aspect of implant treatment is also provided, with good notes on the requirements and procedures involved in the preparation of the surgical site with reference to both hard and soft tissue considerations.

The second part of the book provides an excellent step-by-step guide to the practical protocols involved in providing a definitive implant-retained prosthesis. Each type of prosthesis, categorised by abutment type, single *versus* multi-unit restoration, and cement *versus* screw retention, has been afforded its own chapter, facilitating a very clear and easy to follow set of instructions. The written description of each step is supplemented by an illustration, which are of excellent quality throughout the book. I can say without doubt that a better and clearer protocol would be extremely difficult to produce. My only criticism of this book is that at times it does not identify where nomenclature used may vary from those used by the clinician, and in a book aimed at those with little knowledge in the area, this can on occasion cause some confusion.

I can have no hesitation in recommending this book to any clinician aspiring to restore implants, or those who are looking for a refresher in the principles of implant-retained prostheses. It may be, however, that its length will popularise it more with students seeking a deeper understanding of theory before embarking on treatment. There is no doubting there is much else to read, but as a starting point this book is quintessential in implant education.

H. Ali

DENTAL RADIOGRAPHY: PRINCIPLES AND TECHNIQUES, 4TH EDITION

J. M. Iannucci,
L. J. Howerton
UK: Elsevier
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This fourth edition textbook is intended to teach basic radiographic theory and technique to dental and dental hygiene students and is divided into seven

colour-coded sections containing 35 chapters in total. Topics covered include radiation, equipment, film processing and interpretation basics in addition to an overview of normal anatomy. The chapters are concise and presented in a useful standardised format consisting of learning objectives, key terms, step-by-step procedures, helpful hints, and summary boxes. End of chapter self-tests have answers available on the companion website, EVOLVE. For teachers, lesson plans are included as a complementary online learning resource here also.

Students may find helpful tips on 'Dos and Don'ts' when performing techniques and on how to overcome practical difficulties. I found the new chapters on digital and 3D imaging most valuable. The authors have explained relevant terminology and provided reconstructed images showing the diagnostic capabilities of 3D cone beam CT imaging, including defining anatomic and pathologic structures, and treatment planning in complex cases eg implant placement.

Conversely, the introductory section on radiation physics is perhaps too detailed to keep the reader involved, and the interpretation section appears to be very basic. It covers radiological interpretation of restorations, caries, periodontal disease and dental trauma but does not cover facial trauma and salivary gland pathology: topics which are covered in the undergraduate curriculum. I recall as an undergraduate being particularly concerned about differential diagnoses of radio-opaque and lucent lesions and this was only touched on briefly. For advanced oral radiography techniques or interpretation, one should refer to a more detailed text.

The reader is reminded that this is an American text and although the principle of ALARA is mentioned, UK legislation (IRMER) is not covered. In typical American flair, there is a chapter on interpersonal skills and patient relations which can at times be wordy.

In conclusion for the UK reader, the information within this book is a supplement to student radiology lectures and provides a good novice learning

tool covering radiology basics. I feel this text is most suited to an undergraduate level for dental hygienists, therapists and dental students alike. It also provides an interactive inventive teaching resource combining text and online material. However, in comparing this to the UK's best selling competitor, I don't think I will be trading in my beloved copy of Whaites just yet.

N. E. O'Murchu