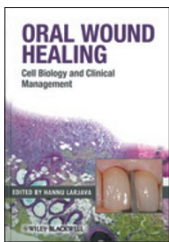


Book reviews

Books, videos, CD-ROMs, DVDs and any other relevant items submitted for a review in the BDJ should be addressed to:

Laura Pacey,
Assistant Editor,
British Dental Journal,
Nature Publishing Group,
4-6 Crinan Street,
London,
N1 9XW

ORAL WOUND HEALING: CELL BIOLOGY AND CLINICAL MANAGEMENT



H. Larjava (ed)
Wiley-Blackwell
price £96.95; pp 432
ISBN 9780813804811

Oral wound healing: cell biology and clinical management is a new resource that provides the reader with a detailed look at the processes of wound healing including both intra- and extra-oral sites.

The book is, as expected, quite heavy reading – particularly in the earlier chapters as described below. It is aimed at a target audience of specialists, surgeons and researchers, but the way the chapters are set out, and some of the topics covered, such as healing of extraction sockets, implants and periodontal regeneration, make the text also of value to interested practitioners who are looking for more than an overview text in their particular area.

The book begins by giving an overview of the contents with a summary of each chapter. It kicks off with a look at haemostasis. This takes you back to basics with coagulation cascades and clotting factors. It is a good reminder of what is happening on a cellular level when we cause injury to tissues. There is an interesting section on warning signs to look out for in the patient's history that may indicate a bleeding tendency, which is of relevance to all practitioners. The first half of the book includes sections on inflammation, angiogenesis, re-epithelialisation and healing of extraction sockets. These chapters look at the

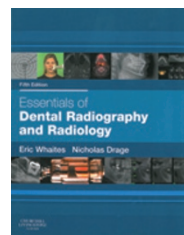
complex cellular-level interactions and mechanisms that affect healing and describe the implications of failure of any of these interactions. There are informative, colourful diagrams throughout and tables of information that serve as good reference points for the topic.

The chapters at the end of the book regarding periodontal surgery, burn healing and dentofacial defects have some very high quality photographs that really enhance the text. These chapters are written in a way that is highly informative but still manageable for the novice reader. For this reason, these later chapters were the highlight of the book for me.

The text is supported throughout by descriptions of various theories on the topics, and current research in the field is described in detail. This aspect strengthens the text and of course makes for a more interesting read. The authors have made the book relevant and interesting for a wide audience and have managed to cover a huge topic in a relatively concise text.

A. Walshe

ESSENTIALS OF DENTAL RADIOGRAPHY AND RADIOLOGY, 5TH EDITION



E. Whaites, N. Drage
Churchill Livingstone
price £47.99; pp 496
ISBN 9780702045998

Written by two of the most eminent names in dental radiology, this popular book is now in its fifth edition and covers traditional imaging techniques with updates and expansions on new

imaging modalities.

The book is detailed and comprehensively covers almost all that a general practitioner, undergraduate and postgraduate could want to know about radiology and radiography. The book is divided into four sections. The first looks at the radiographic image and provides an introduction; the second looks at physics, equipment and radiation protection; the third looks at radiography and covers the taking of more common images such as periapicals and bitewings and more specialist imaging such as cone beam computed tomography. The final section covers interpretation of radiographs.

The book is well laid out, with each chapter starting with the basics before moving on to more complex areas. This is helpful as it means the information is accessible to all; you can start from the beginning and work through full chapters, or simply access a particular area you are interested in. The text within the book is very detailed; however, there are a huge number of clear images and prints of radiographs, which enable you to more fully appreciate what is being explained. Where appropriate, images of normal anatomy are provided, often prior to discussing pathology, which I found helpful to refer to.

There is the additional benefit of an online self-assessment module, available once you purchase the book, which contains multiple choice questions, extended matching questions and 'drag and drop' style questions. This would be very useful for anyone revising for undergraduate or postgraduate examinations. There are specific online modules aimed at dental care professionals, enabling targeted learning.

One of the only criticisms I would have of the book is the fact that there are very limited colour photographs and diagrams, which can make the pages appear a little dull.

I can see why previous editions of this book have been so popular. It is easy to dip in and out of, so knowledge on particular topics can be easily refreshed. The clear explanations make a potentially arduous topic to revise an interesting read. A must have for undergraduates and GPs alike!

L. Ridsdale

IMPLANT SITE DEVELOPMENT



M. Sonick, D. Hwang (eds)
Wiley-Blackwell
price £117.00; pp 456
ISBN 9780813825120

Implant site development refers to a variety of procedures aimed at augmenting an edentulous ridge to optimise implant positioning for excellent prosthesis aesthetics and function. From the outset, the editors make abundantly clear implant placement and augmentation of the site should be prosthetically driven.

The text begins with an overview of bone metabolism and healing, which is concise and focuses on factors underpinning clinical decisions. Following this, a refreshingly pragmatic, albeit flamboyantly written section by the editors on their treatment philosophies include 'not to rush treatment' and 'aesthetic implant restorations are fraught with risk'. Anatomy of the jaws was covered extensively in two chapters illustrated with excellent quality images from cone beam computer technology (CBCT). Numerous clinical cases illustrated virtual implant placement highlighting shortcomings of alveolar dimensions and critical anatomical structures that require careful attention. Well-appointed, clearly labelled diagrams explaining key dimensions for implant positioning help the reader relate to the extensive and scrupulous intraoperative photographs during treatment.

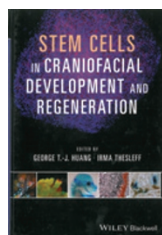
This nicely sets the scene to detail the options of implant site development.

Ridge augmentation procedures such as pre-extraction orthodontics, socket preservation, and pre- and perioperative implant placement grafting are initially covered. Pleasingly the authors have neatly categorised the plethora of currently available grafting materials into visually attractive tables and flow charts. Block bone grafting from extra and intraoral donor sites and maxillary sinus augmentation procedures follow, but with progressively fewer illustrated cases. Distraction osteogenesis and soft tissue augmentation completed the list of surgical options. Unfortunately, provisionalisation and prosthetic considerations were only briefly discussed.

The authors have gone to great lengths to cover all potential clinical techniques, available materials, potential complications and future developments associated with implant site development. This has led to slight repetition and pushing the boundaries of what is achievable; some techniques mentioned require extensive clinical experience and knowledge beyond this text. As an overview for clinicians with an interest to begin implant treatment it is on the whole well referenced, utilising excellent high quality illustrations making an informative and pleasurable read.

G. Calvert

STEM CELLS IN CRANIOFACIAL DEVELOPMENT AND REGENERATION



G. T. J. Huang, I. Thesleff (eds)
Wiley-Blackwell
price £100.00; pp 584
ISBN 9781118279236

In recent years, major advances have been made in stem cell biology and in tissue engineering technology. As a result of this rapidly evolving niche, this text focuses on the potential use of tissue specific stem cells in bioengineering of craniofacial tissues and organs. It is an introduction to stem cells with an emphasis on their role in craniofacial development. This text is divided into three sections and contains 28 well written chapters. Filled with superb, full-colour photographs and

step-by-step, illustrated procedures, this book is the definitive source on all aspects of stem cells in craniofacial development.

Stem cells have the unique ability to repair and replenish adult tissues and are now being utilised in cutting-edge medical therapies. The field of stem cell biology focuses on the full spectrum of cell behaviour from the stem cell state to the fully differentiated condition. With contributions from a coterie of renowned experts in the field of craniofacial research *Stem cells in craniofacial development and regeneration* should become the *vade mecum* of aspiring researchers, developmental biologists, tissue engineers and dentists. This comprehensive text can also be utilised effectively by oral and maxillofacial surgeons and colleagues in related fields. This edition reflects the latest trends, concepts and innovations in the field of stem cell regeneration.

The first section of the book is divided into nine chapters discussing the embryogenesis, morphogenesis and regeneration of craniofacial tissues and organs. Cranial neural crest cells, temporomandibular joint and craniofacial muscle development are highlighted. In addition, paragraphs are devoted to understanding the formation, proliferation, migration and differentiation of neural crest cells. Various contributors explain how craniofacial anomalies occur and discuss craniosynostosis and Treacher Collins Syndrome. In order to develop therapeutic strategies for minimising or preventing craniofacial anomalies it is imperative to understand the normal events that induce neural crest cells and influence their differentiation during embryogenesis.

The authors consolidate prior knowledge of stem cells in the second section of the book where they elaborate on the concept of induced pluripotent stem cells. The third section of the book focuses on stem cell mediated craniofacial tissue bioengineering. It summarises the use of scaffolds, growth factors and stem cells in engineered tissue regeneration. Chapters reinforce periodontal bioengineering strategies including the present status and some developing trends for the future.