Practical Osseous Surgery in Periodontics and Implant Dentistry

Serge Dibart and Jean-Pierre Dibart

WILEY-BLACKWELL
PRACTICAL OSSEOUS SURGERY IN PERIODONTICS AND IMPLANT DENTISTRY
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Ray C. Williams, DMD  

**Contributors**  

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I am delighted to be asked to write the forward for this new book on practical osseous surgery. This book is greatly needed in dentistry and, quite frankly, is overdue. I am especially glad that Serge Dibart and Jean-Pierre Dibart decided to undertake this work and to provide the dental profession with a much-needed resource in the management of intraoral bone.

I cannot help but smile when I see the words “bone” or “alveolar bone” or “osseous.” I am reminded of long ago at the start of my graduate training program in periodontology at Harvard under the mentorship of Paul Goldhaber. I did not realize until I arrived in Boston that Paul was a world authority on bone and that he would begin to teach my fellow residents and me all of the intricacies and exciting mysteries of bone. Quite frankly, I thought I was at Harvard to study “periodontal pockets.” I remember that in the first month of the residency program, my classmates and I rotated through orthopedic surgery at Massachusetts General Hospital. Paul wanted us to see the management of bone up close and firsthand. And so we watched as hips, knees, and elbows were repaired or replaced or tumors removed from legs and arms and subsequent osseous defects grafted. It was an amazing introduction to osseous surgery. And soon thereafter, upon returning to the dental school, we were given new Ochsenbein chisels and Schlüger files and shown how to remove and contour the alveolar bony defects associated with periodontitis. We were also taught the initial steps in bone regeneration using allograft material and later, tissue-guiding membranes. It was a phenomenal time of being “immersed” in the training of the surgical management of bone.

Osseous surgery has clearly come a very long way since I was a resident in periodontics. It is extraordinary what has been introduced to dentistry in the last 30 years, and quite frankly, there is no looking back. Resective osseous surgery, while not as popular as it once was, is nonetheless an essential part of managing bony defects in the treatment of periodontitis and placing dental implants. Sophisticated instruments such as the Piezotome have been introduced to make bone cutting and resection easier and with much fewer complications. Bone regeneration for both periodontal disease management and implant placement management has come a very long way. We now have at our disposal signaling molecules such as growth and differentiation factors that can greatly enhance our ability to regenerate bone. Even as we are adopting specific signaling molecules into our practice, new molecules are being developed that may prove to be more efficacious.

The subsequent introduction of guided bone regeneration principles and techniques has taught us that we can in fact regenerate bone where it is critically needed prior to implant placement. And this new ability to regenerate bone where needed ushered in the era of “prosthetically driven” implant placement. Guided bone regeneration, coupled with bone grafts, signaling molecules, and tissue excluding/guiding membranes have allowed the clinician to dictate where bone will be regenerated. No longer does the mere presence of bone dictate where an implant will be placed. Moreover, extraction sockets are now carefully managed during tooth removal, using a combination of atraumatic techniques, bone grafts, and membranes to ensure maximal preservation of the site.

And now, with no end in sight, osseous surgery has also advanced orthodontic tooth movement. Several years ago the Wilcko brothers brought periodontally accelerated osteogenic orthodontics to the forefront through a series of intriguing cases presented in publications and at meetings. It became clear that the manipulation of bone through osseous surgery, combined with bone regeneration techniques, could foster quicker tooth movement. A more minimally invasive surgical technique introduced will likely make this approach to tooth movement even more acceptable to orthodontists and patients.

All told, I say “lucky us”. Serge and Jean-Pierre Dibart have provided us with a first-rate book that provides current concepts and techniques for managing “bone” in periodontics, orthodontics, and implant dentistry. Realizing how far and how quickly dentistry’s management of osseous conditions has advanced, I look forward to the future and the continual development of this aspect of patient management in dentistry, knowing that clinicians such as the Dibarts will help advance this very exciting area of dentistry.

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Section 1
Body-Mouth Connection: Relevant Pathologies Affecting Dental Treatment, Guidelines, Prevention, and Necessary Precautions