field studies. Each chapter has a page-numbered contents table allowing easy access to the section desired and an excellent summary at the start. This allows the salient points to be understood even when skimming the book, especially if the physiology appears scary. Anyone familiar with West's respiratory physiology text will immediately recognise the same clarity of the graphs. Diagrams and graphs are positioned within the relevant text avoiding the necessity of page turning when referring to the illustrations. My only criticism of the illustrations is the lack of colour, especially in the mountain photographs.

There is currently an increase in the interest in altitude physiology promoted by the ease of travelling to such environments and high-profile expeditions and meetings. The Cauldwell Xtreme Everest research project has seen a fellow of this College, Mr CHE Imray, perform experiments on the summits of two 8000 m peaks in the last year, Cho Oyu and Everest.

High Altitude Medicine and Physiology is a definitive text. It should be the first port of call for anyone with medical training and an interest in high-altitude physiology or indeed planning to travel to high altitude, to gain an understanding of the associated physiological changes. It is not a field guide to expedition medicine or athletic training but it does contain the core principles of physiology and medicine on which these areas of medical interest are based.

Urinary Stone Diseases: The Practical Guide to Medical and Surgical Management

MARSHALL L STOLLER, MAXWELL V MENG

EXTENT P/H	696 pages, Hardback
PRICE/ISBN	£115.50, 9781588292193
PUBLISHER	Humana (Towota, NJ), 2007
REVIEWER	Ling Lee
STAR RATING	****

This text book is divided into four sections. The background section presents the history, epidemiology and genetics of stone disease, theories of stone formation and analysis of kidney stones. Chapter 1 gives a well-researched walk through the surgical history of stone management from the ancient Egyptians to the rapid changes in technology of the last century, which have shaped our present-day stone management. Chapter 3, on genetics, reveals the complexity of the subject as well as the difficulties in translating a known specific gene defect into the metabolic fault that predisposes to stone disease.

Chapters 6–19 make up section 2 on metabolism, which deals with various metabolic causes of stone formation. This section highlights the complex interplay of internal (genetic and metabolic) and external (diet, climate and concurrent illness) factors that influence urolithiasis. While a great deal of research

has helped our understanding of stone disease, the complete understanding of why some patients do not form stones in spite of abnormal physiological factors remains an enigma.

Section 3 on presentation and evaluation comprises four chapters, chapters 20 and 23 discussing imaging techniques, anatomical considerations and the benefits of a multidisciplinary approach in selecting the best management option. Radiation and infection safety guidance is presented in chapter 21. Differential diagnosis of loin pain and the initial management of the acute presentation of renal colic are dealt with in chapter 22.

Section 4 on treatment makes up the remaining third of the book, covering conservative management, palliation with ureteral stenting and the three main areas of intervention. Open stone surgery is rare in the developed world and the authors in this chapter describe fully the surgical techniques used for the complex staghorn calculi. The role for open cystolitholapaxy is still important yet is not included in this chapter.

In this section, I found a fair amount of overlap between the chapters, which is probably inevitable given the closely related chapter titles, such as 'Indications and outcomes of ureteroscopy' and the following chapter 'Ureteroscopy: Technical aspects'. Nevertheless the chapters stand well on their own and the authors have comprehensively presented the evidence in support of the various treatments. Possibly the biggest omission in the conservative management is the use of α -blockers in facilitating the passage of lower ureteric stones.

The aim of the editors to 'put together ... contemporary views on the development, treatment and prevention of urinary stone disease' is successfully achieved in this textbook. The chapters are well researched and written by experts. There could be greater use of tables, as in chapter 29, to present the outcomes of the treatment modalities. For the jobbing urologist, sections 3 and 4 are the most interesting and the conclusion at the end of each chapter and sections on 'pearls and tricks' are particularly useful. This textbook describes the practice of stone management in the developed world and is aimed at both the urologist who has a general interest in urolithiasis as well as specialists in the field. It would be a useful addition in any urology and lithotripsy unit.

AO Principles of Fracture Management

THOMAS P RÜEDI, RICHARD BUCKLEY, CHRISTOPHER G MORAN

EXTENT P/H	1106 pages, Hardback/DVD
PRICE/ISBN	€399.95, 9781588905567
PUBLISHER	Thieme (Stuttgart), 2007
REVIEWER	Stephen Hodgson
STAR RATING	***

For the last half century, the AO Foundation has been a pioneer in developing principles and techniques of fracture

fixation. Wide-spread acceptance of its philosophy has been supported by a well-developed educational programme including instructional meetings and technical manuals. The original AO manuals of internal fixation expounding the principles of anatomical reduction and rigid internal fixation were compulsory reading for orthopaedic trauma surgeons.

This book builds on the first edition published in 2000. Like its award-winning predecessor, this second edition aims to provide trainee and senior surgeons with up-to-date knowledge for correctly applying AO philosophy and principles as they apply to the management of fractures. I feel these aims have been largely met. Rapid advances in trauma knowledge during the 7 years since the first edition are recognised by the inclusion of new chapters on minimally invasive surgery, soft-tissue handling, osteoporosis and an introduction to biotechnology. All other chapters have been updated with particular reference to the increasing popularity of bridge plating/locking plates.

The book consists of two volumes. Volume 1, 'Principles', contains sections covering basic sciences, fracture classification, decision-making, surgical principles, general topics and complications. Volume 2, 'Specific fractures', contains 21 chapters covering most fractures including long bones, pelvis and acetabulum, and spine. This results in some inevitable repetition with general principles covered in volume 1 being repeated in the individual chapters in volume 2. This does, however, enable each chapter to stand alone for one-off reading.

For a multi-author production, the style is generally consistent between chapters. Each chapter provides an overview of relevant anatomy, surgical approaches, basic science, fracture classification (largely confined to the AO system), decision-making, surgical techniques and pitfalls. The writing style is clear and concise, making for easy reading. The illustrations and diagrams supported by short videos in the accompanying DVD are of excellent quality.

Most chapters provide a clear, concise overview of their subject. Particularly strong chapters are those on fracture classification, intra-articular fractures, intramedullary nails, polytrauma (including a good description of the concept of damage control surgery), proximal humeral, pelvic and acetabular fractures. Some chapters, for example external fixator, distal radius and wrist, suffer due to restricting fixation devices described to those produced by AO. The proximal femur chapter is also too brief and lacking in operative tips for such a common subject. The spine chapter has less detail than the others, though this is probably understandable for such a large topic.

Overall, there is a good number of relevant references for each subject. The arguments made in favour of the AO philosophy are generally sound. At times, it seems there is poor evidence offered to support the principles recommended,

though this reflects the relative lack of randomised controlled trials in trauma surgery rather than being a criticism of this book.

This book is released into a market where there is fierce competition ranging from established major reference works through other AO publications to a variety of regional or single fracture texts. Against this background, it has to be asked at whom this book is aimed. I feel it can be recommended as worthy of consideration for higher surgical trainees requiring a basic grounding in the principles of operative fracture care. Nevertheless, in an era of increasing subspecialisation in trauma care, it does not provide sufficient detail for subspecialty expertise but I feel it can be recommended for consultants providing a general trauma service outside their field of subspecialty interest.

Orthopaedic Knowledge Update: Pediatrics 3

MARK F ABEL

EXTENT P/H	400 pages, Paperback
PRICE/ISBN	£83.95, 100892033533
PUBLISHER	American Academy of Orthopedic Surgeons (Rosemont, IL), 2006
REVIEWER	Robin Paton
STAR RATING	*****

The editor states that the goal of this book is to provide a review for general orthopaedic surgeons and residents in training that will update evidence-based treatments and guidelines in paediatric orthopaedics. It is also hoped that it will be used as a reference source. The aim is to summarise current and past information, providing a text book containing the essential knowledge necessary for practising paediatric orthopaedics, both elective and emergency. I feel that this aim has been generally achieved as most common aspects of children's orthopaedics are covered. However, the book in itself cannot cover the whole of paediatric orthopaedics and other reference sources would be required.

It is broken into five sections, each with a different section editor. These are: general paediatric orthopaedics, neuromuscular disorders and metabolic disorders, lower extremity conditions, paediatric trauma and the spine. The sections are written by experienced American authors who are experts in their fields. Although it is written very much for those with an interest in paediatric orthopaedics, this book will also be useful for those general orthopaedic surgeons who have to care for children when on emergency 'take'. There are particularly good sections on bone and joint infection and paediatric trauma.