Clinical Case Study - August 2018

Bone ridge reconstruction after failed implants removal

Surgery by: Dr. Baranes David

- 67 years old female came to the office her main complaint was being unsatisfied with the aesthetic appearance of the lower anterior prosthetic bridge due to the exposed implant threads. Those implants were placed 8 years earlier. During the clinical and radiographic examination, all implants were stable, with large buccal bone deficiency, exposed threads and loss of the attached keratinized gingiva.

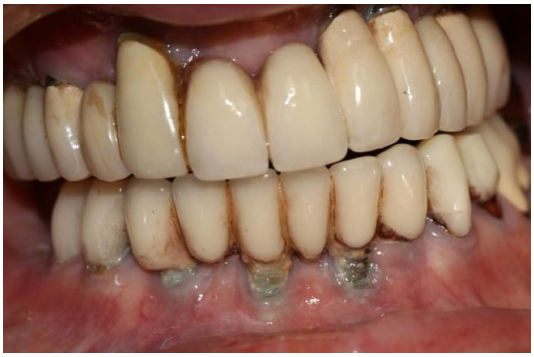
- The treatment decision was to remove all involved implants, augment and reconstruct the deficient bone ridge and soft tissue, and to place a new implants.

- The flap was reflected according to recommended Bone cements envelope technique by performing midcrestal incision continued with intrasulcular involving the medial and distal teeth. Then a full thickness flap was elevated, and an envelope was created .It is important to emphasize that during flap reflection the periosteal elevator should not pass the mucogingival junction with more than 2-3 mm. In that way we prevent the involvement of the muscles' insertion and eliminate muscles movements and thus pull on the flap. At this stage, implants were removed and complete debridement was

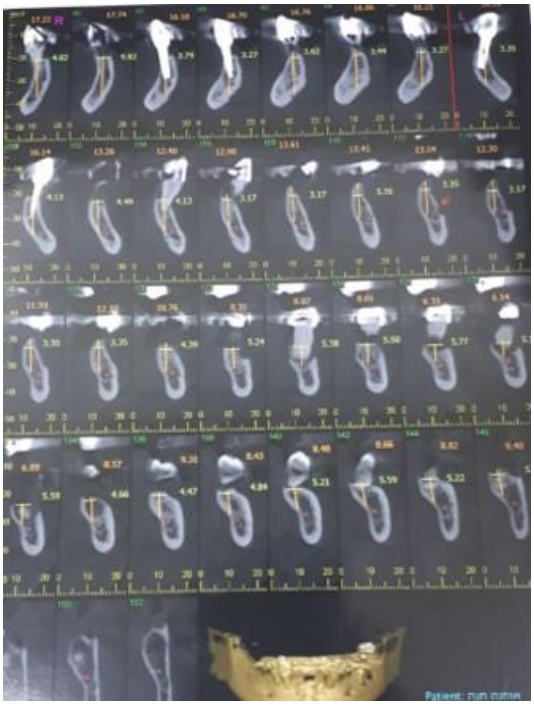
performed.

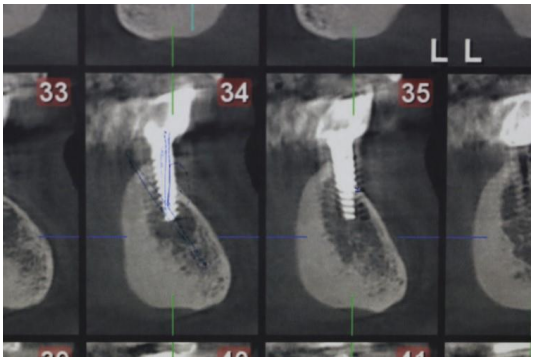
- Prior to Bond apatite placement, a stretching was preform by grasping mesial corner of the flap with a needle holder and stretching, then the distal part of the flap and then the middle. If we want to release the flap a bit more we insert the periosteal elevator into the mesial apical corner of the pouch with 45 degree angle and than distally and stretch the flap. The Bond Apatite cement was ejected into the site, a dry sterile gauze was placed and pressed above the material for 3 seconds, and flap closure took place by stretching the mesial corner of the flap and suturing than the distal, then the middle. After 3 points of suturing a predictability test was performed by placing a finger in the vestibule and vibrating the flap; if the sutures do not move at all it means that the muscles movements will not influence the stability of the graft during the healing phase, which can indicate that high success rate will be guaranteed.

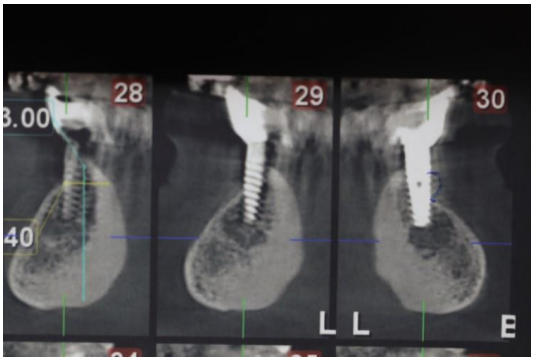
- Healing occurred uneventfully and reentry and new implants placement took place 3 months post op.

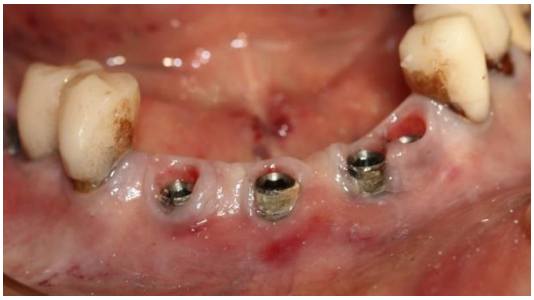


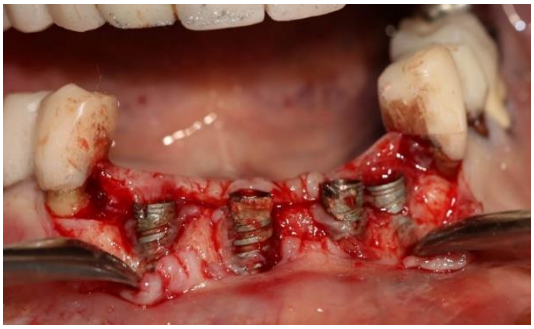
Pre op clinical and radiographic appearance



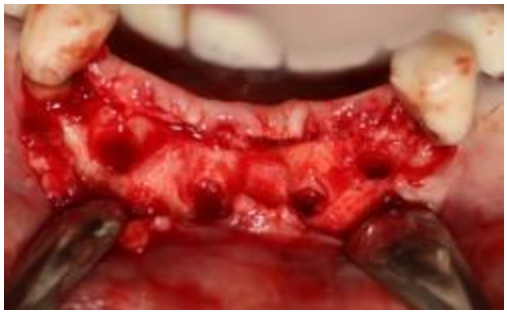




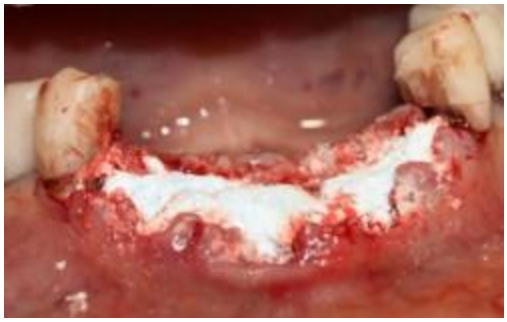




Clinical appearance before implants removal



After implants removal, large bone deficiency can be seen



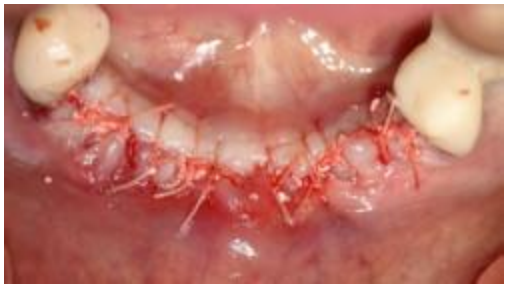
Bond Apatite in place according to Augma

Bone cements envelop technique protocols.

1.Minimal flap preparation2-3 mm passing the MGJ

2.Flap with full tension during closure.

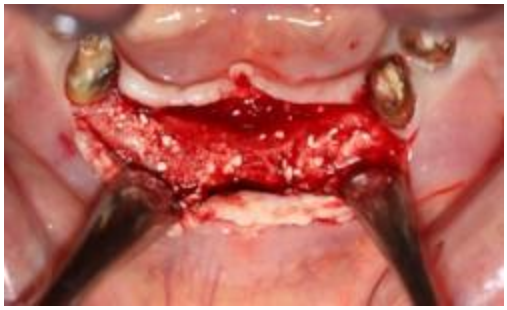
3.Cement application PPC (place ,press ,close)



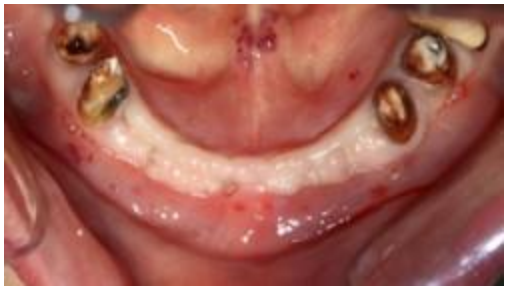
Suturing for maximal closure (up to 3 mm exposure is acceptable) Suturing start by stretching the mesial corner and suture than the Distal than in the middle.

Performing a predictability test by placing the finger in the vestibule and vibrating it strongly. If there are no movement of the sutures its means that the muscles are out of the equation, which can guarantee the stability of the graft during the healing phase and the success of the case is a high probability.

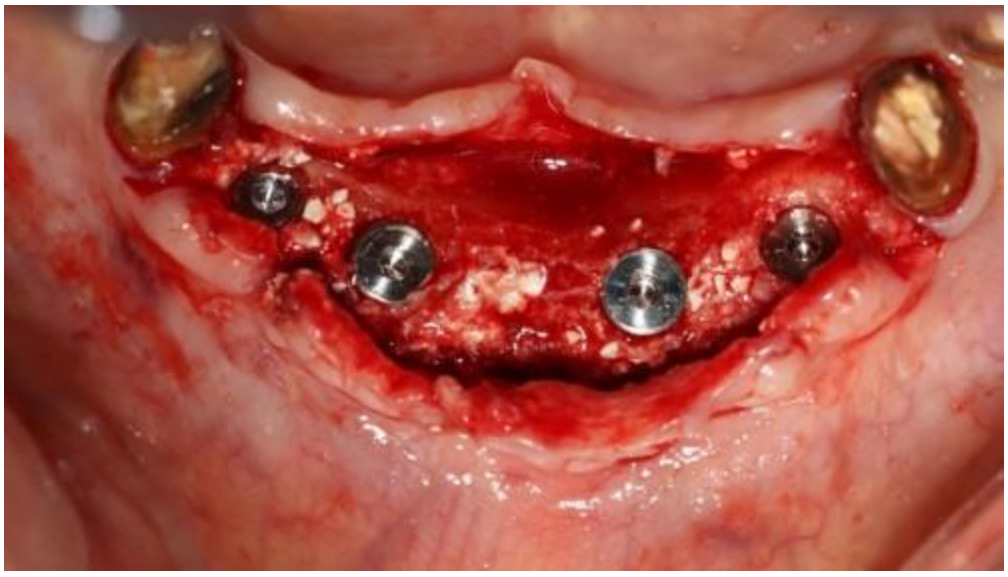
After the predictability test suturing is continued for achieving maximal Closure. Primary closure is not necessary.



3 months post op the bone regeneration and complete ridge reconstruction ready for optimal Implant placement.



Soft tissue appearance 12 weeks post op



12 weeks post op implants are safely placed