

Book Reviews

Maxillofacial Rehabilitation: Prosthodontic and Surgical Management of Cancer-Related, Acquired, and Congenital Defects of the Head and Neck, Third Edition



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(mostly in color); price \$198,
hardcover*

Three editors and 54 contributors produced this third edition of the book. The book includes 10 chapters dealing with the challenging prosthodontic and surgical management of cancer-related, acquired, and congenital defects of the head and neck. Throughout the book, the authors and editors stress the importance of a multidisciplinary approach in dealing with such defects in order to secure a successful outcome and help patients regain a nearly normal life. The reader will be provided with insights into the latest developments in reconstructive surgery, maxillofacial prosthodontics, and prosthodontics.

The book begins with a standard review of the oral management of patients who have been treated with radiation therapy and/or chemoradiation. After a description of the principles and oral effects of radiation therapy, the authors describe the differences between the available stents that could be used during such therapy. They also review the principles of dental and prosthetic management of the irradiated patient along with a discussion on dental implants in the irradiated tissues.

The next chapter, "Rehabilitation of Tongue and Mandibular Defects," starts with an excellent review of the epidemiology, etiology, and predisposing factors of oral cancers. The authors then present an excellent section on the treatment of mandibular tumors along with a discussion of the disability secondary to surgical resection. The surgical procedures to enhance the prognosis of the future prosthesis are meticulously described. The use of bone and soft tissue materials and sites for the reconstruction of defects followed by the physiology of oral function following surgical resection are also discussed. The prosthesis designs (removable partial denture, overlay prosthesis with a

step-by-step approach) for both partially and completely edentulous patients are excellently documented.

The third chapter, "Rehabilitation of Maxillary Defects," contains common-sense advice for the rehabilitation of maxillary defects. The chapter is complete with a variation of clinical situations (including clinical and laboratory procedures) that are very nicely documented. This chapter, like the one before, is an excellent review of possible intraoral defects for both residents and practicing prosthodontists.

The next two chapters provide an excellent analysis of soft palate and facial defects. Soft palatal, orbital, nasal, and auricular defects are discussed with an evidence-based approach. High-quality laboratory work and all state-of-the-art materials available to perform such meticulous work with pre- and post-operative instructions are discussed. The use of CAD/CAM and implants are also discussed.

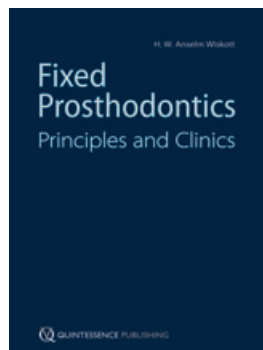
The text then proceeds with the rehabilitation of cleft lip and palate and other craniofacial anomalies. The chapter starts with a review of the classification, incidence, and etiology of clefting followed by a multidisciplinary approach for the treatment of these unilateral and bilateral clefts. Prosthetic rehabilitation is thoroughly presented, ranging from conventional to implant-supported prostheses. The chapter ends with an analysis of the treatment of several craniofacial anomalies (hemifacial microsomia, Pierre Robin syndrome, and ectodermal dysplasia) and a guideline to implants in growing children.

The seventh and eighth chapters present new information on digital technologies and tissue engineering, two promising treatment modalities in maxillofacial prosthodontics. The ninth chapter deals with an important aspect during the treatment of head and neck cancer patients: the psychosocial aspect. The authors explain the significance of teamwork in helping patients and their families overcome difficulties and providing them with required support and motivation during their long and difficult rehabilitation. The tenth and final chapter reviews the oral effects and management of chemotherapy patients.

This text is elegantly bound and printed on excellent quality paper stock. All 1555 illustrations are of exceptional quality. This book provides excellent evidence-based diagnosis and treatment planning information and will be a valuable addition to the library of any resident or clinician involved in the care of patients requiring maxillofacial rehabilitation.

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Fixed Prosthodontics: Principles and Clinics



By H.W. Anselm Wiskott,
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Quintessence Publishing,
New Malden, Surrey KT3 3AB,
UK, 2011: ISBN-13:
978-1-85097-208-2,
768 pages; 825 illustrations;
price \$128.00.

This comprehensive textbook was written and designed for the student of dentistry. It is laid out to first convey a broad view of the field and then focus on the essentials of fixed prosthodontics. The author presents the material in a clearly written and well-designed format. The 768 pages are accompanied by 825 exceptional illustrations. Most of the artwork is presented in black and white, which the author acknowledges reduces printing costs to a bare minimum and allows a wide distribution of the book among students.

Chapters are structured to discuss the scientific background first and then move to clinical applications. All start with an introduction or overview of the topic. When applicable, many chapters also include a historical perspective on the subject matter presented. Proper terminology as found in the *Glossary of Prosthodontic Terms* is used throughout.

Within this 20-chapter text are 6 sections that present the book's material in a methodical treatment-type sequence. They build on each other in a logical manner. The first section and chapter is an introduction. It gives a broad view of the discipline of fixed prosthodontics within the realm of prosthodontics. Subsequently, the author takes us through the essentials of the oral environment from the basic anatomy and physiopathology, through the parameters of esthetics and color, into the complexities of forces, mastication, and occlusion. He then ends this section with a discussion on materials and structures. The third section is "Treatment Planning," where time-tested principles are followed to guide the reader through "a theoretical background in a number of aspects of clinical dentistry." The analogy of project management is used to guide the reader conceptually and technically through the process of "establishing a diagnosis and formulating a rational sequence of steps designed to eliminate disease, correct anatomic deficiencies, and restore the masticatory system's function and cosmetic appeal." The use of diagnostic aids such as "mock treatment" via preliminary wax-ups with diagnostic templates is emphasized for communication, and as a clinical aid for the treating doctor.

Section four, "The Preprosthetic Phase," takes the reader logically and thoroughly through the necessary disciplines of periodontics, orthodontics, operative dentistry, and implantology. The chapter on periodontal topics covers etiology, principles of treatment, indications, and execution of surgical technique. The orthodontic chapter expands on the indications for prerestora-

tive tooth movement, the physiology of orthodontic movement, mechanics, and techniques. The techniques of tooth bleaching and microabrasion are covered in the chapter on operative dentistry. In the last half of the operative dentistry chapter, great emphasis is given to the mechanics, design, and limitation of foundation restorations, both direct and indirect.

The implantology chapter covers the biology of osseointegration in depth, with noted emphasis on titanium's biocompatibility and design features. The relationship of bone biology to implant success is covered, along with augmentation techniques required for implant site development.

Section five, "The Prosthetic Phase," begins with two back-to-back chapters on what is considered the crux of fixed prosthodontics, tooth-anchored, cemented restorations, and implant prosthodontics. Design principles for both full- and partial-coverage retainers are presented. Other topics include mechanics in relation to displacement and functional loading stress, as well as retention, resistance, and load distribution. Principles of splinting and stabilization, as well as proper cantilever application are also discussed. Framework design, encompassing retainers, connectors, embrasures, emergence profile, pontics, and stress breakers, is covered in detail. All aspects of abutment design as well as preparation sequence, including armamentarium, are discussed. Implant prosthodontics follows nicely from the previous chapter. The author strives to develop principles of implant prosthodontics rather than concentrate on implant systems. The advantages of bone level implant systems compared to tissue level implant systems are discussed. The chapter then moves from a detailed development of all the possible implant components into contemporary implant prosthetic designs for different clinical situations. A comprehensive analysis is given to the subjects of force transmission, screw clamping, and passive fit. Advantages and disadvantages of open vs. closed tray impression techniques are reviewed, as are screw retention vs. cement-retained implant restorations.

The chapters on adhesive restorations are developed with meticulous attention, including schematics and photographs, adding nicely to the development of the subject. The author adequately covers advantages, limitations, and contraindications for this type of treatment. The next two chapters cover interim prostheses and impressions. All traditional and contemporary techniques are given adequate attention. Digital impression scans are missing from this chapter, but are covered in detail in the laboratory procedure chapter, along with other CAD/CAM procedures.

The occlusal relationships chapter reviews articulators and facebows, followed by several techniques for registering the intraoral relationship of the maxillary and mandibular arches. The different contemporary occlusion philosophies are not discussed, but the author remarks from the outset that this chapter would focus on the development of functional occlusal contact relationships.

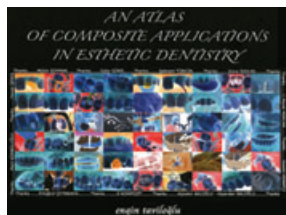
The chapter dedicated to try-in and cementation discusses methods to ascertain optimal seating and occlusion as well as possible remedies when deficiencies are noted. The different families of dental cements are categorized according to their particular biologic, physical, and clinical properties. Conventional cementation vs. adhesive bonding are given appropriate

emphasis. The final section of the text logically deals with post-treatment care with a chapter titled "Maintenance." The author treats teeth and implants similarly in this regard. The concept of preventing disease and preventing the recurrence of disease is described. In addition, the importance of reevaluation, risk assessment, recall intervals, and personal oral hygiene is stressed.

This well-crafted textbook will prove to be an essential reference and resource for years to come. For the student in training as well as the seasoned clinician, the scientific background on topics provides a solid evidence-based foundation for successful clinical execution. The clinical workflows provide a convenient roadmap to assist in logically sequencing treatment steps. This text is a welcome addition to any dental school curriculum or practitioner's bookshelf.

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An Atlas of Composite Applications in Esthetic Dentistry



By Engin Taviloglu,
Quintessence Publishing Co.
Ltd. Istanbul, Turkey, 2009,
ISBN 978-605089856-6-0.
(96 pages 400 color
illustrations; price \$150.00)

The primary purpose of this book is to be a visual tool for dentists to show conservative composite applications and details of restorative techniques used in practice today to patients. The book is divided into two parts, one for patient education and one for showing restorative techniques to members of the dental profession. The author stresses the need for continu-

ing education, training, and hands-on seminars to use adhesive materials for maximum esthetics and function.

Multiple procedures are presented for education on the wide range of capabilities available with adhesive composite dentistry. Starting out using very conservative methods, and leading into more complex procedures, the author documents using both direct and indirect composite restorations and finishes in a chapter called "Gum Reshaping." In all of the book's cases, the author uses a good photographic technique where one can see his visualization of the clinical result. Due to the sequential detail of the photographs, showing this to patients will give them a good perspective on what to expect during and after these restorative procedures.

The chapter on form modifications summarizes the closing of diastemas and presents a section detailing crowding correction/camouflage of a mandibular anterior case. While there is adequate photographic detail of the preparation of teeth and restorative technique, it would be helpful to see how the author layered composite as well as the finishing techniques. In the section regarding direct and indirect restorations, the author shows before and after results with nice detail. Each section has between 12 and 25 photos showing the step-by-step procedures. In the final chapter on gum reshaping, the author creates a natural contour in a bicuspid implant case with a specialized provisional crown. The final result is not documented; however, the provisional crown results in a natural appearance. A photo documenting this case completion would have been a nice finishing touch.

The author's foreword states that innovations constantly occur, and more training is certainly needed to keep up with ever-changing techniques and materials. With this in mind, a summary of the actual materials used, footnotes, or a summary page would be helpful. In all, the book does accomplish the author's goal of educating his patients and other dentists as to what can be accomplished with current materials available.

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