

From the Editor's Desk



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Bone Sets the Tone for Healthy and Long Lasting Dental Implants

As most things keep changing in implant dentistry, the one thing that may never change is the need for bone, good in quality and adequate in quantity. Dental implants have become a mainstay of treatment planning and are gaining popularity in being offered as the number one replacement option for teeth. It is common knowledge that implants are the best alternative to natural teeth that we have today. When bone is insufficient, bone augmentation procedures are considered in order to gain the required amount of bone for dental implants. Bone grafting following extractions is becoming a common practice in most dental offices since there is growing awareness of the consequences of inadequate bone quantity for implants and the cost and morbidity associated with bone regeneration procedures. The benefits of preserving the alveolar ridge profile and its clinical significance for esthetics and function have clinicians buying into this concept. Bone grafting at the time of extraction preserve the existing bone profile or at least minimize the post extraction soft and hard tissue collapse associated with post extraction remodeling.

During my residency training, our Program Director used to say that research and industry changes associated with the findings had a general pattern in each decade as implants were evolving to the way we practiced in its current form of screw shaped implants. If we were to look at the last 3 decades of implant dentistry beginning from the early 80's, the early days of screw shaped implants, the industry and the research especially the 1980's focused on establishing successful Osseointegration and adopting guidelines for the clinical use of dental implants. 1990's were about refining the surgical protocol an working on different bone grafting techniques to preserve and augment bone for implants.

The 2000's saw a significant improvement in the multitude of restorative options, as the surgical part seemed to have been quite clearly established by then. In my opinion the decade of 2010 going forward, has been a time period where the industry seems to be working to incorporate technology like CBCT scans, digital impressions, guided surgery and immediate loading protocols to simplify everyday implant dentistry. The bone grafts, membranes and other biologics of today seem to push the boundaries with how they can be used and manipulated to achieve the desired results and it is only going to get better with time. Autogenous bone, which is patients own bone, has long been hailed as the gold standard. I'm not sure if it should be the case anymore as Allografts, which are processed human bone grafts obtained from bone banks are proving to be equally good, comparable or even better in handling and much easier to obtain. They also come without the morbidity associated with harvesting Autogenous grafts. This issue of the *Nugget* will focus on bone grafting for dental implants discussing a few aspects and approaches. While one article starts off with what to do after an extraction to make the implant process easy, the other one talks about how to expand the available bone carefully to place the implant. Another one talks about multiple options with bone augmentation for thickness with an emphasis on using a block of Autogenous bone for implants and the fourth one discusses about navigating and working under the sinus to gain height of bone under the sinus in order to place the implant. Every one of these authors were picked for their wisdom, experience and clinical insight on this topic. I believe, "in order for tissue to not be the issue, bone has to set the tone." ■



Fig 1. Note the collapse of the hard/soft tissue profile along missing tooth #10.



Fig 2. Restored implant shows improvement in the soft tissue profile after bone augmentation procedure allowed for implant placement.

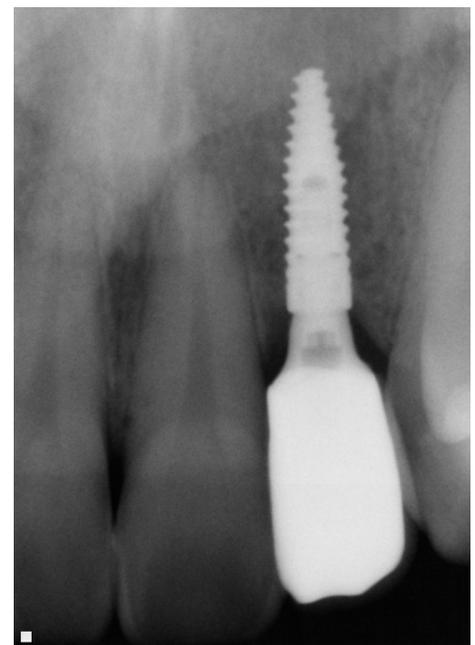


Fig 3. X-ray showing good implant integration with the grafted and regenerated bone.