## CASE 1

# Sinus Lift



Pre-operative OPG showing insufficient subantral distance in the left posterior maxillary region



Sinus lift elevation with simultaneous dental implant placement via lateral approach



2<sup>nd</sup> stage surgery ( implants uncoverage 6 months later )



## **Gingival formers in position**



## **Abutments applied**



### **Final prosthesis**

## CASE 2

# Compromised Alveolar Ridge



#### **Edentulous anterior maxilla with vestibular concavity**



Four fixtures introduced with resultant fenestrations of the alveolus due to the presence of vestibular concavity



# Augmentation of the defects with non-autogenous bone graft material



The graft material is covered with barrier membrane (GBR)



Wound closure



#### Postoperative CT scan ( coronal – axial – sagittal )



### 2<sup>nd</sup> stage surgery 6 months later (gingival formers)



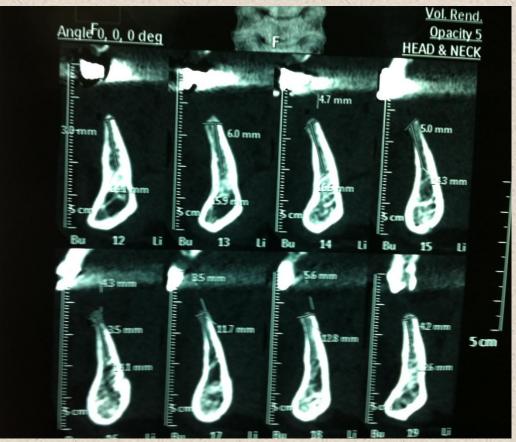
Final prosthesis

## CASE 3

# Fixed Slim Implants



OPG of a 37 years-old patient with an atrophied edentulous mandible



**Cross-sectional CT illustrating narrow alveolar ridge** (inadequate width for ordinary implants)



### Mid-crestal incision



#### Introduction of fixed slim (narrow 2.5 mm) implants



### Introduction of 8 fixed slim implants



### Wound closure

Temporary non-functional prosthesis prepared and modified during healing period



Temporary non-functional prosthesis wearied during healing period



### 2<sup>nd</sup> stage surgery with abutments in position



### **Clinical trial of metal frame**



Final prosthesis on the articulator



### Final prosthesis in the patient's mouth

## CASE 4

# Sinus Lift



OPG showing pneumatization of the right maxillary sinus



CBCT demonstrates the subantral distance of 7.1 mm



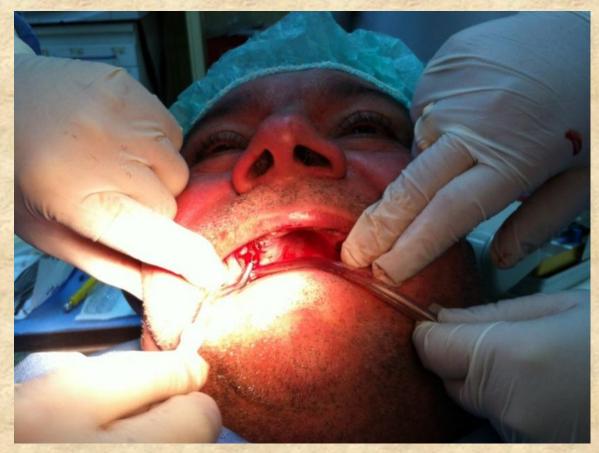
### **Edentulous right posterior maxillary region (sinus zone)**



**Crestal incision with palatal bias** 



Drilling of implants beds with a special crestal sinus elevation burs with stoppers leaving 1-2 mm below the sinus floor



Green-stick fracturing of the sinus floor by osteotomes with firm tapping



#### Hydraulic pressure elevation for the sinus membrane



#### Sinus balloon utilized for sins membrane elevation



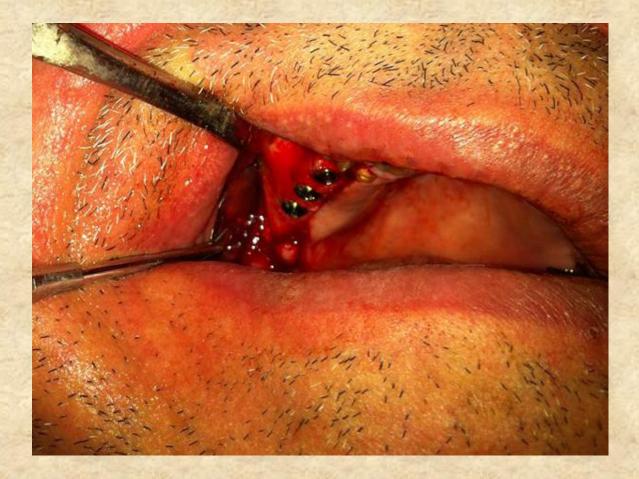
#### Application of the sinus balloon in the drill holes



Barrier membrane introduction into the sinus membrane space



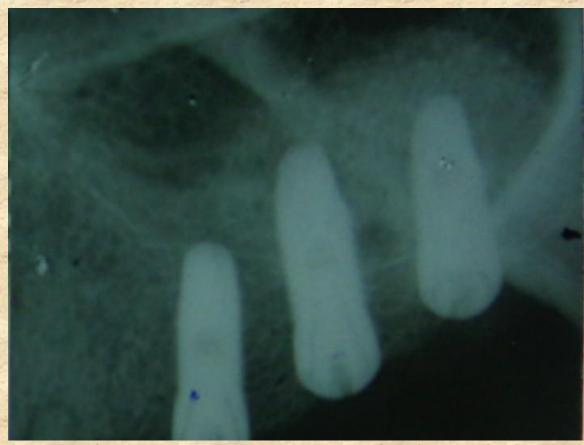
Dental implants introduced into drill holes and the sinus



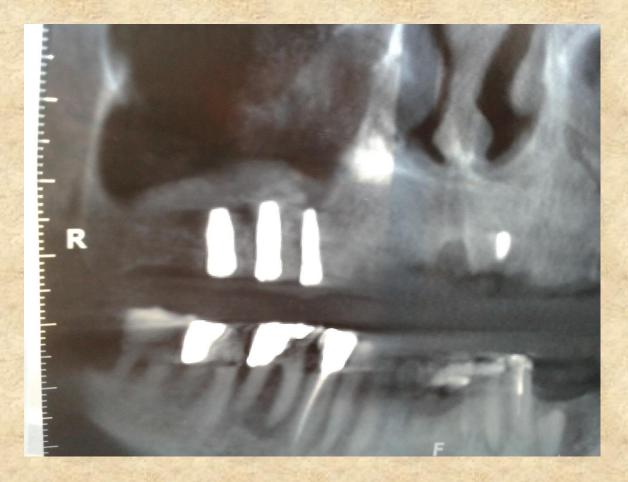
#### **Fixtures in place after the application of cover screws**



Wound closure



Immediate postoperative periapical radiograph showing implants, non-autogenous bone graft material and patent sinus membrane



**CBCT 6 months following surgery** 

### CASE 5

# Flapless Implant Surgery



## OPG for a patient with edentulous left posterior mandible



#### **Preoperative view**



#### Study model locating the proposed implant sites



#### Fabricated surgical template



#### Bone sounding (ridge mapping) on study model



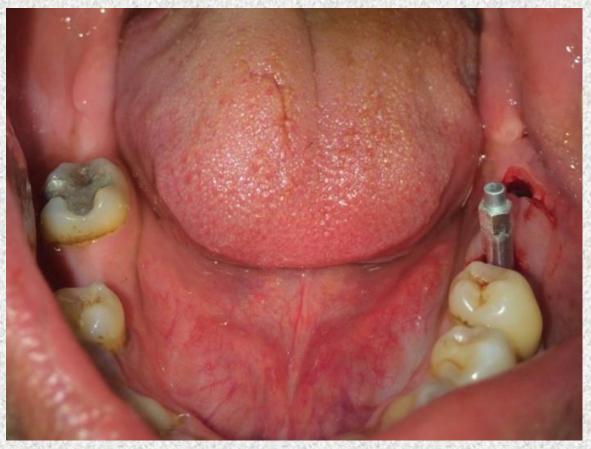
#### Application of the template into the patient's mouth



#### Soft tissue punch for flapless implant surgery



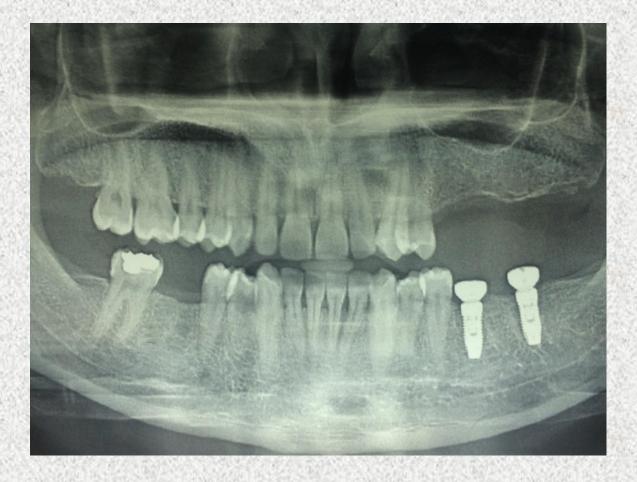
#### Two fixtures in place



Smart peg utilized for checking of primary stability with the use of resonance frequency analysis test



#### **Cover screws (healing screws) are applied**



#### **Postoperative OPG**



#### 2<sup>nd</sup> stage surgery



#### **Final prosthesis**