Osseointegration: On Continuing Synergies in Surgery, Prosthodontics, and Biomaterials

Edited by George Zarb, Tomas Albrektsson, Gerald Baker, Steven Eckert, Clark Stanford, Dennis Tarnow, and Ann Wennerberg, Quintessence Publishing Co, Inc, 2008. 200 pages. ISBN 978-0-86715. US \$168.

Authorities in the field of implant dentistry have collaborated to author this review of osseointegration from the early days of scientific investigation to current applications of the principles and practices. In 14 chapters and 190 pages, the authors have provided pertinent information concerning the disciplines involved in the diagnosis, treatment planning, and clinical application of endosseous implant-based treatment.

Several chapters provide a review of what has been made possible through the emergence of osseointegrated implants and what procedures/techniques have driven progress. Early chapters are concerned with background information related to the evolution of implant dentistry and the osseointegration concept. The illustrated surgical and prosthodontic discussions contain some "how to" examples of patient treatment modalities with their outcomes and what is possible in given clinical situations. The logical development and learning curve of experience in the field have enhanced the assessment of outcomes and proposed criteria for determining implant survival or success. Attendant to this assessment are the roles of hardware components and changes in material surfaces and design over time.

Pertinent diagnostic imaging modalities are reviewed with rationale for the use of each in the planning of treatment and actual procedural placement adjuncts. This information is amplified in the surgical protocol chapter by citing specific examples of use.

The impact of anatomic and physiologically imposed conditions, the effects of disease processes, patient habits, and the psychosocial aspects of implant dentistry are addressed. The healing responses to be expected for specific loading intervals and circumstances of placement give credence to the fact that the involved treatment provider needs to be aware of scientific justification for any hardware employed. Features of hard and soft tissue management during implant site preparation and actual implant placement provide reliable information applicable to diagnosis and treatment planning. The esthetic ramifications for anterior maxillary implant placement identify appropriate factors for consideration and suggest that such procedures may not be prudent undertakings for novice implant clinicians.

The chapter devoted to implant failure contains astute observations on failure cause and proposes potential etiologies for undesirable outcomes at specific loading intervals. The advantages and pitfalls of early loading protocols and immediate implant placement following tooth extraction are highlighted with emphasis on caution for patient selection.

Most of the *Osseointegration* contents are useful for the experienced clinician, continuous student of implant dentistry, and those particularly interested in the contemporary status of the osseointegration concept and clinical applications. The material is presented without apparent implant system bias. A helpful appendix containing Internet resources, their access, and use is available in the closing pages of the book. This timely conceived and well-written monograph represents a scholarly assessment of a widely accepted biologically and physiologically proven dental treatment modality and philosophy.

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