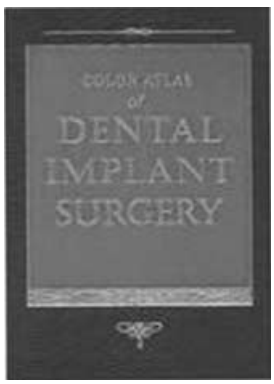
Book Reviews



Color Atlas of Dental Implant Surgery

Michael S. Block. W.B. Saunders, Publishers, Philadelphia, PA 2001: ISBN 0-7216-8317-7, 216 pp, 650 color illustrations, price $165, hardcover

The goal of a textbook in atlas format is to provide the reader with a pictorial review of procedures in a step-by-step sequence. This visual form of learning is an important adjunct to text-based information, especially when one is first acquiring knowledge and experience in 3-dimensional procedures such as dental implant placement and the associated surgical steps. The knowledge gained from the visualization of anatomic proportions and landmarks is vital in applying new procedures in a clinical environment. The weaving of illustrations and images with this text presents a clearly understandable endpoint. A particular strength of this atlas is the inclusion of the final prosthodontic treatment result and a discussion of how implant surgical placement contributed to the definitive result.

Dr. Block has organized this atlas by both anatomy and procedure. The first 3 chapters discuss implant placement and surgery by the characteristics of the anatomic site and status—completely edentulous mandible with anterior positioning of the implants, posterior mandible implant placement, and implant placement in all regions of the completely edentulous maxilla. The next chapters cover specific topics involved in implant placement such as maxillary sinus grafting, zygomaticus implant techniques, surgical techniques in the esthetic zone, and soft tissue esthetic procedures. This format easily allows the clinician ready access to the information as it would be needed.

In each chapter, significant effort has been made to present techniques to improve the implant receptor site with both hard and soft tissue grafting procedures. The detail and clarity of both the illustrations and text would enable both the beginning clinician as well as the experienced clinician to perform the procedures recommended.

Although many of the techniques described in this atlas, including distraction osteogenesis, maxillary sinus grafting, and cortico-cancellous block grafts, are usually performed by dentists with formal surgical postgraduate training, the information presented gives every clinician a more complete understanding of the scope of care possible. The type of information presented allows the clinician to work in referral-based relationships with greater confidence and knowledge. Remarkably, the bulk of the information presented in this text is directly applicable by most clinicians to everyday practice.

The highlights of the first 3 chapters include an excellent review and discussion of incision location and adjunctive soft tissue procedures such as a lip-switch to increase vestibular depth in the atrophic mandible, a thorough description of augmentation materials and procedures in all the regions of the mouth, the importance of surgical guides for accurate implant placement, and the utilization of reformatted CAT-scan radiology.

The chapter on maxillary sinus grafting covers all aspects of this critical procedure in implant therapy and is followed by a chapter on the zygomaticus implant procedure, which is an important counterbalance technique when grafting is not indicated by anatomy, health, surgical morbidity, or patient preference. The placement of dental implants in the partially edentulous situation,

especially in the esthetic zone, is illustrated in the final chapters with special emphasis on implant site development procedures utilizing both hard and soft tissues.

This atlas could be even better with additional information about the interrelationship of the prosthodontic diagnosis, treatment plan, and patient expectations with dental implant placement and associated surgical procedures. The influence of the opposing dentition is a critical diagnostic factor with its effects on interarch spacing for prosthetic materials, intertooth spacing, and occlusal loading. Information on mandibular flexion and implant placement and prosthetic splinting of implants would have also been helpful. Nevertheless, the atlas is an excellent resource for anyone who includes implant therapeutics in their clinical repertoire. It is particularly valuable for those clinicians beginning to place dental implants, as it describes the adjunctive surgical procedures necessary in a clear and concise method that can be readily translated into clinical practice.

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Dental Materials In Vivo: Aging and Related Phenomena

Editors: George Eliades, Theodore Eliades, William Brantley, David Watts. Quintessence Publishing Co. Inc., Chicago, IL, 2003: ISBN 0-86715-399-7, 20 contributing authors, 283 pages with index; 183 illustrations; price $110.00, hardcover

This book is a comprehensive overview of the effect of the oral environment on the clinical performance of dental biomaterials. There are several respected textbooks on dental biomaterials readily available, but none of those texts focus on how the biomaterials function in the biologic system over extended periods of time. As stated in the text's introduction, it is important to understand how dental biomaterials *live* and ultimately *die*, and to address that need, this book has thoroughly reviewed the current research findings to provide a better understanding of dental material behavior and failure. The text assimilates information covering both in vitro, and more importantly, in vivo, investigations, including especially useful retrieval studies offering excellent insight into oral environment degradation mechanisms.

The chief editors and 16 additional contributing authors have presented 15 chapters that provide complete citation of all references used throughout each chapter. The text is well organized into sections that integrate the aging of dental biomaterials into numerous applications and disciplines, including prosthodontics and implant dentistry, restorative dentistry, orthodontics, endodontics, oral and maxillofacial surgery, and periodontology. Brief introductions at the beginning of most chapters provide the groundwork and summarize the information to follow.

The first chapter provides a useful and logical introduction to general aspects of biomaterial interactions with biologic fluids. Both initial and prolonged biologic responses to dental biomaterials are discussed, including interesting information regarding cell attachment and organization mechanisms. The effect of the biomaterial surface properties and related pellicle formation is discussed, revealing the fact that significant pellicle compositional differences may exist at the tooth surface as a function of the specific material. This chapter also includes a review of the classification of dental implant materials as to bioactivity, composition, and their expected bone response.

Section II, which deals with prosthodontics and implant dentistry, presents an excellent chapter on the characterization of retrieved implants with an emphasis on the effects of the oral environment on the implant materials. In addition to covering both biologic and mechanical complications, the review of retrieved implant investigations provides failure analysis observations and reported changes in the implant materials after in vivo use, rather than only the histologic features associated with