medicine, University of Ulsan

10월 26일(Fri) 그랜드볼룸 A Implant

KS (26-A) Past and Present of Dental Implant
08:00~08:15 Jae-Seek You
Dept. of Oral and Maxillofacial surgery, school of Dentistry, chosun university

O16 (26-A) 상악동 거상량에 따른 3차원 상악동 부피 평가
08:15~08:24 김효준*, 김수관, 문성용, 오지수, 유재식, 최해인, 신나라
조선대학교 치과대학 구강악안면외과학 교실

Assessment of 3D volume of the maxillary sinus according to the amount of maxillary sinus elevation
Hyo-Joon Kim*, Su-Gwan Kim, Seong-Yong Moon,
Ji-Su Oh, Jae-Seek You, Hae-In Choi, Na-Ra Shin
Dept of Oral and maxillofacial Surgery, School of Dentistry, Chosun University

O17 (26-A) 임플란트 제거 원인에 대한 분석: 128명의 환자에 대한 후향적 연구
08:24~08:33 이유정*, 장성백, 이성탁, 최소영, 김진욱, 권대근
경북대학교 치의학전문대학원 구강악안면외과학 교실

Analysis of the cause of dental implant removal: A retrospective study of 128 patients
You-Jung Lee*, Seong-Baek Jang, Seong-Tak Lee, So-Young Choi, Jin-Wook Kim, Tae-Geon Kwon
Dept. of Oral & Maxillofacial surgery, School of Dentistry, Kyungpook National University

O18 (26-A) 상악동 거상술과 동시에 식립한 임플란트의 생존률 및 성공율 : 434개 임플란트 분석
08:33~08:42 정용재*, 안강민
울산대학교 의과대학 구강악안면외과 서울아산병원

Survival and success of dental implants with sinus lifting and simultaneous installation: results of 434 implants
Yong-Jae Choung*, Kang-Min Ahn
Department of oral and maxillofacial surgery, College of medicine, University of Ulsan

O19 (26-A) 상악동 거상술 후 3차원 분석을 통한 골 부피와 골질 변화량 분석
08:42~08:51 권진주[1*], 최나래[1], 백영재[1], 송재민[1], 황대석[1], 김용덕[1], 신상훈[1], 김욱규[1], 황재준[2], 이재열[1]
[1]*부산대학교 치의학전문대학원 구강악안면외과학 교실*
[2]*부산대학교 치의학전문대학원 영상치의학 교실*

Analysis of Bone Volume and Bone Density Change by 3D Analysis after Maxillary Sinus Lift
Jin-Ju Kwon[1*], Na-rae Choi[1], Young-jae Baek[1], Jae-Min Song[1], Dae-Seok Hwang[1], Yong-Deok Kim[1], Sang-Hun Shin[1], Uk-Kyu Kim[1], Jae-joon Hwang[2], Jae-yul Lee[1]
[1]*Dept. of Oral and maxillofacial surgery, School of Dentistry, Pusan National University*
[2]*Dept. of Oral and maxillofacial radiology, School of Dentistry, Pusan National University*

O20 (26-A) 약물과 연관된 임플란트 주위염 : 항흡수 약물 투여 후 이미 유착된 임플란트 실패를 설명하기 위한 새로운 용어에 대한 제안
08:51~09:00 김준영*, 박진후, 정영수
연세대학교 치과대학 구강악안면외과학 교실

Medication related peri-implantitis : Proposal for a new terminology to explain late failure of osseointegrated implant after anti-resorptive medication

Jun-Young Kim*, Jin Hoo Park, Young-Soo Jung
Department of Oral & Maxillofacial Surgery, Yonsei University College of Dentistry, Seoul, Korea

10월 26일(Fri) 직지홀 A TMJ

KS (26-B) 턱관절 장애의 영상 및 감별진단
08:00~08:15

김수호
고려대학교 부속 구로병원 구강악안면외과

Imaging and Differential Diagnosis of Temporomandibular Joint Disorder

Soo-Ho Kim
Department of Oral and Maxillofacial Surgery, Guro Hospital, Korea University

O21 (26-B) 측두하악관절염 진단시 골극과 SPECT-CT 영상
08:15~08:24

장효원*, 유영훈, 김재영, 허종기
연세대학교 치과대학 구강악안면외과학교실
(강남세브란스 병원)
연세대학교 의과대학 핵의학교실
(강남세브란스 병원)

Bony spur of mandibular condyle and SPECT-CT imaging for diagnosis of temporomandibular joint osteoarthritis

Hyo-Won JANG[1*], Young Hoon RYU[2], Jae-Young KIM[1], Jong-Ki HUH[1]
[1] Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry, Seoul, Korea
[2] Department of Nuclear medicine, Gangnam Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

O22 (26-B) 측두하악관절질환 환자에서 초음파진단기를 이용한 관절낭거리의 측정
08:24~08:33

장동규*, 김헌영, 성태환, 박정현, 김진우, 김선종
이화여자대학교의료원 목동병원 구강악안면외과

Measurement of capsular width using ultrasound in temporomandibular joint disorders patients

Dongkyu Jang*, Heonyoung Kim, Taewhan Sung, Junghyun Park, Jinwoo Kim, SunJong Kim
Department of Oral and Maxillofacial Surgery,
Ewha Womans University Mokdong Hospital

O23 (26-B) 양측성 측두하악관절 강직 환자에 3D 가상수술과 CAD/CAM 기술을 이용한 기성 TMJ 보철물의 적용
08:33~08:42

이승현*[a], 백승학[b], 백범주[a], 양병은[c], 김종철[d], 정춘기[e], 최진영[a]
[a]서울대학교 구강악안면외과학 교실
[b]서울대학교 교정과학 교실
[c]한림대학교 의과대학 구강악안면외과
[d]미르 치과 병원
[a]메가젠 임플란트, FACEGIDE

Total joint reconstruction surgery for a patient with recurrent ankylosis in bilateral

temporomandibular joints using three-dimensional virtual surgical planning, CAD/CAM-fabricated surgical guides, and stock prostheses

Seung-Hyun Rhee[*a], Seung-Hak Baek[b], Bum-Joo Baek[a], Byoung-Eun Yang[c], Jong-Cheol Kim[d]
Chun-Gi Jeong[e], Jin-Young Choi[f]
[a] *Department of Oral and Maxillofacial Surgery, Seoul National University, Dental Hospital, Seoul, South Korea*
[b] *Department of Orthodontics, School of Dentistry, Dental Research Institute, Seoul National University, Seoul, South Korea*
[c] *Department of Oral and Maxillofacial Surgery, College of Medicine, Hallym University, Anyang, South Korea*
[d] *Mir Dental Hospital, Daegu, South Korea*
[e] *FACEGIDE, Division of Digital Business, Megagen Implant, Daegu, South Korea*
[f] *Department of Oral and Maxillofacial Surgery, School of Dentistry, Dental Research Institute, Seoul National University, Seoul, South Korea*

O24 (26-B) 턱관절 질환과 류마티스인자와의 상관관계 분석

08:51~09:00

안재명[*], 홍종락, 팽준영
성균관대학교 의과대학 삼성서울병원 구강악안면외과

Analysis of correlation between temporomandibular joint disease and rheumatoid factor

Jaemyung Ahn[*], Jongrak Hong, Jun-Young Paeng
Dept. of Oral and maxillofacial surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine

10월 26일(Fri) 우암홀 Basic research

KS (26-C) 구강편평세포암종의 기초 연구

08:00~08:15

최소영[*]
경북대학교 치과대학 구강악안면외과학 교실

Basic Research of Oral Squamous Cell Carcinoma

So-Young Choi*
Department of Oral & Maxillofacial Surgery,
School of Dentistry, Kyungpook National University

O25 (26-C) Comparison of tantalium-coated with non tantalium coated facial implants - Experimental study

08:15~08:24

Bakri, Mohammed Mousa[*1,2], Sung Ho Lee[1], Jong-Ho Lee[1]
Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University, Korea.
Department of Oral and Maxillofacial Surgery, School of Dentistry, Jazan University, Saudi Arabia.

O26 (26-C) Foxp3$^+$ 조절 T 임파구가 구강악안면 면역 항상성을 조절하는 기전에 관한 연구

08:24~08:33

박주영[1,2*], 박정현[2]
[1]*서울대학교 치과병원 구강악안면외과, 서울, 대한민국*
[2]*Experimental Immunology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA*

The oral mucosa favorably recruits Foxp3+ regulatory T cells regulating immune reaction in the oral mucosa

Joo-Young Park[1,2*], and Jung-Hyun Park[2]
[1]*Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital, Seoul, South Korea*
[2]*Experimental Immunology Branch, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA*

O27 (26-C) Animal models for the study of platelet-rich fibrin (PRF) and concentrated growth factor (CGF) for the clinical application
08:33~08:42
KYUHOON LEE*, HYEJEONG LEE, HEEJIN KIM, DAUM KIM, SEUNGHWAN KIM, JIHOON PARK, SEUNGWOO PAEK, HOJIN YOON, HYOJIN CHA, JAESEEK YOU, SUGWAN KIM
Directed by JAESIK YOO
Maxillofacial Surgery Department

O28 (26-C) 하이드로젤이 혼합된 이상 인산 칼슘 골이식재의 생체 적합성 및 골 재생 평가
08:42~08:51
문성호*[1], 김한종[1], 임헌준[1], 김봉철[1], 이준[1,2]
[1]*원광대학교 대전치과병원 구강악안면외과*
[2]*원광 골재생 연구소*

Biocompatibility and bone regeneration of hydrogel / Biphasic calcium phosphate bone graft materials
Seong Ho Mun*[1], Hanjong Kim[1], Hun Jun Lim[1], Bong Chul Kim[1], Jun Lee[1,2]
[1]*Dept. of Oral and maxillofacial surgery, Daejeon Dental Hospital, College of Dentistry, Wonkwang University*
[2]*Wonkwang Bone Regeneration Research institute, Wonkwang University*

O29 (26-C) 실크로부터 느리게 방출되는 세리신 단백질 조각의 TNF-α 유도와 골 형성 조절
08:51~09:00
조유영[1], 권해용[1], 김대원[2], 백경화[3], 강예진[4*], 김민근[4], 김성곤[4], 채원식[5], 최재용[6], Horatiu Rotaru[7]
[1]*잠사양봉소재과, 국립농업과학원, 완주*
[2]*강릉원주대학교 치과대학 생화학교실*
[3]*강릉원주대학교 치과대학 약리학교실*
[4]*강릉원주대학교 치과대학 구강악안면외과*
[5]*한국기초과학지원연구원, 대구*
[6]*경북대학교 의과대학 생화학교실*
[7]*두개악안면외과, "Iuliu Hatieganu" University of Medicine and Pharmacy, Rumania*

Slow and fragmented release of sericin from silk mat induces tumour necrosis factor - α and indirectly regulates bone formation
You-Young Jo[1], Hae-Yong Kweon[1], Dae-Won Kim[2], Kyung-Hwa Baek[3], Yei-Jin Kang[4*], Min-Keun Kim[4], Seong-Gon Kim[4], Weon-Sik Chae[5], Je-Yong Choi[6], Horatiu Rotaru[7]
[1]*Sericultural and Apicultural Division, National Institute of Argricultural Science, Wanju*
[2] *Department of Oral Biochemistry, College of dentistry, Gangneung-Wonju National University*
[3] *Department of Oral Pharmacology, College of dentistry, Gangneung-Wonju National University*
[4]*Department of Oral and Maxillofacial Surgery, College of dentistry, Gangneung-Wonju National University*
[5]*Analysis Research Division, Daegu Center, Korea Basic Science Institute*
[6]*School of Biochemistry and Cell Biology, Kyungpook National University*
[7]*Department of Cranio-Maxillofacial Surgery, Iuliu Hatieganu University of Medicine and Pharmacy, Rumania*

10월 27일(Sat) 그랜드볼룸 A Dentoalveolar Surgery

KS (27-A) 이 뽑다가 생긴 일
08:00~08:15
김봉철*
원광대학교

What happens in the extraction?
Bong Chul KIM*
Hospital, Wonkwang University College of Dentistry

O30 (27–A) 가상현실을 이용한 치과 임상 술기 교육
08:15~08:24 김효준*, 문성용, 정희석
조선대학교 치과대학 구강악안면외과, 조선대학교 대학원

Virtual reality for clinical technique education in dentistry
Kim Hyo Joon*, Moon Seong Yong, Jung Hee Suk
Department of Oral and Maxillofacial Surgery, College of Dentistry, Chosun University

O31 (27–A) 의원성으로 발생한 이물질 제거: 11 증례 분석
08:24~08:33 이동훈*, 안강민
울산대학교 의과대학 구강악안면외과 서울아산병원

Removal of foreign body from iatrogenic origin: analysis of 11 cases
Dong-Hun Lee*, Kang-Min Ahn
Department of oral and maxillofacial surgery, College of medicine, University of Ulsan

O32 (27–A) 하악 매복 제3대구치 발치 후 콜라겐 스폰지의 삽입이 치유에 미치는 영향: 무작위 대조군 실험
08:33~08:42 성태환*, 김헌영, 장동규, 박정현, 김진우, 김선종
이화여자대학교 의과대학 부속 목동병원

Randomized controlled trial on the effectiveness of absorbable collagen sponge after extraction of impacted mandibular third molar: Split-mouth design
Tae-Whan Seong*, Heon-Yeong Kim, Dong-Kyu Jang, Jung-Hyun Park, Jin-Woo Kim, Sun-Jong Kim
Ewha Womans University Medical Center

O33 (27–A) 내시경을 이용한 악하선 도관 내 타석 제거술에 대한 증례 보고
08:42~08:51 이동건*, 김창우, 강몽헌, 송인석, 전상호
고려대학교 안암병원 구강악안면외과학교실

Sialolithotomy of submandibular duct using sialoendoscopy: case report
Dong-Keon Lee*, Chang-Woo Kim, Mong-Heun Kang, In-Seok Song, Sang-Ho Jun,
Dept. of Oral and Maxillofacial Surgery, Korea University Anam Hospital

O34 (27–A) 낭종 감압술과 하치조신경관의 재생
08:51~09:00 김진우*, 조진용, 류재영, 김성범
가천대 길병원 구강악안면외과

Decompression of cyst and recovery of inferior alveolar canal
Kim Jin Woo*, Cho Jin-yong, Ryu Jae Young, Kim SungBeom
Department of Oral & Maxillofacial surgery, Gachon University Gil Medical Center

10월 27일(Sat) 직지홀 A Deformity

KS (27–B) 구순열에서의 이차 교정술
08:00~08:15 정승곤
전남대학교 치의학전문대학원,
구강악안면외과학교실, 전남대학교 치의학연구소

Secondary correction in cleft lip
Seunggon Jung

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

O35 (27–B) 치근하방 골 절단술과 교정을 통한 유착된 치아의 수직 재배열

08:24~08:33 박병호*, 안강민

울산대학교 의과대학 구강악안면외과 서울아산병원

Vertical tooth alignment with subapical osteotomy and orthodontic treatment in ankylosed tooth

Byungho Park*, Kang-Min Ahn

Department of oral and maxillofacial surgery, College of medicine, University of Ulsan

O36 (27–B) 구순열 코변형에 대한 외과적 교정술

08:33~08:42 이장하*, 김민근, 김성곤, 권광준, 박영욱

강릉원주대학교 치과대학 구강악안면외과학교실

Surgical correction on cleft patients with secondary nasal deformity

Jang-Ha Lee*, Min-Keun Kim, Seong-Gon Kim, Kwang-Jun Kwon, Young-Wook Park

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

O37 (27–B) 악안면 기형에 따른 경추 형태의 비교

08:42~08:51 하태욱*[1], 김진규[1], 김학진[1], 이상휘[1]

[1]*연세대학교 치과대학병원 구강악안면외과*

Morphological comparison of cervical spine by dentofacial deformity

Tae-Wook Ha*[1], Jin-kyu Kim[1], Hak-Jin Kim[1], Sang-Hwy Lee[1]

[1]*Department of Oral and Maxillofacial Surgery, Dental Hospital, Yonsei University, Seoul, Korea*

O38 (27–B) 사두증의 비대칭 교정을 위한 3차원적 전두–안와 전진술

08:51~09:00 정한울, 박상윤, 김영우*, 이주영, 하성호, 왕규창, 정필훈

서울대학교 치과병원 구강악안면외과

3D Surgery of fronto–orbital advancement with correction of plagiocephaly asymmetry

Han-Wool Choung, Sang Yoon Park, Yeong Woo Kim*, Ju-Young Lee, SungHo Ha, Gyu-Chang Wang, Pil-Hoon Choung

Oral and Maxillofacial Surgery, Seoul National University Dental Hospital

10월 27일(Sat) 우암홀 Infection

KS (27–C) 치과치료에서 감염성 심내막염의 위험성

08:00~08:15 박성민*

단국치대병원 구강악안면외과

Dental Procedures and the Risk of Infective Endocarditis

Sung Min Park*

Clinical fellow in Department of Oral and Maxillofacial Surgery, College of Dentistry, Dankook University, Se-Jong , Korea.

O39 (27–C) 골아세포의 골형성능에 미치는 bisphosphonate의 효과와 이에 적용된 rh–BMP2의 효과

08:15~08:24 장승일*, 김주연, 안재명, 홍종락, 팽준영

성균관대학교 의과대학 삼성서울병원 구강악안면외과
Surgery, Yonsei University College of Dentistry, Seoul, Korea

The effect of bisphosphonate and rh-BMP2 on the osteogenic differentiation of osteoblast

Seug-Il Jang*, Juyeon Kim, Jaemyung Ahn, Jongrak Hong, Jun-Young Paeng
Department of Oral and Maxillofacial Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, 81 Irwon-ro, Gangnam-gu, Seoul, 06351, Republic of Korea

O40 (27-C) Medication-Related Osteonecrosis of the Jaw(MRONJ) 환자에 식립된 임플란트 예후에 관한 연구

08:24~08:33

정연우*, 김경민, 심유송, 한정준, 정승곤, 국민석, 박홍주, 오희균,
전남대학교 치의학전문대학원 구강악안면외과학교실

A study on prognosis of dental implant in Medication-Related Osteonecrosis of the Jaw (MRONJ) Patients

YeonWoo Jeong*, Kyungmin Kim, You Song Sim, Jeong Joon Han, Seunggon Jung, Min-Suk Kook, Hong-Ju Park, Hee-Kyun Oh
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University

O41 (27-C) 치아기원으로 추정되는 비중격농양

08:33~08:42

이상민*[1,2], 임대호[1,2], 고승오[1,2], 백진아[1,2]
[1]전북대학교 치과대학 구강악안면외과학교실
[2]전북대학교 임상의생명연구소

Nasal septal abscess presumed to be of dental origin

Sang Min Lee*[1,2], Dae Ho Leem[1,2], Seung-O Ko[1,2], Jin-A Baek[1,2]
[1]Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonbuk National University, Jeonju, Korea
[2]Research Institute of Clinical Medicine-Biomedical Research Institute, Chonbuk National University Hospital, Jeonju, Korea

O42 (27-C) 크론병 환자에서 구강 내 궤양성 병소 및 악골 골수염의 진단과 치료

08:42~08:51

최용석*, 박주영
서울대학교 치과병원 구강악안면외과

Diagnosis and treatment for oral mucosal ulceration and jaw osteomyelitis in Crohn's disease patient

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

O43 (27-C) MRONJ의 수술적 치료: 일차적 치유 혹은 이차적 치유?

08:51~09:00

정상환*, 장성백, 이성탁, 김진욱, 권대근, 최소영
경북대학교치과병원 구강악안면외과학 교실

Surgical treatment of MRONJ: Close or open?

Sang-Hwan Jung*, Sung-Beak Jang, Seong-Tak Lee, Jin-Wook Kim, Tae-Geon Kwon, So-Young Choi
Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea

The 57th Congress of The Korean Association of Maxillofacial Plastic and Reconstructive Surgeons

Poster Presentation

제57차
대한악안면성형재건외과학회
종합학술대회 및 정기총회

Poster Session Part Ⅰ
[Trauma & Orthognathic surgery / Orthognathic surgery]

PⅠ–01 전신질환자의 구강연조직 손상 대처법 : 증례보고

유한창[1*], 윤필영[1], 김영균[1,2]
[1]분당서울대학교병원, 치과, 구강악안면외과
[2]서울대학교 치의학대학원 치의학과, 치의학 연구소

Preventing oral soft tissue damage in patients with systemic diseases : case report

Han-Chang YU[1*], Pil-Young Yun[1], Young-Kyun Kim[1,2]
[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

PⅠ–02 후하악접근법을 이용한 양측 하악과두경부 및 정중부주위 골절 치료의 증례보고

신영민[1*]
계명대학교 동산의료원, 계명대학교 의과대학 치과학교실(구강악안면외과)

Open reduction & Internal fixation of Bilateral Condylar neck and Parasymphyseal Fractures via Retromandibular Approach; Case Report

Youngmin Shin[1*]
Keimyung University School of Medicine, Department of Dentistry & Oral surgery[1]

PⅠ–03 하악골 골절의 관혈적 정복술 후 발생한 부정교합에 대한 치료: 증례 보고

이혜정[*], 김수관, 문성용, 오지수, 유재식, 최해인, 신나라
조선대학교 치의학전문대학원 구강악안면외과학교실

The treatment of malocclusion after open reduction of mandibular fracture : a case report

Hye-jung Lee[*], Su-Gwan Kim, Seong-Yong Mon, Ji-Su Oh, Jae-Seek You, Hae –In Choi, Na-Ra Shin
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chosun University

PⅠ–04 심한 전안면 골절로 인한 상하악골의 불완전한 정복과 악교정수술을 통한 교합 재건 : 증례 보고

오광진[*], 류동목, 지유진, 이덕원, 김세원, 양선인, 정상필, 강미주, 이재덕
강동 경희대학교 치과병원 구강악안면외과학교실

Incomplete reduction of maxilla–mandibular bone due to severe panfacial fracture and occlusal reconstruction via orthognathic surgery : a case report

Gwangjin Oh[*], Dong-mok Ryu, You-jin Jee, Deok won Lee, Se-won Kim, Sunin Yang, Sang-pil Jung, Miju Kang, Jaedeok Lee
Dept. of Oral and Maxillofacial surgery, Kyung-Hee University Dental Hospital at Gangdong

PⅠ–05 편측 하악각 골절에서 흡수성 polymer, 티타늄과 Mg–Ca–Zn 합금을 이용한 고정을 하였을 때, 유한 요소 분석 통한 흡수성 polymer의 안정성 비교

박병호[1*], 김원현[2], 이종호[3], 이지호[1]
[1]서울아산병원 구강악안면외과학교실
[2]서울대학교 치과병원 중개임상시험지원센터
[3]서울대학교 치의학대학원 구강악안면외과학교실

Stability of absorbable polymer fixation compared with titanium and Mg–Ca–Zn alloy for

unilateral angle fracture of the mandible using finite element analysis model

Byungho Park[1*], Won Hyeon Kim[2], Jong Ho LEE[3], Jee-Ho Lee[1]
[1]*Dept. of Oral and Maxillofacial Surgery, Asan Medical Center, college of medicine, Ulsan University, Seoul, Korea*
[2]*Clinical Translational Research Center for Dental Science, Seoul National University Dental Hospital, Seoul, Korea*
[3]*Dept. of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University*

P I –06 외이도 골절을 동반한 하악 과두의 외상성 후방 탈구

민송희*, 조동현, 이정근*, 송승일
아주대학교 치과병원 구강악안면외과

Traumatic posterior dislocation of mandibular condyle with external auditory canal fracture

Song Hee Min*, Dong Hyun Cho, Jeong Keun Lee*, Seung Il Song
Department of Oral and Maxillofacial Surgery, AJOU University Dental Hospital

P I –07 비골 골절에 대한 최근 9년간 후향적 연구

강병훈*, 최송제, 고성혁, 정지훈, 안준형, 한정준, 정승곤, 박홍주, 오희균, 국민석
전남대학교 치의학전문대학원,
구강악안면외과학교실, 전남대학교 치의학연구소

A Recent 9–year Retrospective Study On Nasal Bone Fracture

Byung-Hun Kang*, Song-Je Choi, Sung-Hyuk Koh, Ji-Hun Chong, Jun-Hyeong An, Jeong Joon Han, Seunggon Jung, Hong-Ju Park, Hee-Kyun Oh, Min-Suk Kook
Department of Oral and Maxillofacial Surgery, Dental Science Research Institute, School of Dentistry, Chonnam National University

P I –08 악교정 수술 계획 수립 시 기존 수술 계획과 가상 수술 계획 사이의 시간 및 비용 비교

박시연*, 송재민, 이재열, 김용덕, 신상훈, 김욱규, 황대석
부산대학교 치의학전문대학원 구강악안면외과학교실

Comparison of Time & Cost between Conventional Surgical planning and Virtual Surgical planning in Orthognathic Surgery

Si-Yeon Park*, Jae-Min Song, Jae-Yeol Lee, Yong-Deok Kim, Sang-Hun Shin, Uk-Kyu Kim, Dae-Seok Hwang
Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University

P I –09 Clinical study of intraoperative bleeding in orthognathic surgery

Keisuke Sugahara[1*], Akira Wada[2], Masahide Koyachi[1], Shuji Yoshida[2], Akira Watanabe[2], Hiroki Bessho[2], Kiyohiro Kasahara[1], Masayuki Takano[2], Takahiko Shibahara[2], Chikara Saito[2], Akira Katakura[1]
[1]*Department of Oral Pathobiological Science and Surgery, Tokyo Dental College, Tokyo, Japan*
[2]*Department of Oral and Maxillofacial Surgery, Tokyo Dental College, Tokyo, Japan*

P I –10 Technical report of Le Fort I osteotomy using Microsoft® HoloLens and 3D devices

Masahide Koyachi[1*], Keisuke Sugahara[1], Mayu Shin[1], Yu koyama, Ryo Takagi[1], Kiyohiro Kasahara[2], Kento Odaka[2], Satoru Matsunaga[3], Shinichi Abe[3], Akira Katakura[1]
[1]*Department of Oral Pathobiological Science and Surgery, Tokyo Dental College, Tokyo, Japan*
[2]*Department of Oral and Maxillofacial Radiology, Tokyo Dental College, Tokyo, Japan*
[3]*Department of Anatomy, Tokyo Dental College*

P I –11 악교정 수술로 인해 발생한 수면무호흡증에 대한 치료로써 이설근 전진술과 구개수구개성형술의 증례보고

김원재*, 이백수, 최병준, 오주영, 이정우, 정준호,권용대
경희대학교 치의학전문대학원 구강악안면외과학교실

Genioglossus Advancement with Uvulopalatoplasty for the treatment of orthognathic surgery induced obstructive sleep apnea (OSA): A case report

Weon Jae Kim*, Baek Soo Lee, Byung Joon Choi, Joo Young Ohe, Jung Woo Lee, Jun-ho Jung, Yong Dae Kwon
Dept. of Oral & Maxillofacial surgery
Kyung Hee University School of Dentistry

P I –12 Use of CAD/CAM technology in maxillofacial reconstruction – 4 Cases presentation

Ali Alqussair[1,2*], Choi Jin Young[1]
[1]*Seoul National University Dental Hospital*
[2]*Dammam Medical Complex, Ministry of Health, Saudi Arabia*

P I –13 안면 비대칭과 관골의 위치 연관성의 3차원 전산화 단층 촬영을 이용한 평가

최효원*, 유한솔, 윤승규, 장효원, 박광호
연세대학교 치과대학 구강악안면외과학교실
(강남세브란스병원)

3–dimensional computed tomography evaluation of relationship between zygomatic bone location and facial asymmetry

Hyo-Won CHOI*, Han-Sol YOU, Seungkyu Yoon, Hyo-Won JANG, Kwang-Ho PARK
Department of Oral and Maxillofacial surgery, Gangnam Severance Hospital, Yonsei University Colleage of Dentistry, Seoul, Korea

P I –14 Reproducibility of Facial Images Taken with a Non–contact 3D Imaging System

Hidenobu Sakuma*, Yusuke Kato, Daichi Hasebe, Daisuke Saito, Wataru Katagiri, and Tadaharu Kobayashi
Division of Reconstructive Surgery for Oral and Maxillofacial Region, Graduate School of Medical and Dental Sciences, Niigata University

P I –15 Our Strategy for Orthognathic Surgery for Patients with Cleft Lip and Palate.

Yuko Shintaku*, Tomonao Aikawa, Susumu Tanaka, and Mikihiko Kogo
The First Department of Oral and Maxillofacial Surgery, Osaka University Graduate School of Dentistry

P I –16 증례보고: 상악후퇴환자에서의 BAMF(Bone Anchored Face Mask) 사용

김태호*, 박성민, 김문영, 한세진, 김철환, 이재훈
단국대학교 치과대학 구강악안면외과학 교실

Case Report: BAFM(Bone Anchored Face Mask) on Maxillary Retrusion Patient

Tae Ho Kim*, Sung Min PARK, Moon Young KIM, Se Jin HAN, Chul Hwan KIM, Jae Hoon LEE
[1]*Dept. of Oral and maxillofacial surgery, College of Dentistry, Dankook University*

P I –17 External reference point using facial impression for settling maxillary position during Le Fort I osteotomy

Ko ITO*, Kosuke TAKAHASHI, Mai Tajima, Teruo YANO, Suguru WATANABE, Fumie YAMAZAKI, Toshirou KONDOH
Department of Maxillofacial Surgery Nihon University School of Dentistry at Mastsudo

PI-18 하악지 수직 골절단술 후 뒤로 밀린 근심 골편의 회전 경향

박종찬[*1], 이준[1,2], 임헌준[1], 김봉철[1]
[1]원광대학교 대전치과병원 구강악안면외과
[2]원광 골재생 연구소

Rotation tendency of the posteriorly displaced proximal segment after vertical ramus osteotomy

Jong Chan Park[*1], Jun Lee[1,2], Hun Jun Lim[1], Bong Chul Kim[1]
[1]Dept. of Oral and maxillofacial surgery, Daejeon Dental Hospital, Wonkwang University College of Dentistry
[2]Wonkwang Bone Regeneration Research institute, Wonkwang University

PI-19 구순/구개열 환자의 악교정 수술 후 안정성에 관한 임상적 연구 : 32명의 환자에 대한 후향적 연구

최원혁[*], 송재민, 이재열, 황대석, 신상훈, 김욱규, 김용덕
부산대학교 치의학전문대학원 구강악안면외과학교실

A clinical study of stability following orthognathic surgery for patients with cleft lip/palate : A retrospective study of 32 patients

Won-hyuk Choi[*], Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Sang-Hun Shin, Uk-Kyu Kim, Yong-Deok Kim
Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University

PI-20 하악전돌증 환자의 양악동시 악교정 수술 후 기도부피의 변화의 3차원적 분석

최성환[*], 박진후, 임기현, 김준영, 정휘동, 정영수
연세대학교 치과대학 구강악안면외과학교실

Changes of pharyngeal airway volume after mandibular setback: 3-Dimensional Analysis

Sung-Hwan Choi[*], Jin Hoo Park , Ki-Hyun Lim, JunYoung Kim, Hwi-Doing Jung, Young-soo Jung
Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University

PI-21 하악전돌증 환자에서 전방 분절골절단술을 동반한 하악 후퇴술 후 상기도 공간 변화에 대한 연구

조예원[*1], 권익재[1], 양훈주[2], 황순정[1,2]
[1]서울대학교 치의학대학원 구강악안면외과
[2]서울대학교치과병원 턱교정수술센터

A study of the effect of SSRO combined with anterior segmental osteotomy for mandible setback surgery on the change of pharyngeal airway space

Yewon Joh[*1], Ik Jae Kwon[1], Hoon Joo Yang[2], Soon Jung Hwang[1,2]
[1]Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University
[2]Department of Orthodontics, School of Dentistry, Seoul National University

PI-22 안면비대칭이 있는 하악 전돌 환자에 있어서 선수술로 양측 시상골절단술 (BSSRO)와 구강내 수직골절단술 IVRO를 시행한 환자의 과두 위치 변화 평가

임이랑[*], 김수관, 문성용, 오지수, 유재식, 최해인, 신나라
조선대학교 치의학전문대학원 구강악안면외과학교실

Changes in condylar position after bilateral sagittal split ramus osteotomy (BSSRO) and intraoral vertical ramus osteotomy (IVRO) via surgery-first approach in mandibular prognathism with facial asymmetry

Lee-Rang Lim*, Su-Gwan Kim, Seong-Yong Mon, Ji-Su Oh, Jae-Seek You, Hae-In Choi, Na-Ra Shin
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chosun University

PI-23 **Intraoral Le Fort II/III osteotomy를 통한 골신장술**

정필훈, 하성호*, 정한울
서울대학교 치과병원, 구강악안면외과학 교실

Distraction osteogenesis of Intraoral Le Fort II/III osteotomy

Pill-Hoon Choung, Sung-Ho Ha*, Han-Wool Choung
Dept. of Oral & Maxillofacial Surgery, Seoul National University Dental Hospital.

PI-24 **선수술과 투명교정장치를 이용한 빠른 악교정 치료 환자에 대한 치험례**

고성혁*, 최송제, 강병훈, 정지훈, 안준형, 한정준, 정승곤, 박홍주, 오희균, 국민석
전남대학교 치의학전문대학원, 구강악안면외과학교실

Fast orthognathic treatment by a Surgery-First approach and using clear overlay orthodontic appliance : a Case Report

Sung-Hyuk Koh*, Song-Je Choi, Byoung-Hun Kang, Ji-Hun Chong, Jun-Hyeong An, Jeong Joon Han, Seunggon Jung, Hong-Ju Park, Hee-Kyun Oh, Min-Suk Kook
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PI-25 **Two Jaw Surgery 환자에서 Rocuronium으로 인한 anaphylaxis:**

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서울아산병원 구강악안면외과학교실

Rocuronium bromide induced anaphylaxis in Two Jaw Surgery patient: A case report

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Ulsan University, Seoul, Korea

PI-26 **하악전돌증 환자의 전진 이부성형술을 동반한 양악동시 악교정 수술 후 기도부피의 변화의 3차원적 분석**

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연세대학교 치과대학 구강악안면외과학교실

Changes of pharyngeal airway volume after mandibular setback surgery combined with advancement genioplasty: 3-Dimensional Analysis

Jin Hoo Park*, Sung-Hwan Choi, Ki Hyun Im, Jun-Young Kim, Hwi-Doing Jung, Young-Soo Jung
Dept. of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University

PI-27 **골격성 3급 부정교합 환자에서 부분 혀 절제술을 동반한 악교정 수술 이후 3D-CBCT를 이용한 기도 변화에 대한 연구**

박지열*, 이백수, 권용대, 최병준, 이정우, 정준호, 황보연, 오주영
경희대학교 치과병원 구강악안면외과

Airway changes in patients with skeletal class III malocclusion after orthognathic surgery with partial glossectomy: a three-dimensional cone-beam computed tomography study

Jiyeol Bak*, Baeksoo Lee, Yongdae Kwon, Byungjoon Choi, Jungwoo Lee, Junho Jung, Boyeon Hwang, Jooyoung Ohe
Dept. of Oral and Maxillofacial Surgery, Kyung Hee University Dental Hospital, Seoul, Korea

PI-28 갈색종양에 의한 악안면 변형 환자의 진단 및 치료: 증례보고

홍석환*, 김준영, 박진후, 정휘동, 정영수
연세대학교 치과대학 구강악안면외과학교실

Diagnosis and treatment of patients with craniofacial deformity due to brown tumor : Case report

Seok-Hwan Hong*, Jun-young Kim, Jin-hoo Park, Hwi-Dong Jung, Young-Soo Jung
Department of Oral & Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea

PI-29 3급 부정교합 환자에서 Condyle positioner를 이용한 악교정수술 후 하악 과두의 3차원적 위치 변화 분석

강효선*, 심유송, 고성혁, 허재진, 안준형, 한정준, 정승곤, 국민석, 오희균, 박홍주
전남대학교 치의학전문대학원,
구강악안면외과학교실, 전남대학교 치의학연구소

Three-dimensional Analysis of Postoperative Condylar Positional Changes after Orthognathic Surgery using Condylar Positioner

Hyo-Sun Kang*, You Song Sim, Yeon Woo Jeong, Jae-Jin Heo, Jun-Hyeong An, 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

PI-30 양악 수술 시 CAD/CAM splint의 두가지 다른 시스템에 대한 비교 연구 : Orapix versus simplant

조극제*, 이성탁, 최소영, 김진욱, 권대근
경북대학교 치의학전문대학원 구강악안면외과학 교실

Comparison of the two different type of CAD/CAM splint for maxillomandibular osteotomy ; Orapix versus Simplant

Keuk-Je Cho*, Sung-Tak Lee, So-Young Choi, Jin-Wook Kim, Tae-Geon Kwon
Dept. of Oral and Maxillofacial surgery, School of Dentistry, Kyungpook National University, Daegu, Republic of Korea

PI-31 Volumetric comparison of maxillofacial soft tissue morphology: CT in the supine position versus three-dimensional optical scanning in the sitting position

Yoshihiro Yamaguchi*, Hikari Suzuki, Shinnosuke Nogami, Kensuke Yamauchi, Tetsu Takahashi
Department of Oral and maxillofacial surgery, Graduate School of Dentistry

PI-32 3급 부정교합 환자에서 Condyle positioner를 이용한 악교정수술 후 하악 과두의 3차원적 위치 변화 분석

강효선*, 심유송, 고성혁, 허재진, 안준형, 한정준, 정승곤, 국민석, 오희균, 박홍주
전남대학교 치의학전문대학원,
구강악안면외과학교실, 전남대학교 치의학연구소

Three-dimensional Analysis of Postoperative Condylar Positional Changes after Orthognathic Surgery using Condylar Positioner

Hyo-Sun Kang*, You Song Sim, Yeon Woo Jeong, Jae-Jin Heo, Jun-Hyeong An, Jeong Joon Han, Seunggon Jung, Min-Suk Kook, Hee-Kyun Oh, Hong-Ju Park
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PI-33 IVRO를 이용한 선수술 환자에서 Surgical occlusion setup 양상에 따른 술 후 안정성 및 치료기간에 대한 후향적 연구

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Postoperative stability and duration of treatment according to surgical occlusion setup in Surgery-First Approach using IVRO : A retrospective study

Hansol CHOI[*1], Jun-Young Kim[1], Jin Hoo Park[1], Hwi-Dong Jung[1], Young-Soo Jung[1]
[1]Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea

PI-34 서울대학교 치과병원의 폐쇄성 수면무호흡(OSA) 환자의 수술적 치료 프로토콜

박상헌[*],
최진영
서울대학교 구강악안면외과학 교실

Protocol of Surgical Treatments for Obstructive Sleep Apnea in Seoul National University of Dental Hospital

Sang Hun Park[*]
Jin-Young Choi
Department of Oral and Maxillofacial Surgery, Seoul National University, Dental Hospital, Seoul, Korea

PI-35 구내 수직-시상 상행지 분할 골절단술 후 측두하악관절의 3차원적 관찰

정필훈, 김영우[*], 정한울
서울대학교 치과병원 구강악안면외과

3D Findings of Temporomandibular Joint after Intraoral Vertico-Sagittal Ramus Osteotomy (IVSRO)

Pil-hoon Choung, Yeong Woo Kim[*], Han-Wool Choung
Department of Oral and Maxillofacial Surgery, Seoul National University

PI-36 술후 하악골의 3차원 기하학적 형태 비교 분석 : 하악골 수직 골절단술과 시상 분할 골절단술

김진규[*1], 하태욱[1], 김학진[1], 유상진[2], 이상휘[1]
[1]연세대학교 치과대학 구강악안면외과학교실
[2]포스유 구강악안면외과치과의원

3D morphometric comparison of postoperative mandibular structure after IVRO and SSRO

Jin-kyu Kim[*1], Tae-Wook Ha[1], Sang-Jin Yu[2], Sang-Hwy Lee[1]
[1]Department of Oral & Maxillofacial Surgery, Yonsei University College of Dentistry, Seoul, Korea
[2]Department of Oral & Maxillofacial Surgery, FOS-U dental clinic, Seoul, Korea

PI-37 선수술 접근법으로 시행한 악교정 수술이 측두하악관절에 미치는 영향에 대한 후향적 연구

안준형[*], 한정준, 정승곤, 국민석, 박홍주, 오희균
전남대학교 치의학전문대학원 구강악안면외과학교실

A Retrospective Study on Influence of the Orthognathic Surgery via Surgery-First Approach(SFA) on the Temporomandibular Joint(TMJ)

Jun-Hyeong An[*], Jeong Joon Han, Seunggon Jung, Min-Suk Kook, Hong-Ju Park, Hee-Kyun Oh
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University

PI-38 반안면 왜소증 하악골 3차원 구조의 성장 시기별 형태 비교

Helios Bertin[*1], 김봉철[2], 김학진[3], 강상훈[4], Jacques Mercier[1], Jean-Philippe Perrin[1], Pierre Corre[1], 이상휘[3]
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Structural comparison of hemifacial microsomia mandible in different age groups by three-dimensional skeletal unit analysis

Helios Bertin[*1], Bong Chul Kim[2], Hak-Jin Kim[3], Sang-Hoon Kang[4], Jacques Mercier[1], Jean-Philippe Perrin[1], Pierre Corre[1], Sang-Hwy Lee[3]
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PⅠ-39 다양한 저작 시 윤곽 수술을 시행한 하악골에 대한 응력 분포의 유한 요소 분석

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A finite element analysis of the stress distribution to the mandible after contouring surgery with various clenching tasks.

Young Jae Yoon[1*], Gunwoo Noh[3], Yong Dae Kwon[2]
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PⅠ-40 STO시에 기하 연속성과 기계 학습을 이용한 Pogonion의 위치 결정

강성현[*1,2], 임대호[1,2], 백진아[1,2], 염정호[2,3], 고승오[1,2]
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Positioning of the pogonion in STO using geometric continuity with machine learning

Sung-Hyun Kang[*1,2], Dae-Ho Leem[1,2], Jin-A Baek[1,2], Jung-Ho Youm[2,3], Seung-O Ko[1,2]
[1]*Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonbuk National Universityl, Jeonju, Korea*
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Poster Session Part Ⅱ
[Tumor & Reconstruction/ Implant]

PⅡ-01 측인두공간에서 발생한 다형 선종 기원 암종의 경부 접근법을 이용한 수술례 : 증례보고 및 문헌고찰

유한솔[*], 최효원, 허종기, 김재영

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(강남세브란스병원)

Transcervical approach for carcinoma ex pleomorphic adenoma on parapharyngeal space : A case report with literature review

Han-Sol YOU*, Hyo-Won CHOI, Jong-Ki HUH, Jae-Young KIM
Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry, Seoul, Korea[1]

P Ⅱ-02 하악하 도서형 피판을 이용한 구강 내 결손부 재건

임세정[1*], 전도현[1], 김대영[2], 손승환[2], 손장호[1], 조영철[1], 성일용[1]
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구강악안면외과학교실
[2]울산대학교 의과대학 울산대학교병원
통합치의학과

Reconstruction of defected oral cavity with submental island flap

Se-Jeong Lim[1*], Do-Hyun Jeon[1], Dae-Young Kim[2], Seung-Hwan Son[2], Jang-Ho Son[1], Yeong-Cheol Cho[1], Iel-Yong Sung[1]
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[2]Department of Advanced General Dentistry, University of Ulsan Hospital, University of Ulsan College of Medicine

P Ⅱ-03 하악에 발생한 중심성 치성 섬유종: 2례의 증례 보고

전영태*, 이한얼, 박성민, 김문영, 한세진, 김철환, 이재훈
단국대학교 치과대학 구강악안면외과학 교실

Central odontogenic fibroma located in the mandible: Two case reports

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P Ⅱ-04 하악에 발생한 골아세포종 : 증례 보고

김민규*, 신우진, 박성민, 김문영, 한세진, 김철환, 이재훈
단국대학교 치과대학 구강악안면외과학 교실

Osteoblastoma located in the mandible : A Case Report.

Min Gyu Kim*, Woo Jin Shin, Sung Min Park, Moon Young Kim, Se Jin Han, Chul Hwan Kim, Jae Hoon Lee
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P Ⅱ-05 구강저에 발생한 거대한 유피낭종

김지관*, 구철홍, 박성민, 김문영, 한세진, 김철환, 이재훈
단국대학교 치과대학 구강악안면외과학 교실

Giant Dermoid Cyst in Mouth Floor

Ji Kwan KIM*, Chul Hong KOO, Sung Min PARK, Moon Young KIM, Se Jin HAN, Chul Hwan KIM, Jae Hoon LEE
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P Ⅱ-06 이하선에 발생한 와르틴 종양

김지관*, 구철홍, 박성민, 김문영, 한세진, 김철환, 이재훈
단국대학교 치과대학 구강악안면외과학 교실

Warthin's Tumor of Parotid Gland

Ji Kwan KIM*, Chul Hong KOO, Sung Min PARK, Moon Young KIM, Se Jin HAN, Chul Hwan KIM, Jae Hoon LEE

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PⅡ-07 **상악골, 하악골, 및 두개저에서 관찰된 광범위한 Myelolipoma: 문헌 검토 및 새로운 증례 보고**

최재원*, 안재명, 홍종락, 팽준영

성균관대학교 의과대학 삼성서울병원 구강악안면외과

Intraosseous multiple myelolipoma on mandible, maxilla and cranial base: Contribution of a new case and review of the literature

Jaewon Choi*, Jaemyung Ahn, Jongrak Hong, Jun-Young Paeng

Dept. of Oral and Maxillofacial Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine

PⅡ-08 **하악에 발생한 투명세포 치성암종: 증례 보고**

이승준*[1)], 최민호[1)], 김진수[1)], 박재억[1)], 김창현[1)]

가톨릭대학교 서울성모병원 구강악안면외과[1)]

Clear cell odontogenic carcinoma of the mandible: Case report

SeungJoon Lee*[1)], MinHo Choi[1)], JinSu Kim[1)], Je-Uk Park[1)], Chang-Hyen Kim[1)]

Department of oral and maxillofacial surgery,
Seoul St.Mary's hospital, The catholic University of Korea[1)]

PⅡ-09 **치근단 병소를 닮은 외상성 골낭**

조주연*

계명대학교 동산의료원 치과

Traumatic bone cyst mimicking a periapical lesion: A confusing case

Juyeon Cho*

Department of Dentistry, Dongsan Medical Center, College of Medicine, Keimyung University

PⅡ-10 **구강저와 하악에 광범위하게 이환된 기저양 편평세포암종의 치험례 - 증례보고와 논문고찰**

이준상*, 최나래, 백영재, 송재민, 이재열, 황대석 김용덕, 신상훈, 김욱규

부산대학교 치의학전문대학원 구강악안면외과학교실.

Basaloid squamous cell carcinoma on floor of mouth and mandible - A case report and literature review

Jun Sang Lee*, Na-rae Choi, Young-Jae Baek, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Sang Hun Shin, Dae-Seok Hwang, Uk-Kyu Kim

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PⅡ-11 **골수염과 유사한 임상적 특성을 보이는 상피세포암종: 4개의 사례 리뷰**

김호준*, 김진욱, 이성탁. 권대근, 최소영

경북대학교 치과대학 구강악안면외과학교실

Squamous cell carcinoma mimicking osteomyelitis : 4 case series review

Ho-Joon Kim*, Jin-Wook Kim, Seong-Tak Lee, Tae-Geon Kwon, So-Young Choi

Dept. of Oral amd maxillofacial surgery, Kyunhpook National University, Daegu, Korea

PⅡ-12 **증례보고 : 우측 하악골에서 발생한 광범위한 낭종성 법랑모세포종의 치험례**

손정완*[1], 김봉철[1], 이준[1,2], 윤정훈[3], 임헌준[1]

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[3]원광대학교 대전치과병원 병리과

A case report : The treatment of the large unicystic ameloblastoma of the right mandible.

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P Ⅱ-13 경부 림프절 전이를 모방한 이소성 갑상선 증례

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Ectopic thyroid mimicking metastasis cervical lymph node : case report

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P Ⅱ-14 르포씨 제1형 절골을 이용한 상악동 내 종물 제거: 증례보고 및 술기 고찰

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Removal of a benign tumor in maxillary sinus via Le Fort I osteotomy approach: case report and procedural notes

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P Ⅱ-15 증례 보고 : 크고 파괴적인 비구개관낭

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Case Report : An unusually large destructive nasopalatine duct cyst

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P Ⅱ-16 하악지에 발생한 양성 섬유성 조직구증이 악성으로 전환된 증례

안재명*, 홍종락, 팽준영
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Case report: Transformation of Benign Fibrous Histiocytoma into Malignant Fibrous Histiocytoma (Undifferentiated Pleomorphic Sarcoma) in the Mandibular Ramus

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P Ⅱ-17 술 중 메틸렌블루 주사를 이용한 혈관종의 경계 설정: 증례보고

오지현*, 박영욱, 김성곤, 김민근, 권광준
강릉원주대학교 치과병원 구강악안면외과

Intraoperative localization of hemangioma on the buccal mucosa by methylene blue injection: A case report

Ji-Hyeon Oh*, Young-Wook Park, Seong-Gon Kim, Min-Keun Kim, Kwang-Jun Kwon
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PⅡ-18 OK-432를 사용한 구강저 낭성 림프관종의 경화술

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연세대학교 치과대학 구강악안면외과학 교실

Sclerotherapy of cystic lymphangioma on floor of mouth using OK-432

Slmaro Park*, Sanghoon Lee, In-Ho Cha
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PⅡ-19 하악골에 생긴 Parosteal osteosarcoma : 증례보고

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Parosteal osteosarcoma occurred in Mandible : A Case Report

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PⅡ-20 Abbe flap을 이용한 상순 재건술 : 증례 및 고찰

양현우*, 이천의, 최병호
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Upper lip reconstruction with Abbe flap : Case study

Yang Hyun Woo*, Lee Chunui, Choi Byung Ho
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PⅡ-21 비골 유리피판술을 이용한 하악골 재건 환자에서 이식 골편의 변위 및 근돌기의 신장: 증례보고

신승호*, 박영욱, 김성곤, 김민근, 권광준
강릉원주대학교 치과대학 구강악안면외과학교실

Elongation of coronoid process and displacement of grafted bone after mandible reconstruction after Fibula free flap

Sung Ho Shin*, Young-Wook Park, Seong-Gon Kim, Min-Keun Kim, Kwang-Jun Kweun
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PⅡ-22 표층 이하선 적출술, 로봇을 이용한 선택적 경부청소술 및 악하선 적출술에서 이개후부 절개술의 유용성

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연세대학교 치과대학 구강악안면외과학교실[1]

Versatility of retroauricular incision for superficial parotidectomy, robot-assisted SOND and submandibular gland excision: case series

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PⅡ-23 악하부위에 외과적 절제술 후 발생한 고분화 지방육종: 증례 보고

정지훈*, 허재진, 강병훈, 최송제, 안준형, 한정준, 국민석, 박홍주, 오희균, 정승곤
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구강악안면외과학교실, 전남대학교 치의학연구소

Well-differentiated liposarcoma arisen on submandibular after excision of lipoma: A case report.

Ji-Hun Chong*, Jae-Jin Heo , Byoung-Hun Kang, Song-Je Choi, Jun-Hyeong An, Jeong Joon Han, Min-Suk Kook, Hong-Ju Park, Hee-Kyun Oh,, Seunggon Jung
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PⅡ-24 한국인의 구강악안면 영역에 발생한 악성 흑색종에 관한 임상 연구

채연수[1,2*], 이진용[1,2], 이정우[3], 장현석[2], 임재석[2], 이의석[2], 김성민[1,3], 김명진[1,3], 이종호[1,3]
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Clinical study on the malignant melanoma of oral and maxillofacial area in Korea

Yeon-Su Chae[1,2*], Jin-Yong Lee[1,2], Jung-Woo Lee[3], Hyon-seok Jang[2], Jae-suk Rim[2], Eui-seok Lee[2], Sung-Min Kim[1,3], Myung-Jin Kim[1,3], Jong-Ho Lee[1,3]
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[2]*Department of Oral and Maxillofacial Surgery, Graduate School of Clinical Dentistry, Korea University*
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PⅡ-25 구강암 수술 후 노출된 티타늄 금속판 폐쇄를 위한 협부 지방 피판을 이용한 치료 증례

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강동 경희대학교 치과병원 구강악안면외과 교실

The use of the buccal fat pad for closure of the exposed titanium plate after oral cancer surgery; A case report

Miju Kang*, Dong-mok Ryu, You-jin Jee, Deok won Lee, Se-won Kim, Suning Yang, Sang-pil Jung
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PⅡ-26 구강내와 폐에 동시에 발생한 편평상피세포암: 증례보고

정상필*, 류동목, 지유진, 이덕원, 김세원, 양선인, 강미주
강동경희대학교 치과병원 구강악안면외과 교실

Squamous Cell Carcinoma Occuring Simultaneously in the Oral and Lung: A Case Report

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PⅡ-27 안면부에 발생한 모기질종의 진단 및 적출 : 증례보고

조제호* 정지혜 최순규 허성휘 양수남
청주한국병원 구강악안면외과

Diagnosis and excision of pilomatricoma occurring in the face : case report

JEHO CHO*, JI HAE JUNG, SUN GYU CHOI, SUNG HYUI HUA, SOO NAM YANG
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PⅡ-28 피부에 발생한 편평상피세포암 ; 증례보고

정지혜*, 조제호, 최순규, 허성휘, 양수남
청주 한국병원 구강악안면외과

Cutaneous squamous cell carcinoma; a case report
JI HYE JEONG*, JEHO CHO, SUN GYU CHOI, SUNG HWI HUR, SOO NAM YANG
Department of Oral and Maxillofacial surgery, Cheongju Hankook Hospital

PⅡ-29 **섬유성골형성이상의 장골이식 치료**
정준홍*, 이한빈, 하현빈, 오현준, 서병무
서울대학교치과병원 구강악안면외과

Iliac bone graft as a treatment option for fibrous dysplasia
Junhong Jung*, Hanbin Lee, Hyunbin Ha, Hyun Jun Oh, Byoung-Moo Seo
Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital

PⅡ-30 **3차원적 CT 체적분석을 통한 구강 내 낭성병소의 낭종강 감압술의 효과 연구**
권예진*, Puneet Wadhwa, 김충남, 김민수, 김규태, 김수호, 임호경, 이의석
고려대학교 부속 구로병원 구강악안면외과

Effect of decompression of Intraoral cystic lesion based on computed tomography Volumetric analysis.
Yeh-Jin Kwon*, Punnet Wadhwa, Choong-Nam Kim*, Min-Su Kim, Gyu-Tae Kim, Soo-Ho Kim, Ho-Kyoung Lim, Eui-Suk Lee
Department of Oral and Maxillofacial Surgery, Guro Hospital, Korea University

PⅡ-31 **재발성 법랑모세포종의 악성변이에 대한 증례**
김근환*, 장성백, 이성탁, 최소영, 김진욱, 권대근
경북대학교 치과병원 구강악안면외과학 교실

A case on the Malignant transformation of Recurrent Ameloblastoma : A case report
Keun-Hwan Kim*, Sung-Back Jang, Sung-Tak Lee, So-young Choi, Jin-wook Kim, Tae-Geon Kwon[1]
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PⅡ-32 **타액선 암 치료 결과: 13 증례**
장완희*, 안강민
울산대학교 의과대학 구강악안면외과 서울아산병원

Salivary gland cancer: 13 cases
Wanhee Jang*, Kang-Min Ahn
Department of oral and maxillofacial surgery, College of medicine, University of Ulsan

PⅡ-33 **법랑아세포종과 각화성치성종양의 재발률 비교**
장완희*, 안강민
울산대학교 의과대학 구강악안면외과 서울아산병원

Comparison of recurrence rate between ameloblastoma and keratocystic odontogenic tumor
Wanhee Jang*, Kang-Min Ahn
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PⅡ-34 **하악골에서 발생한 연골점액유사 섬유종 : Case report**
김정헌[1], 이상훈[1*], 남웅[1]
연세대학교 치과대학 구강악안면외과학교실[1]

Chondromyxoid fibroma arising in mandible : Case report

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P Ⅱ-35 협측 점막에 발생한 Syringoid Eccrine Carcinoma (SEC)의 치험례 – 증례 보고와 논문고찰

이준호[*], 최나래, 백영재, 이재열, 황대석 김용덕, 신상훈, 김욱규, 송재민[*]
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Syringoid Eccrine Carcinoma (SEC) of the buccal mucosa – A case report and literature review

Jun-Ho Lee[*], Na-rae Choi, Young-Jae Baek, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Sang Hun Shin, Uk-Kyu Kim, Jae-Min Song[*]
Department of Oral and Maxillofacial Surgery, School of Dentistry, Pusan National University

P Ⅱ-36 상악골에 발생한 간엽성 연골육종: 증례 보고

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Mesenchymal chondrosarcoma in Maxilla : A Case Report

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P Ⅱ-37 심한 상악 치조골 결손이 존재하는 환자에서 구개골을 이용한 임플란트 식립 : 증례보고

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Implant placement using the palatine bone in patients with severe maxillary alveolar bone defect : Case report

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

P Ⅱ-38 상악동 막 수압 거상기의 개발과 예비평가

노성수[*1], 천무철[2], 문종훈[2], 노정훈[2], 황경균[1], 박창주[1]
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Development and Preliminary Assessment of a Hydraulic Membrane Lifter for the Sinus Membrane

Seong-Su Ro[*1], Moo-Cheol Cheon[2], Jong-Hoon Moon[2], Jung-Hoon Ro[2], Kyung-Gyun Hwang[1], Chang-Joo Park[1]
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P Ⅱ-39 임플란트 주위염의 수술적 치료 증례

김인수, 김지혜[*], 이 원, 조승연, 김수연, 안혜선
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Surgical Therapeutic Approaches on Peri-implantitis Defects

InSoo Kim, Gee Hae Kim[*], Won Lee, SeungYeon Cho, SuYeon Kim, Hye Sun An
Department of Dentistry, Uijeongbu St. Mary's Hospital, College of Medicine, The Catholic University of Korea

P Ⅱ-40 제거된 임플란트의 원인 및 조직형태계측학적 분석을 통한 골-임플란트 접촉 비율 평가

이중곤[*1], 윤필영[1], 김영균[1,2]
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[2]서울대학교 치의학대학원 치의학과, 치의학 연구소

The causes of removed implats and Evaluation of bone-to-implant contact ratio by histomorphometric analysis

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[2]Department of Dentistry & Dental Research Institute, School of dentistry, Seoul National University, seoul, Korea

P Ⅱ-41 Micro-hole이 있거나 없는 탈회 또는 불완전 탈회된 인간 치아 상아질 블록 이식의 비교 조직학적 분석 : 토끼 실험 연구

우라현[*1], 손동석
대구가톨릭의료원 구강악안면외과

Comparative histologic analysis of demineralized or undemineralized human dentin block graft with and without micro-holes: An experimental study in rabbits

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Resident, Dept. of Dentistry, Oral and Maxillofacial Surgery, Daegu Catholic University Medical Center

P Ⅱ-42 발치 후 즉시 식립한 임플란트의 변연골 소실에 관한 장기관찰 연구

강동우[*1], 유한창[1], 윤필영[1], 김영균[1,2]
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[2]서울대학교 치의학대학원 치의학과, 치의학 연구소

Long-term observation on the marginal bone loss in immediately-installed implants after extraction

Dong-Woo Kang[*1], Han-Chang Yu[1], Pil-Young Yun[1], Young-Kyun Kim[1,2]
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P Ⅱ-43 임플란트 주위염 환자에서 엑소덴 분말 치약을 사용한 후 구강 내 세균의 변화

이영철[*], 문성용, 오지수, 유재식, 김수관
조선대학교치의학전문대학원 구강악안면외과학교실

Changes in Oral Bacteria after Exogenous Powder Toothpaste Treatment in Patients with peri-implantits

Young-Cheol Lee[*], Seong-Yong, Moon, Ji-Su Oh, Jae-Seak You, Su-Gwan Kim
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P Ⅱ-44 자외선 처리를 통한 치과용 임플란트의 표면개질과 골형성효과에 대한 연구

신현서[1*], 임헌준[1], 김봉철[1], 이준[1,2]
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[2]원광 골재생 연구소

The Study on the Surface Modification and Osteogenesis of Dental Implants by Ultraviolet Treatment

Hyeon seo Shin[1*], Hun Jun Lim[1], Bong Chul Kim[1], Jun Lee[1,2]
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P Ⅱ-45 **3D 프린트로 제작된 임플란트 수술가이드 사용의 장점과 단점**

허재진*, 강효선, 정연우, 한정준, 정승곤, 박홍주, 오희균, 국민석
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구강악안면외과학교실

Advantage and Disadvantage of using the Implant Surgical Guide made by 3D Printing

Jae-Jin Heo*, Hyo-Sun Kang, Yeon Woo Jeong , Jeong Joon Han, Seung-Gon Jung, Hong-Ju Park, Hee-Kyun Oh, Min-Suk Kook
Department of Oral and Maxillofacial Surgery, School of Dentistry, Chonnam National University

P Ⅱ-46 **연세대학교 치과대학병원 구강악안면외과학 교실에서 시행한 explantation 원인에 관한 임상적 연구**

송상현*, 이상훈, 차인호
연세대학교 치과대학 구강악안면외과학 교실

A clinical study on the causes of explantation in Oral and Maxillofaciial Surgery, Yonsei University College of Dentistry

Sang Hyun Song*, Sang Hoon Lee, In-Ho Cha
Department of Oral and Maxillofacial Surgery, College of Dentistry, Yonsei University, Seoul, Korea

P Ⅱ-47 **디지털 가이드를 이용한 임플란트 수술 후 즉시 부하 : 전악수복의 증례**

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Digital-Guided Implant Surgery with Immediate Loading : A Case of Full Mouth Rehabilitation

*Yang-Yeol Tae, Kwan-Soo Park, Kyu-Ho Yoon, Jae-An Park
Department of Oral and Maxillofacial Surgery, Inje University Sanggye-Paik Hospital

P Ⅱ-48 **Dental Implants Placement on Autogenous Iliac Block Bone Graft**

Akram Abdo Almansoori[1,2*], Mohammed Mousa Bakri[1], Han-Wool Choung[1], Bongju Kim[2], Soung-Min Kim[1], Jong-Ho Lee [1,2,3]
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P Ⅱ-49 **3D 프린트로 제작된 임플란트 수술가이드 사용의 장점과 단점**

허재진*, 강효선, 정연우, 한정준, 정승곤, 박홍주, 오희균, 국민석
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구강악안면외과학교실

Advantage and Disadvantage of using the Implant Surgical Guide made by 3D Printing

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P Ⅱ-50 **상악동거상술 후 발생한 상악동염의 치험례**

정지상*, 김영권, 심의섭, 양수남
청주 한국병원 구강악안면외과

TEATMENT OF MAXILLARY SINUSITIS AFTER MAXILLARY SINUS ELEVATION : A CASE REPORT

Ji Sang Jeong*, Young Kwon Kim, Uie Sub Shim, Soo Nam Yang
Department of Oral and Maxillofacial surgery, Cheongju Hankook Hospital

P Ⅱ-51 **상악 골절로 플레이트 고정술이 시행된 환자에서 측방접근법을 통한 상악동 거상술: 증례 보고**
심의섭*, 김영권, 정지상 , 양수남
청주 한국병원 구강악안면외과

Maxillary Sinus Lift by Lateral Approach in Patient with Plate Fixation with Maxillary Fracture: Case Report
Eui Sub Shim*, Young Kwon Kim,Ji Sang Jung, Soo Nam Yang
Department of Oral and maxillofacial surgery, CheongjuHankook hospital

P Ⅱ-52 **격벽의 골절을 활용한 측방접근법: 증례보고**
허성휘*, 정지혜, 조제호, 최순규, 양수남
청주 한국병원 구강악안면외과

Lateral approach using Septa Fracture in Maxillary Sinus: Case Report
SUNG HWI HUR*, JI HYE JEONG, JEHO CHO, SUN GYU CHOI, SOO NAM YANG
Department of Oral and Maxillofacial surgery, CheongjuHankook Hospital

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P Ⅲ-01 **외상으로 상악전치부 결손된 성장기환자의 악교정 수술을 동반한 임플란트 수복 : 증례보고**
김경진*, 김무성, 장국원, 황희성, 김복주, 김정한, 장국원, 김무성, 김철훈
동아 대학교의료원 구강악안면외과

Implant restoration with orthognathic surgery in a growing patient with maxillary anterior defect due trauma : Case Report
Kyung-Jin Kim*, Moo-Sung Kim , Kuk-Won Jang, Hee-Sung Hawng, Bok-Joo Kim, Jung-Han Kim, Chul-Hun Kim
Department of Oral and Maxillofacial Surgery, College of Medicine, Donga-A University, Busan, Korea

P Ⅲ-02 **인공원판대치물과 관절치환보철물을 이용한 악관절재건술: 증례보고**
김헌영*[1], 성태환[1], 장동규[1], 박정현[1], 김진우[1], 김선종[1]
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Temporomandibular joint replacement with alloplastic prosthesis: Case series
Heon-young Kim*[1], Tae-Whan Seong[1], Dong-gyu Jang[1], Jung-hyun Park[1], Jin-woo Kim[1], Sun-Jong Kim[1]
Dept. of Oral and maxillofacial surgery, Ewha Womans University Medical center

P Ⅲ-03 **하악 과두 과증식에 의한 안면비대칭: 증례보고**
최민호*[1)], 이승준[1)], 김진수[1)], 박재억[1)], 김창현[1)]
가톨릭대학교 서울성모병원 구강악안면외과[1)]

Facial asymmetry caused by unilateral condylar hyperplasia: Case report
Minho Choi*[1)], Seungjoon Lee[1)], Jin-Su Kim[1)], Je-Uk Park[1)], Chang-Hyen Kim[1)]
Department of oral and maxillofacial surgery, Seoul St.Mary's hospital, The catholic University of Korea[1)]

P Ⅲ-04 국소 마취 실패의 기여 요인들 : 증례보고

이원범*, 최나래, 백영재, 이재열, 황대석 김용덕, 신상훈, 김욱규, 송재민
부산대학교 치의학전문대학원 구강악안면외과학교실

Contributing Factors of Failure of Local Anesthesia : Case report

Won-bum Lee*, Na-rae Choi, Young-Jae Baek, Jae-Yeol Lee, Dae-Seok Hwang , Yong-Deok Kim, Sang Hun Shin, Uk-Kyu Kim, Jae-Min Song
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P Ⅲ-05 Exosomes secreted from bone marrow-derived mesenchymal stem cells promote bone regeneration

Ryoko TAKEUCHI*[1], Wataru KATAGIRI[1], Satoshi ENDO[1], Daisuke SUDA[1], Hidenobu SAKUMA[1], Syohei KANEMARU[1], Kanae NIIMI[1], Kohei SAKAGUCHI[2], Junna WATANABE[2], Tadaharu KOBAYASHI[1]
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P Ⅲ-06 가토에서 폴리디옥시리보뉴클레오티드의 골 유도 효과에 대한 연구

양지호*[1], 임헌준[1], 김봉철[1], 이준[1,2]
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Osteoinductive Effect of Polydeoxyribonucleotide Sodium in Rabbit Calvarial Defect

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P Ⅲ-07 MRONJ 수술 후 Bone-spect 평가에 대한 고찰

김창우*, 이동건, 강몽헌, 송인석, 전상호
고려대학교 안암병원 구강악안면외과학교실

Review of Postoperative Evaluation after MRONJ Surgery by Bone-spect.

Chang-Woo Kim*, Dong-Keon Lee, Mong-Heun Kang, Tae-Hyun Jeon, In-Seok Song, Sang-Ho Jun
Dept. of Oral and Maxillofacial Surgery, Korea University Anam Hospital

P Ⅲ-08 골막기원줄기세포 및 산소함유 지지체를 이용한 악골 골수염의 처치

변준호[1,*], 변성훈[1], 오세행[2]
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[2]단국대학교 나노바이오의과학과

Development of bone regeneration strategy for jaw osteomyelitis using periosteum-derived mesenchymal stem cells oxygen carrier-loaded scaffold

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P Ⅲ-09 만성 방사선 장해에 대한 고압산소치료

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연세대학교 원주의과대학 치과학교실
원주세브란스기독병원 구강악안면외과

Hyperbaric oxygen therapy in chronic radiation injury

Yang Hyun Woo*, Lee Chunui, Choi Byung Ho
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PⅢ-10 TRAV7-2*02-expressing CD8+ T cells are responsible for Palladium allergy

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PⅢ-11 하악 제3대구치 매복양상과 난이도 분석의 임상적 연구

신경수*, 서경현, 조선경, 김기태, 정영곤, 박원종, 최은주, 최문기, 권경환
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A clinical study on aspects of impacted mandibular third molar and analysis of difficulty index

Kyung Su Shin*, Kyung-hyun Seo, Seon-gyeong Jo, Gi Tae Kim, Yeong Kon Jeong, Won Jong Park, Eun Joo Choi, Moon Gi Choi, Kyung-hwan Kwon
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PⅢ-12 하치조 신경이 카노이 용액에 노출되었을 때 발생하는 하순과 이부의 감각이상에 대한 후향적 평가

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A retrospective evaluation hypoesthesia of the lower lip and chin when the inferior alveolar nerve is exposed to the Carnoy solution

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PⅢ-13 Assessment of biomarkers in Medication-Related Osteonecrosis of the Jaw (MRONJ) patients: Preliminary results

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PⅢ-14 RAW 264.7 세포에서 PDRN의 항소염작용

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Anti-inflammatory effect of olydeoxyribonucleotide on zoledronic acid-pretreated and lipopolysaccharide-stimulated RAW 264.7 cells

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Department of Oral & Maxillofacial Surgery, Kyung Hee University Dental Hospital at Gangdong, Kyung Hee University, Seoul, Republic of Korea

PⅢ-15 난치성골괴사 치유를 위한 PDRN의 적용

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Polydeoxyribonucleotide may help restoration for bisphosphonate-related osteonecrosis of jaw

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PⅢ-16 구강 상악동 누공 환자에 대한 후향적 연구

장성백*, 이성탁, 최소영, 김진욱, 권대근,
경북대학교 치과대학 구강악안면외과학 교실

Retrospective study of patients with oroantral fistula : 2015-2017

Seong-Baek Jang*, Sung-Tak Lee, So-Young Choi,
Jin-Wook Kim, Tae-Geon Kwon
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PⅢ-17 Long-term follow up of bone augmentation with ramal bone graft

Yoojin Shin*, Kang-Mi Pang, Han-Wool Choung, Jong-Ho Lee
Department of Oral and Maxillofacial Surgery, Seoul National University Dental Hospital

PⅢ-18 하치조신경과 하악 매복 제3대구치의3차원 형태학적 분석

김효준*, 김병무, 서봉건, 정준오, 문성용
조선대학교 치과대학 구강악안면외과학 교실

Three Dimensional Morphometric Analysis between Inferior Alveolar Nerve and Impacted Mandibular Third Molar

Hyo-Joon Kim*, Kim Byung moo, Seo bong geon, Cheong Juno, Seong-Yong Moon,
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PⅢ-19 설피판을 이용한 치조열 증대술 – 증례보고

김태흥*, 최나래, 백영재, 송재민, 이재열, 황대석 김용덕, 김욱규, 신상훈*
부산대학교 치의학전문대학원 구강악안면외과학교실

Augmentation of alveolus using tongue flap - case report

Tae-heung Kim*, Na-rae Choi, Young-Jae Baek, Jae-Min Song, Jae-Yeol Lee, Dae-Seok Hwang, Yong-Deok Kim, Uk-Kyu Kim, Sang Hun Shin*
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PⅢ-20 류마티스 관절염 환자에서의 MRONJ에 대한외과 및 보철 치료 : 증례보고

김민아*, 이백수, 최병준, 오주영, 이정우, 정준호, 황보연, 권용대
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Oral Medication Related Osteonecrosis of the Jaw(MRONJ) in rheumatoid arthritis patient After Surgery and Prosthetic treatment : A Case Report

Minah Kim*, Baeksoo Lee, Byungjoon Choi, Jooyoung Ohe, Jungwoo Lee, Junho Jung, Boyeon Hwang, Yongdae Kwon
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PⅢ-21 흡수성 콜라겐 스폰지의 제3대구치 발치와에서 골 재생 능력에 대한 평가

손준배[*1], 진기수[1], 이 호[1,2], 한윤식[1,2]
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[2]서울대학교 치의학대학원 구강악안면외과학 교실

Assessment of regeneration of bone in the extracted third molar sockets augmented using absorbable collagen sponges

Jun-Bae Sohn[*1], Ki-Su Jin[1], Ho Lee[1,2], Yoon-Sic Han[1,2]
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[2]Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul National University

PⅢ-22 경상돌기 증후군의 수술적 치료: 거대한 경상돌기의 증례보고

전도현[*], 임세정, 김대영, 이수호, 손승환, 서정민, 하진희, 손장호, 성일용, 조영철
울산대학교병원 의과대학 울산대학교병원
구강악안면외과학교실

Surgical management of Eagle syndrome: Report of huge styloid process

Do-Hyun Jeon[*], Se-Jeong Lim, Dae-Young Kim, Su-ho Lee, Seung-Hwan Son, Jung-Min Seo, Jinhee Ha, Jang-ho Son, Iel-Yong Sung, Yeong-Cheol Cho
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PⅢ-23 구순열 비변형 환자에서 이차교정술 치험례

심유송[*], 강효선, 허재진, 한정준, 정승곤, 국민석, 오희균, 박홍주,
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The correction of secondary cleft lip and nasal deformities : Report of two cases

You Song Sim[*], Hyo Sun Kang , Jae Jin Heo, Jeong Joon Han, Seung-gon Jung, Hee-Kyun Oh, Min-Suk Kook, Hong-Ju Park
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PⅢ-24 Botulinum toxin과 filler를 이용한 안면 회춘술

김상윤[*1], 윤필영[1], 김영균[1,2]
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Facial rejuvenation using Botulinum toxin and filler

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PⅢ-25 Hemifacial macrosomia, bifid tongue, ankyloglossia 그리고 ear deformify 를 동반한 lower lip 의 median fleft : 증례보고

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Median cleft of lower lip with hemifacial microsomia, bifid tongue, ankyloglossia and ear deformity : a case report

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탁혜진[*1], 김학진[2], 문주원[1], 박경미[3], 이상휘[1,2]
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Altered expression of bone- and cartilage-related genes after the diminished masticatory muscle activity in growing rat mandibular condyle

Hye Jin TAK[*1], Hak Jin KIM[2], Joo Won MOON[1], Kyeong Mee PARK[3], Sang Hwy LEE[1,2]
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최송제[*], 강병훈, 정지훈, 안준형, 한정준, 정승곤, 박홍주, 오희균, 국민석
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구강악안면외과학교실, 전남대학교 치의학연구소

Augmentation of Ala in CLND Patient with Auricular Composite Graft: Case Report

Song-Jay Choi[*], Byung-Hun Kang, Ji-Hun Chong, Jun-Hyeong An, Jeong Joon Han, Seunggon Jung, Hong-Ju Park, Hee-Kyun Oh, Min-Suk Kook
Department of Oral and Maxillofacial Surgery, School of Dentistry, Dental Science Research Institute, Chonnam National University

PⅢ-28 악골수염 분류와 이에 따른 치료 및 예후

김기태[*], 권경환, 최문기, 박원종, 정영곤, 최은주
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원광 치의학 연구소

Classification, treatment and prognosis of osteomyelitis

Gi Tae Kim[*], Kyung-hwan Kwon, Moon Gi Choi, Won Jong Park, Yeong Kon Jeong , Eun Joo Choi
Department of Oral and Maxillofacial Surgery, College of Dentistry, Wonkwang UniversityWonkwang Dental Research Institute

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강동우[*1], 윤필영[1], 김영균[1,2]
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Brain abscess of odontogenic origin: Case reports

Dong-Woo Kang[*1], Pil-Young Yun[1], Young-Kyun Kim[1,2]
[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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용해성[*], 김보라, 김재영, 박광호
연세대학교 치과대학 구강악안면외과학교실 (강남세브란스 병원)

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Hae-Seong YONG[*], Bola KIM, Jae-Young KIM, Kwang-Ho PARK
Department of Oral and Maxillofacial Surgery, Gangnam Severance Hospital, Yonsei University College of Dentistry

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신경수*, 김기태, 정영곤, 박원종, 최은주, 최문기, 권경환
원광대학교 치과대학 구강악안면외과학 교실 원광치의학연구소

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Kyung Su Shin*, Gi Tae Kim, Yeong Kon Jeong, Won Jong Park, Eun Joo Choi, Moon Gi Choi, Kyung-hwan Kwon
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온도현*, 김성범, 조진용, 류재영
가천대 길병원 구강악안면외과

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이한빈*, 하현빈, 오현준, 정준홍, 서병무
서울대학교치과병원 구강악안면외과

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HanBin Lee*, Hyun Bin Ha, Hyun Jun Oh, Junhong Jung. Byoung-Moo Seo
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장한슬*, 김진욱, 최소영, 이성탁, 권대근
경북대학교 치과병원 구강악안면외과학 교실

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최순규* 정지혜 조제호 허성휘 양수남
청주한국병원구강악안면외과

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SUN GYU CHOI*, JI HAE JUNG, JEHO CHO, SUNG HYUI HUA, SOO NAM YANG
Department of Oral and maxillofacial surgery, CheongjuHankook hospital

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이최량*, 호앙, 권익재, 서미현, 명훈, 김성민, 이종호
서울대학교 치과병원 구강악안면외과

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Choi Ryang Lee*, Thi Hoang Truc Nguyen, Ik Jae Kwon, Mi Hyun Seo, Hoon Myoung, Soung Min Kim, Jong Ho Lee
Department of Oral and Maxillofacial Surgery, School of Dentistry, Seoul national University

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장태환*, 백진아
전북대학교병원 구강악안면외과

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Tae-Hwan Chang*, Jin-A Baek
Department of Dentistry & Dental Research Institute, School of Dentistry, Chonbuk-National University, Chonju, Korea

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Evaluation of bone regeneration for treatment of osteomyelitis of jaw by sequesterectomy using rh BMP-2

Tae-Woong Ahn*[1], Sun-Ung Yoon[1], Kil-Hwa Yoo[1], Ka-Young Seol[1], Chul-Min Park[1], Min-Seok Oh[1], Na-Ra Kang[1]
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홍성옥[1], 이덕원[2]
[1]가톨릭 관동대학교 국제성모병원 치과 (구강악안면외과)
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Poly (L -Lactic Acid)/Gelatin Fibrous Scaffold Loaded with Simvastatin/Beta-Cyclodextrin- Modified Hydroxyapatite Inclusion Complex for Bone Tissue Regeneration

Sung ok Hong[1], Deok-Won Lee[2]
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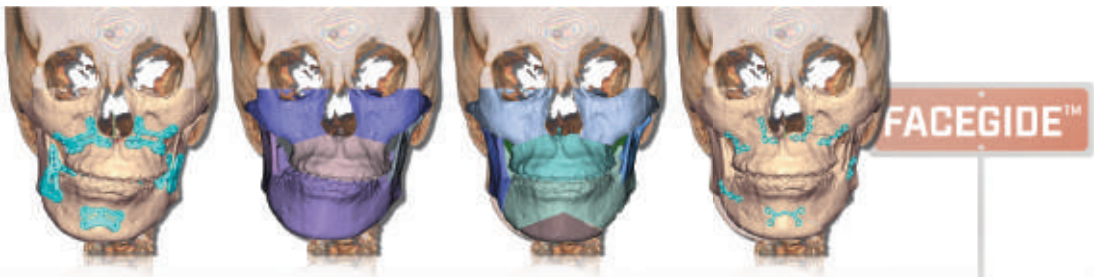

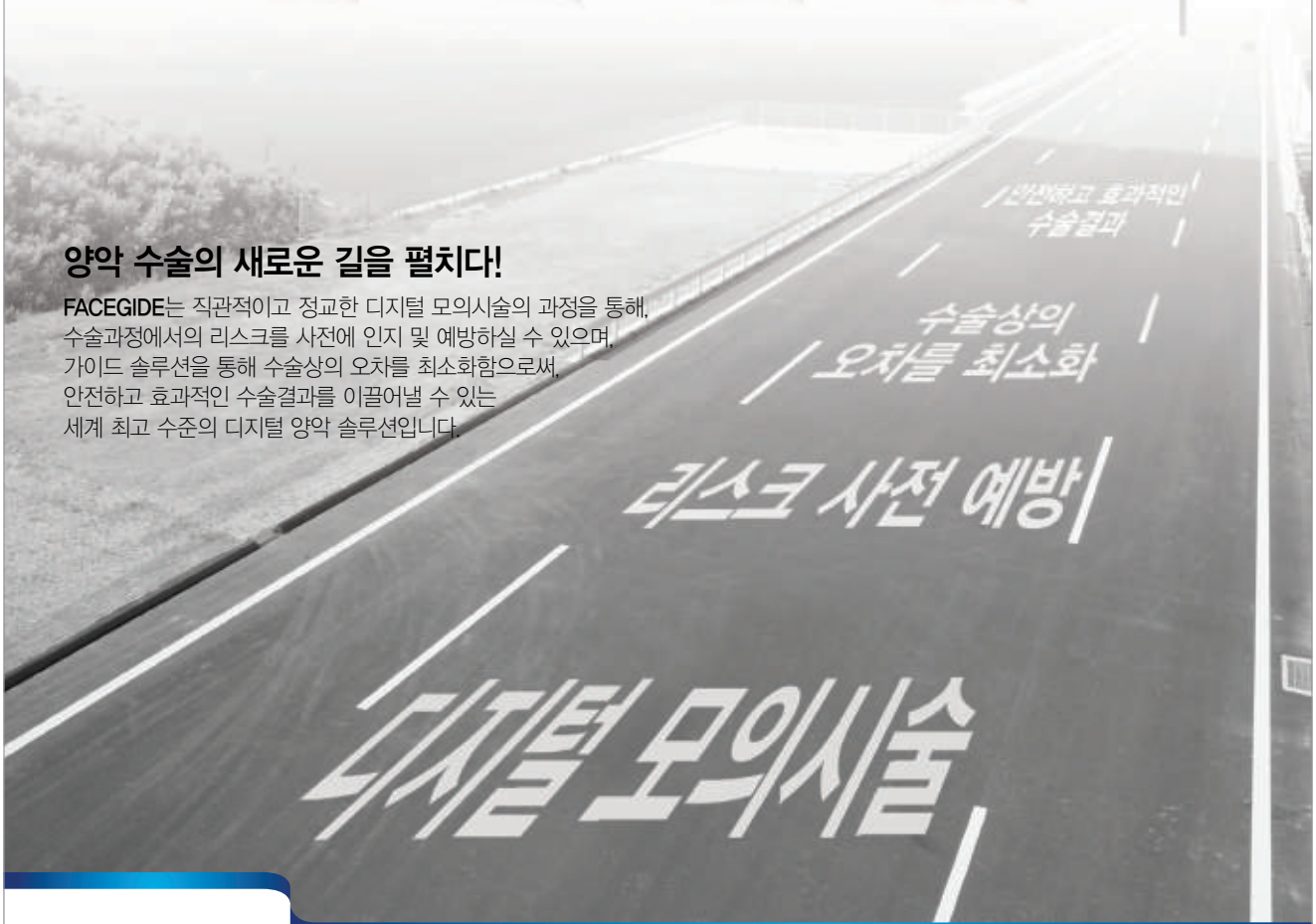

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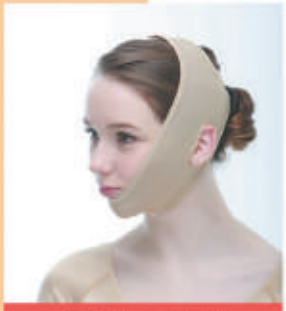

일반형 Size : S, M, L

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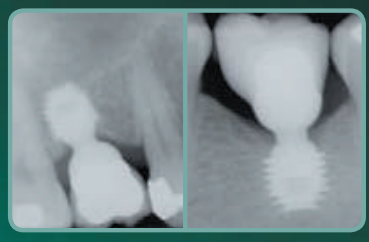

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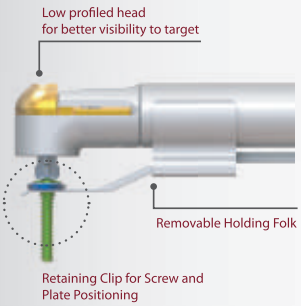

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