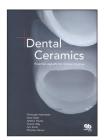
## **Book reviews**

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



C. Hammerle, I. Sailer, A. Thoma, G. Halg, A. Suter, C. Ramel UK: Quintessence price £47.00; pp 136 ISBN 9783938947692

This is the first edition of this book, published in 2008, and as the title suggests it provides an overview of the clinical aspects of the provision of ceramic restorations.

The book is designed 'as a quick reference guide and to provide practicing dentists with specific information to manufacture ceramic restorations'. It consists of nine chapters and contains only 127 pages, making the book concise and quick to read.

The first chapter covers the scientific aspects of ceramics and gives an excellent overview of the composition and classification of ceramics, along with a description of their properties and how they relate to the performance of ceramic restorations. The next chapter discusses processing methods including manual and CAD/CAM technology. Following on from this, there are chapters on the clinical aspects of veneers, non vital abutment teeth, all-ceramic crowns and bridges and implant supported restorations. There is also a chapter covering the different methods of bonding ceramic restorations, which clarifies an area that dentists often find confusing. The combined approach of bleaching and ceramic restorations is also highlighted.

The book is well written with chapters that are easy to follow. The layout of the chapters is in small paragraph style with good use of subheadings and bullet points. The format is concise and easy to read and well illustrated with tables, diagrams and clinical photographs. On a minor point, some errors in the reference citations were noted. It provides an account of the more standard ceramic restorations but does not cover all preparations comprehensively, for example, only one type of veneer preparation is discussed.

To summarise, this is an enjoyable book to read. It is easy to understand and is useful as a quick reference guide. It is an aesthetically appealing book providing a step by step guide to ceramic restorations, with written text and accompanying photographs allowing for easy clarification of each clinical stage. The book would appeal to undergraduate dental students and general dental practice. However, it would be of more limited use to specialists in restorative dentistry. While the book lacks postgraduate detail, it provides an excellent overview of ceramic restorations.

S. Pollington

## MANAGING OROFACIAL PAIN IN PRACTICE



E. Murphy UK: Quintessence price £28.00; pp 170 ISBN 9781850971306

This is a recent addition to the highly acclaimed Quintessentials of Dental Practice series. This book aims to aid the general dental practitioner in the assessment, diagnosis and management of orofacial pain as well as identifying cases where it may be best to refer for further investigation. It has a firm clinical emphasis.

A foreword written by Nairn Wilson summaries the complex and challenging nature of managing a patient with orofacial pain. We can all recall having been drawn into providing irreversible treatment for a patient in pain where no diagnosis has been able to be made. An important point raised for such a case is 'No diagnosis, no treatment'.

Dental disease is by far the most common cause of orofacial pain therefore a dental cause should first be excluded in all cases. The assessment, diagnosis, management and treatment of many conditions are covered. These include: TMJ disorders, bruxism, myogenic pain, neurovascular pain eg migraine, giant cell arteritis, cluster headache and neuropathic eg trigeminal neuralgia. The signs and symptoms of these different conditions can often be misinterpreted. Tables, illustrations and well written text are used to clearly differentiate between them.

A very useful point highlighted was the importance of psychological factors such as depression, anxiety and somatisation on treatment outcome. Studies have found the presence of premorbid psychological trauma an important indicator of the risk of developing chronic pain. Such factors may include: physical or sexual abuse, neglect or loss of a parent. Taking a detailed social history is important as early referral maybe indicated as such factors will impede treatment outcome. Accurate diagnosis is essential in the acute phase to prevent the pain becoming chronic as the longer pain is present psychological factors plays a dominant role. Another interesting point is that there is no link between the severity of the initial injury and the development of chronic pain and 80-100% of chronic pain sufferers are depressed.

Case presentations are present at the beginning of each chapter and the final chapter is dedicated to this. Examples of cases include: 'I cannot open my mouth' and 'My toothache will not go away'.

This book is an excellent, comprehensive clinical reference invaluable for every general dental practitioner. With the aid of this book one would hope a correct diagnosis can be made so the patient receives the best treatment as soon as possible and where referral is needed this is done early and appropriately. Improving our knowledge and understanding of these conditions should improve our patients understanding and therefore acceptance of their condition.

M. Edwards

## TISSUE ENGINEERING: APPLICATIONS IN ORAL AND MAXILLOFACIAL SURGERY AND PERIODONTICS



S. E. Lynch, M. Nevins, R. E. Marx, L. A. Wisner-Lynch UK: Quintessence price £73.00; pp 312 ISBN 9780867154641

This is a comprehensive textbook written by an eminent group of clinicians, scientists and researchers in the field. It consists of 20 chapters which are subdivided into four sections to help the readers sail smoothly through this comprehensive book.

The first four chapters address the principles of tissue-engineering: each chapter contains clear diagrams and illustrations which explain the cellular interaction and gene turning on for tissue healing and bone regeneration. The authors also provide several tables to help the readers understand the broad spectrum of cytokines, their mode of action and the complex regulatory mechanism of osteogenesis.

The scientific basis of tissue engineering is discussed in detail: the role of the scaffolds, cells and regulators is explained. The cycle of the osteogenesis cascade is discussed; the authors provide several figures of electronic microscopic images to illustrate bone mineralisation.

The advances in gene therapy for periodontal bioengineering are discussed, and the applications of tissue engineering principles in clinical practice are highlighted. This concept is demonstrated with more than 40 illustrations in Chapter 4, which demonstrate the application of basic science clinically.

The book then starts to focus on the treatment of advanced periodontal defects using bioactive therapies. There is a nice illustration of a periodontal defect and the application of recent regenerative techniques which include ceramics, xenographs and recombinant growth factors for surgical repair. The readers would be enlightened by the recent advances in this field and made aware of the improved bone and periodontal regeneration using recent advances of tissue bioengineering.

The textbook also illustrates the soft tissue engineering applications in dentistry, which would be of particular interest to GDPs and clinicians who are dealing with localised bony defects of the oral cavity. There is no doubt that the chapter on the development of implant placement is crucial for those who are practising oral and maxillofacial surgery. Once more, the illustrations are more than satisfactory and there are some interesting presentations which illustrate the possible clinical difficulties and the required procedures to achieve the best possible results.

A full chapter has been dedicated to the application of platelet-rich plasma in oral and maxillofacial surgery and periodontology. This chapter provides a manual of safe practice and a good guide to practitioners to achieve the best possible results. The textbook focuses on the osseous regeneration with recombinant BMP2, which is a fairly recent application of this cytokine in the maxillofacial region. There is a clear demonstration of using BMP2 for ridge augmentation and sinus build-up with histological evidence to demonstrate the regenerative process. The necessity for multi-centre randomised clinical trials to demonstrate the effectiveness and safety of the recombinant BMP2 in sinus floor augmentation is emphasised. The ability to use the recombinant product that eliminates the need for harvesting of autogenous bone and the morbidity associated with the harvesting procedure, is highlighted.

The concept of distraction osteogenesis is also included in the textbook, which provides the reader with the broad scope of all the recent advances in manipulating bone healing.

Three chapters of this book are dedicated to craniofacial osseous reconstruction with recent tissue engineering strategies. This would be of particular interest to craniofacial surgeons who undertake major facial reconstructions secondary to cancer resection or loss of bone due to trauma. In addition, the manipulation of tissue healing in cleft lip and palate has also been considered to complement the chapters on craniofacial reconstruction. I found the section on the tissue engineering strategy in the treatment of temporomandibular joint dysfunction syndrome fascinating. It covers the basic anatomy and physiology of the joint, and the molecular mechanism associated with the inflammation of this structure. The use of cartilage as a tissue scaffolding is also discussed. The authors conclude that new tissue engineering approaches to promote cartilage and disc repair of the temporomandibular joint are promising as future strategies. The authors highlight the importance of further understanding of the cellular and mechanical mechanisms of tissue repair. The use of relevant animal models may overcome some of the important research difficulties.

The last two chapters of this book are really beyond the scope of oral and maxillofacial surgery; one of them is on ankle fusion procedures and the other is on tendon healing.

In summary, I found this textbook enlightening, comprehensive and easy to read. There are hundreds of references included after each chapter which provide useful material for researchers in the field as well as for readers who would like to expand their knowledge on the subject. I would highly recommend this book to be acquired by all the research centres in the field, major teaching institutes and general hospitals which undertake sophisticated reconstructive procedures in the head and neck region.

A. Ayoub