Book Reviews



Prosthetic Rehabilitation



By Giulio Preti. translated by Jennifer Sardo Infirri. Quintessence Publishing Co, Ltd., London, United Kingdom, 2008: ISBN: 978-1-85097-166-5, 224 pages; price \$144.48

This text compilation of 32 contributors from academics and private practice in Turin, Italy, addresses the steps and considerations needed in prosthetic rehabilitation, diagnosis and treatment planning. It is organized into a logical progression of chapters from evaluation of the patient to the newer treatment modalities and their clinical considerations.

The book contains 224 pages of text, color photos, and diagrams. A foreword is written by Dr. George Zarb, who expresses his gratitude for the contributions this text makes to present visions in prosthetic rehabilitation. A preface from the editor follows with acknowledgments and a list of contributors. An interesting 5-page review titled "An Explanation of the Criteria Used for Evaluating the Dental Literature" explains how prosthodontic literature is categorized, along with a brief description of the types of scientific articles found in the literature.

The first three chapters are a review of the assessment of the patient, with emphasis on the overall evaluation of the patient's physical and mental health. The chapters are divided into a logical evaluation of diseases, observations, their possible oral manifestations, and implications for diagnosis and treatment.

Chapter 4 describes the evaluation of the functional and morphological considerations of the patient. The chapter presents excellent examples of examination forms, photos, and diagrams. Maxillomandibular movement, occlusal evaluations, temporomandibular disfunction (TMD), and etiology of occlusal wear are discussed in some detail, especially in terms of bruxism. Articulators are identified by general descriptions with very little detail. The chapter's authors provide a welldescribed method for fabrication and adjustment of a Michigan splint, and some treatment options for TMD are discussed.

Chapter 5 is a unique review and explanation of the oral cavity as an ecosystem and how it affects prosthetic treatment. The chapter contains discussions of the effects of salivary fluids, dental materials, bacteria, and prosthodontic restorations as part of a dynamic system. The relationship of the biocompatibility of dental materials to the overall health of the patient is discussed, especially the effects of nickel and chrome in regard to patient allergies. The remainder of the chapter reviews the overall effect of the oral ecosystem on the durability of prostheses in an oral environment.

Chapter 6 is a look at periodontal considerations of disease, oral hygiene, surgical and nonsurgical techniques for regression of disease, and augmentation of soft and hard tissue. There are many well-planned diagrams and photographs to support the text; however, the descriptions in the chapter are overwhelmed by over 300 references.

Chapter 7 is a review of the techniques used for preprosthetic orthodontics and segmental osteotomies. The text reviews the indications, contraindications, and the pros and cons of different modalities of this type of preprosthetic patient treatment. It is followed by a chapter on the restoration of endodontically treated teeth, covering the goal of endodontic treatment, the use of endodontically treated teeth as abutments for restorations, and a discussion on dowel selection.

The last chapter is dedicated to dental implants. It covers a wide range of implant topics from surface treatments, biomechanical principles, mechanical properties, and the loading of dental implants to the classification of bone and bone quality, guidelines for maxillary and mandibular surgery, and surgical augmentation techniques. There is a discussion on the merits and future of immediate loading and some insight into the present direction of tissue engineering as applied to osseointegration.

The book is very well organized, addressing a wide range of topics in the evaluation of the patient and review of supporting principles in prosthodontic rehabilitation. Although there are some conflicts of terminology with the present *Glossary of Prosthodontic Terms*, this would be a welcome resource for patient evaluation and treatment planning for the prosthodontic resident and an excellent review for members of the American College of Prosthodontists.

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Risk Factors in Implant Dentistry: Simplified Clinical Analysis for Predictable Treatment, Second Edition



By Franck Renouard and Bo Rangert. Quintessence Publishing Co., Inc., Carol Stream, IL, 2008: IBSN 978-2-912550-56-9, 194 pages; 487 illustrations, 352 in color; price \$138.00

This book is the second edition of a very popular text in which the surgical and prosthetic considerations and biomechanical ramifications of implant dentistry are systematically presented to provide the most predictable treatment outcome. The content is arranged identically to the first edition, although the brief chapter on patient relations found in that edition has been eliminated. One notable difference is that the table of contents for the second edition is not as detailed as the first, a feature that allowed the reader to proceed to a particular restorative situation within that chapter and then quickly locate the page number. Additionally, all the suggested readings are grouped at the end of the book, rather than at the end of each chapter. Nonetheless, the second edition maintains and improves upon the well-organized, easily read, and essential information presented in the first edition.

Chapter 1 discusses general risk factors. Pertinent discussions on general health and diagnostic parameters are laid out in a basic but practical manner. Intraoral, extraoral, functional, periodontal, and radiographic examinations provide requisite considerations in treatment planning for dental implants. This is nicely summarized in Table 1–1. The end of the chapter has a new feature to test the reader's knowledge, with questions and the location of the answer within the chapter.

Chapter 2 covers esthetic risk factors centering on the anterior maxilla. Again, the risks are summarized in a useful table. The section on osseous and implant risks is slightly more extensive than it was in the first edition. A checklist for edentulism in the maxillary anterior is provided to ensure that the examination is complete. This checklist or something similar is an absolute requirement for an implant workup in the anterior esthetic zone and, thankfully, the authors provide it in this edition.

Chapter 3 presents biomechanical risk factors. This is an essential chapter to provide a basic biomechanical understanding for anyone involved in implant dentistry. As stated in the text, most complications have biomechanical origins. Although there are certainly biologic failures, the clinician is undoubtedly obligated to understand and prevent biomechanical complications. This chapter, similar to the first edition, uses a risk factor scoring system. The risk factors are categorized by geometric, occlusal, osseous, or technical risk factors. Additionally, warning signs are incorporated, appropriately, in the discussion. As a side note, the authors use finite element analysis exclusively in this edition to optimize their biomechanical discussion. Additionally, an important fact is stated in that a cemented restoration in itself is a risk factor, because access to the screw is eliminated. Considering the number of cemented restorations placed today, it provides an interesting debate on the status and stability of screw tension before the restoration is luted. This chapter, like Chapter 1, has a knowledge test at the end. Without question, those who are placing implants should understand the concepts presented in this chapter; however, this chapter would be greatly enhanced and would serve a greater purpose if it included internal abutment connections. Additionally, the chapter pictorially illustrates what appear to be several situations involving intermediate abutments, which incorporate an abutment as well as a restorative screw. Presumably, these situations are all but eliminated in today's restoration-driven practice of implant dentistry.

The title of Chapter 4, "Treatment of the Edentulous Maxilla," is somewhat misleading, as the initial discussion is about partially edentulous situations; however, the discussion does progress from single, to multiple, to completely edentulous conditions. The chapter divides the topic between the anterior and the posterior maxilla. Overall, the dialogue is covered extremely well for specific partially and completely edentulous situations. The last section in this chapter deals with the implant-supported overdenture. The discussion and the tables summarizing the risk factors are somewhat limited and not entirely in agreement with other texts on the subject. Additionally, with the use of low-profile isolated attachments, such as the Locator[®] (Zest Anchors, Escondido, CA), the risk assessment may be considerably modified.

Chapter 5 is titled "Treatment of the Edentulous Mandible." Like the previous chapter, the title is again somewhat misleading; however, partially and completely edentulous situations are nicely covered. This chapter presents many more scenarios of partially edentulous circumstances, especially in the posterior mandible, and summarizes them in several risk assessment tables. Biomechanical strategies that should be considered but perhaps are often overlooked are presented, such as the concept of tripod stabilization and the use of supplementary implants to obtain tripod stability for multiple posterior units.

Chapter 6 provides sound principles for treatment sequence and planning protocol. Radiographic examination and assessment of bone quality, quantity, and density are accurately described. The fabrication of the surgical guide and surgical techniques are discussed. Unlike the first edition, this edition incorporates a dialogue on short implants. The authors state that although the use of short implants once was considered a risk factor, using a longer implant does not provide a biomechanical advantage. Excessive height of the abutment/crown complex represents the same biomechanical risk for long as well as for short implants. Also new to this edition is a discussion of immediate loading. The chapter concludes with excellent exposure to advanced surgical techniques and bone grafting, postsurgical recommendations, and provisionalization. This chapter also includes a "Test Your Knowledge" section at the end.

The last chapter, Chapter 7, provides an overview of complications. The complications are broken down by surgical (stage 1, 2, or advanced protocols) or restorative stages of treatment and are presented in a table format that includes the problem, possible causes, and solutions. The chapter concludes with a section on tips for establishing your dental implant practice. Disappointingly, this section relates more surgery-related tips and no reference to providing a thorough restorative diagnosis and treatment plan.

Finally and noticeably absent from the first edition, an index has been included in the second edition and is appreciated for facilitating reference to concepts and figures.

Like the previous edition, the authors again limit the specific implant content to the Brånemark (Nobel Biocare, Göteborg, Sweden) implant system, which will likely be seen by some to be constrained in depth. Similarly, a review of the first edition noted the obvious lack of discussion regarding internal abutment connection and implant surface topography.¹ Exposure to the risks regarding those topics will hopefully be covered in future editions. Nonetheless, the concepts of risk and biome-

chanics presented are laid out conveniently and are easy to understand. The photographs, illustrations, and charts are excellent. This edition certainly should be considered a "must-read" text for anyone new to providing dental implant treatment, as an understanding of the concepts of biomechanical risk is an absolute requirement. Likewise, this edition remains a valuable reference in the library of any clinician currently placing or restoring implants.

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(The views expressed in this review are those of the author and do not reflect the official policy of the Department of Defense or other Departments of the United States Government)

Reference

1. Schweitzer KM: Book reviews. J Prosthodont 2002;11:326-327.

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