SURGICAL RESEARCH IN IMPLANT DENTISTRY

Surgical research in implant dentistry explores how research is conducted within the area of implant-based oral rehabilitation. The book is split into 21 chapters, each looking at different stages of research including development and design, methodology, as well as analysis and statistical procedures.

The first six chapters discuss preclinical study design and look at how different animals such as rodents and rabbits can facilitate implant research. These chapters also consider the financial implications, the suitability of each animal, and discuss specifically the surgical model in each animal. This is valuable information for readers planning their own research within this field. The topic of each chapter is extensively described and laid out clearly with headings and subheadings, allowing for an easy read and allowing readers to quickly access a particular section.

The next several chapters highlight how novel treatments within implant dentistry developed though histological, molecular, biomechanical, and other forms of research, and these chapters also describe the considerations the reader must take if they plan to conduct similar research.

There are a couple of chapters on imaging of dental implants, which not only researchers but also practitioners and other academics would find useful, as the type of radiographs required are discussed, including the effects of distortion and the reliability of radiographic measures. Also discussed here is the role of CBCTs and MRIs within implant research. These chapters are well laid out and have multiple radiographs and intraoral photographs throughout which demonstrate clearly the points made in the text.

The book ends with a couple of chapters on advances within implant dentistry thanks to digitalisation. Various systems are discussed, as well as their ability to integrate with one another, increasing accuracy. Also mentioned here is the research relating to each component such as intra-oral scanners, facial scanners, and implant planning software, amongst others. This is not only useful for researchers who may be conducting a project in one of these areas, but also for practitioners who may want to implement one of these digital technologies within their practice.

Overall, this book is well written and provides comprehensive information on research within the area of implant-based oral rehabilitation. It is a useful resource targeted mainly towards researchers and academics, while also being useful to students and general practitioners aiming to understand implant-based dentistry in greater depth.

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