

mantra of the previous chapters with statements such as "Bacterial plaque is a prime etiologic contributor to the loss of dental implants. Like gingivitis, peri-implant mucositis is reversible once the etiologic agent – bacterial plaque – is removed. If allowed to progress, peri-implantitis may ensue," and, "If the patient has a retrievable superstructure, it should be removed every 18–24 months and placed in an ultrasonic cleaning solution."<sup>2</sup>

Section III, "Prosthetics," begins with a brief survey by Dr. Peter S. Wöhrle entitled "Principles of Aesthetic Implant Dentistry." It is followed by "Efficient Implant Prosthodontic Therapy" by Dr. Kenneth W. M. Judy, in which the author stresses the importance of "unbroken models" and the use of cast verification jigs and cast corrective reduction copings to ensure efficient and rapid completion of implant prostheses, which invariably seem to be cement-retained. The final chapter, "Transitional Phase: Patient Management With Transitional Implants" by Dr. Paul S. Petrungaro, a periodontist, is comprised primarily of an emphasis upon the surgical aspects of this treatment modality.

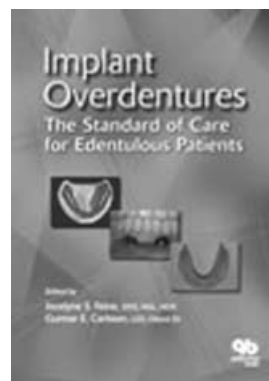
Certainly, Dr. Babbush has made an effort to transfer a large amount of knowledge regarding implantology in this text and has succeeded in this regard when the topic is mostly surgically oriented. I cannot recommend this book for Prosthodontists, however, as the information relating to dental restoration with implants is minimal.

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## Implant Overdentures: The Standard of Care for Edentulous Patients

*Editors: Jocelyne S. Feine, Gunnar E. Carlsson. Quintessence Publishing Co. Inc., Carol Stream, IL, 2003; ISBN 0-86715-430-6, 162 pp., 62 illustrations (many black/white tables/graphs/radiographs, many color images and illustrations); price \$58, soft cover*

This book is written to provide the evidence-based information to both the student and the experienced clinician for treating edentulous patients with anterior mandible two-implant overdentures. A symposium on the two-implant overdenture held at McGill University, Montreal, Quebec, Canada in May 2002 produced a consensus statement that the two-implant overdenture should become the first choice of treatment for the edentulous mandible.

The editors, Drs. Gunnar E. Carlsson and Jocelyne S. Feine, arranged the 14 chapters in a logical order to build support for the consensus statement. The first half of the book is devoted to providing evidence to support the use of two-implant retained overdentures. The latter half of the text addresses issues of two-implant overdenture treatment. Throughout the text, the editors do an excellent job of ensuring that the authors adhere to a recurring theme: adopting a patient-centered approach to treating edentulism.

The text begins with a succinct discussion by Dr. Philippe Mojon of past, current, and future trends in edentulism and the necessity of preparing for the continued treatment of the edentulous patient. At the patient level, consideration is given to the effects of age, gender, income, health, lifestyle, and socioeconomic and psychosocial factors on edentulism rates. The effects of a country's

economic development, urban versus rural setting, and density of dentists provide a broader perspective on the rate of edentulism. The reader needs to pay close attention to the data sources, as it can be confusing when comparing statistics for different countries. This discussion ends with a very clear summary and concise conclusion, which supports the future need for treatment of the edentulous patient for the next 10–20 years.

The second chapter serves to explain the interrelationship between the masticatory process, nutrition, and edentulism. Correlation is made between implant prostheses, conventional dentures, chewing ability, and food selection patterns. A thorough review of the literature is presented to illustrate the relationship between number of teeth and nutrient intake. Although the authors (Drs. J. A. Morais and J. M. Thomason) state that there is no data to date suggesting that changes in eating patterns from implant-supported prostheses will result in changes in patients' nutritional status, they present the results of a pilot study indicating that a mandibular two-implant overdenture improves nutritional status, as evidenced by improved blood and anthropometric measures at 6 months posttreatment when compared to the conventional complete denture group. The authors of this chapter are careful to indicate that these initial findings need to be confirmed with larger randomized clinical trials. This chapter left the impression that the patient will benefit from the two-implant mandibular overdenture.

Dr. Michael MacEntee reiterates the expected trend for edentulism during the next quarter century, but addresses edentulism from the patients' perspective of psychosocial and quality of life issues. He suggests that edentulism affects patients' quality of life, and discusses this from 4 perspectives: psychologic health and function, socioeconomic status, life satisfaction, and self-esteem. Implant overdentures can help alleviate the suffering from dysfunction, pain, low self-esteem, and a reduced QOL.

Dr. Manal A. Awad observes the need to evaluate the success of treatment with more patient-centered criteria rather than just clinical outcomes. He cites literature to support the poor association between clinical excellence and patients' satisfaction with their prostheses, and a stronger association between patients' perceived masticatory ability and satisfaction with their

prostheses. This precedes a good discussion of the interrelationship between patients' expectations of outcome, knowledge, preferences, and perceptions of treatment.

Drs. Jocelyne S. Feine and Guido Heydecke stress the importance of recognizing the priorities of complete denture patients rather than evaluating the success of treatment with the traditional clinical parameters. They present literature to support the two-implant overdenture in providing an improved quality of life, oral health, and function as compared to conventional complete dentures.

Thus far, the reader has been furnished information to support the use of the two-implant overdenture as an improvement over conventional complete dentures, but the question of expense and affordability has not been described. Drs. J. R. Penrod and Yoshiaki Takanashi recognize that since edentulous patients tend to come from households of below-average income, if implant-retained overdentures are to become the standard of care for the edentulous patient, more affordable, cost-effective implant treatments need to be developed. The first step in this process is to identify the costs for implant care through year one as compared to conventional complete denture therapy. The authors review the cost analysis of two-implant overdentures compared to conventional complete dentures in conjunction with a randomized controlled clinical trial comparing the efficacy of two-implant overdentures to conventional dentures. The overdenture/conventional complete denture cost ratio (using direct costs only) is studied to facilitate the comparison of their data with studies from other countries. The authors specifically identify the shortcomings in their study that make comparison to other cited studies impossible. They emphasize the need for long-term data for a complete economic evaluation.

Assuming the demand for implant overdentures increases in the coming decade, one might also assume the number of implant systems in the marketplace will increase. Corporate claims of improved performance, ease-of-use and cost effectiveness may further confuse the selection of the best implant system for patient care. The editors' expert clinical insight is evidenced by including a chapter (by Dr. T. W. Head) with guidelines on simplifying the process of selecting an implant system for clinical practice. Suggestions are given

on developing a system to evaluate and select the most appropriate implant system for the patient.

The remaining text focuses more directly on the implant overdenture strategies with continued reinforcement of the need to evaluate total treatment result, which includes patient satisfaction, amount of aftercare, and clinical performance of the different implant treatment strategies. Drs. D. Wismeijer and G. T. Stoker review a randomized controlled clinical trial (Breda Implant Overdenture Study) and make recommendations for the implant overdenture strategy they deem best. As seen in previous chapters, the authors indicate further long-term evaluation is necessary to confirm their suggestions.

The predictable implant overdenture treatment depends on thorough treatment planning and following sound complete denture principles. Dr. T. D. Taylor offers practical guidelines for treatment planning overdentures with dental implants. The author suggests offering dental implants as a means of increasing patient satisfaction and improving the quality of life with an extremely thorough and systematic approach to treatment planning from consultation to surgery. Excellent color illustrations and intraoral images compliment the text. The indications for specific radiographic surveys in the anterior mandible are described, and high-quality radiographic images clarify the treatment planning process. The pearl in this chapter is in the author's contingency planning for the implant sites at the treatment planning stage. A description of the fabrication of the surgical guide and its importance in ensuring the predictable placement of the implants concludes the chapter.

Following the discussion on treatment planning, Dr. R. Mericske-Stern (in Chapter 10) reviews the clinical considerations in overdenture therapy. Topics considered are fixed prostheses versus overdentures, number of implants, splinted or unsplinted implants, resilient or rigid retention, and overdenture success and implant survival. Once again, we see the recommendation that treatment outcomes be measured by patient-related factors rather than just implant and prosthetic survival.

Dr. Ignace Naert addresses the influence of attachment systems (bars, balls, and magnets) on clinical outcomes by reviewing a clinical trial in Chapter 11. He concludes that the splinting of implants with a bar is not a prerequisite for the

long-term survival or prognosis of implants in the mandible.

Loading strategies for mandibular implant overdentures are discussed through review of a clinical overdenture study involving 4 implant systems with different healing times prior to loading. The authors' (Drs. A. G. T. Payne, A. Tawse-Smith, W. M. Thomson, and W. J. Duncan) description of bone quality and quantity is different than that proposed by Lekholm and Zarb,<sup>1</sup> but is not a source of confusion for the reader. The results of this clinical study can be used as a guide in selecting a loading strategy for unsplinted ball-retained overdentures. High-quality color intraoral images and radiographs illustrate the different anchor systems and clarify the treatment of the intaglio denture surface for loading.

Drs. P. Boudrias and A. Chehade present a step-by-step overview of the procedures from initial clinical assessment, through surgery, to ball-attachment activation in Chapter 13. The authors' 49 clinical color/radiographic images are of high quality and provide a concise and thorough summary. Although this chapter better serves the novice, the clinical images clarify the loading strategy mentioned in the previous chapter. The authors' surgical guide provides a lingual access for the surgical drill. It would be informative for the authors to include either an explanation or a clinical view of a surgical guide restricting surgical drill access to one path of placement.

The final chapter provides a complete overview of the text with a realistic appraisal of the current overdenture status, its future, and areas for continued research. The author (Dr. G. E. Carlsson) suggests that although the trend for increasing use of implant-retained overdentures will probably continue, conventional complete dentures will remain a realistic and necessary alternative for many edentulous patients.

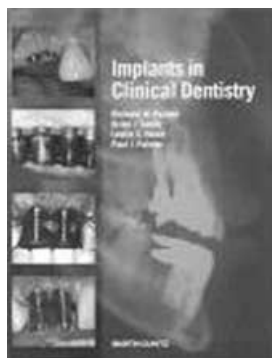
For both the student and the experienced clinician, this text offers a philosophy for successful treatment of edentulism by utilizing a patient-centered approach and the two-implant mandibular overdenture. It provides thorough evidence-based documentation in a quality bound soft cover with heavy paper stock, excellent supportive tables, graphs, illustrations, radiographs, and intraoral color images. The editors have done an excellent job of directing the 23 contributing authors to create a cohesive vision throughout the text, including the provision of a realistic

assessment of the current status of the implant-retained overdenture in clinical practice and suggestions for future research. The authors also suggest a patient-based treatment approach. This will be a valuable text for all students or clinicians wishing to incorporate the two-implant overdenture into their treatment philosophy. It provides evidence-based information to guide both the care-provider and the patient in making treatment decisions.

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## Implants in Clinical Dentistry

*Editors: Richard M. Palmer, Brian J. Smith, Leslie C. Howe, Paul J. Palmer. Martin Dunitz Publishers, Ltd., Thieme, New York, NY, 2002: ISBN 1-85317-805-5, 256 pages; 600 photos (mostly color, 50 b/w); price \$89.95, hardcover*

This book was written to provide comprehensive information on the prosthetic and surgical phases of implant dentistry, and is intended for use by general practitioners, prosthodontists, and oral surgeons alike. This book is divided into 5 parts. Part 1 reviews the success criteria of osseointegration and discusses patient factors such as age, untreated dental disease, severe mucosal lesions, and smoking. Other factors, such as implant biomechanics, including implant length, di-

ameter, shape, and surface characteristics, are also discussed. Additionally, submerged and non-submerged protocols, different loading conditions, and guidelines for choosing various implant systems are covered in Part 1.

Part 2 is divided into 5 chapters covering treatment planning of single anterior and posterior teeth, fixed bridge planning, and diagnosis and treatment planning for implant dentures. This section provides an overall view of treatment planning. It discusses general esthetic principles with emphasis on comprehensive clinical data collection, including clinical examination, radiographic screening, study casts, diagnostic set up, and basic treatment sequencing. The authors discuss single implant tooth planning in the anterior region in detail. They emphasize that in order to achieve ideal esthetic results, the complete evaluation of the status of the adjacent teeth, the ridge and soft tissue profile, planning and precise implant placement, sympathetic surgical handling of the soft tissue, and a high standard of prosthetics are all needed. The authors suggest the use of different implant options for the single tooth implant and, as an alternative, the use of wide diameter implants whenever necessary.

The remaining chapters discuss the treatment planning for multiple implants. They cover the planning of the numbers of implants to be placed, as well as their distribution. Also presented is a treatise on choosing between fixed bridges or multiple single units with a presentation of different prosthodontic options for implant retained dentures. These chapters are well written, and the diagrams and photographs are of high quality. The information is up-to-date and would be extremely beneficial for all members of the implant team, but especially those who are involved in the restorative phase.

Part 3 is divided into 6 chapters, which discuss the basic factors in implant surgery, including heat generation during implant placement, primary stability of implants, implant position, preoperative care, anesthesia and analgesia, flap design and soft tissue handling, surgical placement of the single tooth implant in the anterior maxillae, implant placement for fixed bridgework, and immediate and early replacement implants. Additional emphasis is placed on treatment planning and interdisciplinary approach, in order to achieve the best esthetic and functional results.

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