Clinical Case Study - September 2018

Extensive 3D bone deficiency in the aesthetic zone upper jaw Augmented by Bond Apatite®

Surgery by: Baranes David DMD

The following case describes an augmentation procedure using Bond apatite Bone graft cement (Augma Biomaterials Ltd.) in most extensive three-dimensional bone deficiency lesion in the esthetic segment of the upper jaw.

Soft tissue and site preparation was performed according to the recommended protocols for biphasic calcium sulfate bone cements, in which a minimally invasive surgery is indicated.

A buccal flap was lifted, with minimal reflection, in order to expose the lesion and at the same time avoid any excessive release in order to keep the flap under tension during closure. This is done to avoid muscle movements in the area and not affect the stability of the graft during the healing period (vertical cuts do not extend more than 2-3 mm beyond the MGJ, and no horizontal releasing incision was performed).

After removal of granulation tissue and preparation of the site, augmentation was completed by injecting the Bond-Apatite
cement directly into the site followed by applying firm pressure for 3 seconds above using sterile gauze pad to compact the cement in place. Soft tissue closure was accomplished by stretching the flap tacking it down on the mesial then distal and then in between thereafter continued for maximal closure (3 mm exposure is acceptable).

3 months post op complete regeneration was achieved and implant was placed.
Bond Apatite® in place
Flap maximal closure under tension According to Bond Apatite bone cements recommended protocols
Clinical appearance during reentry 3 months post op
Radiographic appearance with implant in place