

29 May - 2 June, 2013
Cornelia Diamond Convention Center / Antalya - Turkey

ACC BID 2 CC S

Th International Congress



**ABSTRACT BOOK** 

www.acbid2013.com

# OP-43 ALVEOLAR BONE GRAFTING IN CLEFT PATIENTS: OUR CLINICAL APPROACH

Aysegul Mine Tüzüner Öncül, <u>Merve Nur Kadıoğlu</u>, Özün Karaahmetoğlu, Abbascan Kortmaz Department of Oral and Maxillofacial Surgery, Ankara University, Ankara, Turkey

The patient with cleft lip and palate has a complex skeletal deformity that usually requires multipl procedures, starting in infancy, and continuing through puberty. The reconstruction of a secondary alveolar cleft requires the use of autogenous bone grafting for closing the oronasal fistula, and providing bony support for dentition, the nasal alar base, and lip. The successs of alveolar bone grafting is important for post surgery orthodontics treatments, stability and retention of the teeth adjacet to the cleft, and improvement of occlusion. Consequently; anterior iliak bone graft is preferred to the larger volume and improved quality. Twelve patients who ages from 8 to 26 were included in this study at the Ankara University Faculty of Dentistry, Oral and Maxillofacial Surgery Department between April 2012 to January 2013. Ten patients had unilateral cleft defects and two patients had bilateral cleft defects. In conclusion; harvesting cancellous bone from the anterior iliak crest in young patients is well-tolerated, allow early resumtion of normal activities, has no morbidity and a reasonable esthetic outcome.

Keywords: cleft, alveolar bone grafting

### OP-44

USING OF INTRAOPERATIVE C -ARM DIGITAL RADIOGRAPHY FOR REMOVING OF LOST ORTHODONTIC BRACKET DURING ORTHOGNATHIC SURGERY: REPORT OF A RARE CHALLENGING CASE

Ali Hossein Mesgarzadeh

Department of Oral and Maxillofacial Surgery, Tabriz University of medical sciences, Tabriz, Iran

Preoperative orthodontic is an essential phase for about all orthognathic surgeries. It can facilitate surgical repositioning of bony segments by increasing of dental discrepancies. Correction of dentoalveolar inclinations improves surgeons' ability to proper repositioning of osteotomized bony compartments. Adequate post operative dental occlusion may have effective influences on post operative surgical relaps. Banded and bonded brackets are routinely used in orthodontic treatments. They are useful fixation device for temporary intermaxillary fixation intraoperatively and also for final maxillomandibular fixation and elastic therapy. Both brackets have their own advantage and disadvantages. Bonded brackets offers improved periodontal health and patients comfort. Chance of debonding and failure might be greater during orthognathic surgical procedures. Failure and dislodgment of orthodontic brackets into the airway route or surgical wound could be associated with high risk of contamination, severe complications and medico legal consequences. Displacement of debonded bracket into the surgical osteotomy site is extremely rare. In this presentation author will report a rare challenging case and using of C – arm digital radiography for removing of dislodged orthodontic bracket intraoperatively. Technique of management and surgico-radiographic approach will report by illustrative slides.

Keywords: orthognathic, complications, c-arm radiography

### OP-45

DESIGN AND PRODUCTION OF A NOVEL COMPUTER ASSISTED, PATIENT SPECIFIC SAGITTAL SPLIT OSTEOTOMY GUIDE AND SOFT TISSUE RETRACTOR

Erol Cansız<sup>1</sup>, Yunus Ziya Arslan<sup>2</sup>, Fatih Turan<sup>2</sup>, Berkem Atalay<sup>1</sup>

<sup>1</sup>Oral and Maxillofacial Surgery Department, Dentistry Faculty, Istanbul University, Istanbul, Turkey

<sup>2</sup>Mechanical Engineering Department, Engineering Faculty, Istanbul University, Istanbul, Turkey

Sagittal split osteotomy (SSO) is a maxillofacial surgery procedure that is used to correct mandibular prognathism, mandible retrusion or asymmetry. During the SSO operation, using the sharp rotary tools for

## AÇBİD2013 7th International Congress 29 May - 2 June, 2013

the osteotomy can induce complications mostly during the osteotomy of the medial side of the mandibular ramus. In this study, to decrease the SSO complications, it was aimed to design and product a novel computer assisted, patient specific sagittal split osteotomy guide and soft tissue retractor. To achieve this goal first, computed tomography images of a human cadaveric mandible were digitally converted into a three dimensional (3D) model. Then, a case-specific 3D model of the product was designed onto the surface of the cadaveric mandible by taking both the osteotomy line and geometric dimensions of the mandible into consideration. Finally, created 3D model of the product were manufactured using the metal laser sintering method. This instrument would be used to ensure that the osteotomy, which is planned in the computer-aided preoperative preparations, is applied correctly in the operation. The use of that instrument during the SSO would shorten the operation duration and time need for the general anesthesia which results in less time for the exposure to the bacterial contamination. It would also reduce the complications and the operation costs due to shorter operation time, as well as the corticosteroid need given for the edema control. The postoperative hospitalization period and the increase of the healing process would also be decreased.

**Keywords:** sagittal split osteotomy, patient specific sagittal split osteotomy guide, soft tissue retractor, laser sintering

#### OP-46

MAXILLARY ANTERIOR SEGMENTAL OSTEOTOMY: A META ANALYSIS OF THE LITERATURE WITH THE CONCURRENT 16 CASES

Ezher Hamza Dayısoylu<sup>1</sup>, Sina Uçkan<sup>1</sup>, Ali Alper Pampu<sup>2</sup>, Cem Üngör<sup>2</sup>, Mehmet Birol Özel<sup>3</sup>
Department of Oral and Maxillofacial Surgery, Baskent University, Turkey

Department of Oral and Maxillofacial Surgery, Karadeniz Technical University, Turkey

Department of Orthodontics, Karadeniz Technical University, Turkey

AIM: To evaluate predictability, complications and patient satisfaction of anterior maxillary segmental asteotomy (ASO).

MATERIAL-METHODS: A web based literature research was performed in Pubmed, Ovid and Medline databases in terms of maxillary anterior segmental osteotomy, wunderer approach, wasmund osteotomy, complication, patient satisfaction and follow-up. In addition 16 consecutive cases that treated authors' departments were evaluated in the same manner.

**RESULTS:** A total number of 126 articles were evaluated. Palatal tear (7.2%), devitalization of adjacent teeth (0.4%), non-union (0.4%), periodontal problems (2%), oro-nasal communication (0.1%), temporary eurosensory deficit (1.6%) were the main complications of ASO. In the consecutive cases of authors' departments periodontal problem (12.5%) and insufficient esthetical appearance were noted (6%).

**CONCLUSION:** Although it's safe and predictable procedure, the awareness of complications during ASO is important.

Keywords: complication, facial correction, maxillary anterior segmental osteotomy, meta analysis

SPLIT

weolar

or post

quality.

culty of ats had

us bone

DONTIC

surgical

nations

te post

ed and

porary

herapy. odontal

surgical

wound

nences.

ach will

entation slodged

ndibular mols for