

A Decision Tree for Horizontal and Vertical Bone Augmentation

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Bone augmentation is often required to place an adequate number of dental implants in ideal positions for prosthetic support. In addition, adequate bone volume is needed to maintain long term peri-implant health. There are various techniques that are available for bone augmentation including guided bone regeneration, block bone grafting, mesh grafting, ridge expansion, interpositional grafting and distraction osteogenesis. Graft materials include autogenous bone, allografts and xenografts. In addition there are adjunctive materials such as platelet concentrates, growth factors, membranes, tacks and screws. Although the use of autogenous bone is still a mainstay in our surgical techniques, growth factors may be considered as an alternative. This presentation will guide clinicians using an evidence based decision tree for bone augmentation in preparation for implant rehabilitation.

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Dr. Craig Misch received certificates in postgraduate prosthodontics, oral implantology as well as a Master of Dental Science from University of Pittsburgh. Thereafter he became faculty and acted as Co-Director of the University of Pittsburgh Oral Implantology Center. Dr. Misch also completed specialty training in oral and maxillofacial surgery in Pittsburgh and is board certified by the American Board of Oral and Maxillofacial Surgery as well as the American Board of Oral Implantology/Implant Dentistry. Dr. Misch practices as a dual specialist in Sarasota, Florida. He is a Clinical Associate Professor at the University of Florida, Alabama, Penn and Michigan in the departments of periodontics and prosthodontics. Dr. Misch serves as Editor in Chief of *The International Journal of Oral implantology* and is on the editorial boards of the *Journal of Oral Implantology* and the *International Journal of Periodontics and Restorative Dentistry*. He has been a featured speaker for numerous organizations and has published extensively with over 50 publications and 20 textbook chapters.

Objectives

- 1) Discuss alternative methods to manage sites with reduced bone volume
- 2) Review materials that may be used for bone augmentation
- 3) Review case presentations following the bone augmentation decision tree