Surgery of the injured hand towards functional restoration

R. Venkataswami

Pp. 581. New Delhi, Jaypee Brothers Medical Publishing, 2006.
ISBN: 978-81-8448-471-7. £148.99

This is a book that was commissioned and published in India. The editor, himself an internationally respected hand surgeon has assembled 48 chapters from over 40 contributors. His stated objective is to cover the topic of hand injuries emphasising the restoration of function from those surgeons with great experience in the front line of managing such injuries. He has recruited the talents of those authors who have been a significant part of his professional life for whom he clearly has great respect, even affection. This book certainly meets his objective.

Starting with a brief history of hand surgery from Kleinert who also wrote the foreword, it goes on to describe the anatomy and dynamics of the hand and fingers. Major injury to both soft tissue and skeleton, brachial plexus and the carpus are covered together with substantial sections dealing with revascularisation, replantation and digital transfers.

The contributors are from orthopaedic and plastic units throughout the globe and represent a 'who's who' of internationally acclaimed hand surgeons. An extraordinary breadth of material is covered and the volume comes with two invaluable DVD's relating to flaps and brachial plexus surgery.

For those of us who practice hand surgery in the safe environment of the United Kingdom, this book will be a revelation. Contributions from the Indian surgeons are inspirational, full of sound common sense in the management of appalling injuries seldom seen in the West. The results described are near-miraculous. Particularly edifying is a chapter from Venkataswami himself on the creation of an 80-bed hand unit which started from a small space in a corridor in the Stanley Medical College Hospital in Chennai. Most other chapters are well-referenced and informative. Also noteworthy is the coverage of flexor tendon surgery, nerve repair, composite reconstruction and microsurgical reconstruction of the thumb amongst many other excellent chapters.

This book will appeal to the trainee thinking of a career in Hand Surgery and may well guide the choice of an upper limb fellowship.

There are criticisms and it is obvious that many authors are not writing in their first language. Proof reading is poor. There are many misprints, spelling and punctuation errors which will no doubt be addressed in future editions. Although these are minor irritations they do not diminish the merit of the text. The illustrations are of a variable quality and some photographs are inadequate to elucidate the text.

The wisdom and breadth of this book is extraordinary, nevertheless, and allowed a single choice of a manual on hand injuries it would be hard to find one more suitable.

D. S. Nairn

Spine disorders: medical and surgical management

J. D. Bartleson and H. Gordon Deen

Pp. 292. Cambridge, Cambridge University Press, 2009.
ISBN: 978-0521-88941-4. £65.00

This is a very refreshing book written to give an overview of the various disorders that afflict our patients with an up-to-date evaluation of modern treatment options and their likely outcomes. It is co-authored by a neurologist and neurosurgeon to give a balanced viewpoint.

The book is well written with good annotated illustrations. It starts with an explanation of basic anatomy and takes the reader through the ageing process and degenerative change. There is a good section on pain perception and causation. The three areas of the spine, cervical, thoracic and lumbar are dealt with in terms of pathology, investigations and treatment options. There are good explanations of common operative procedures with some excellent illustrations.

The novel features of this book include sections on the referral of patients for surgery and the persistence of symptoms following surgery. This is difficult ground and well covered. I especially enjoyed the 'clinical pearls' in the lumbar spine chapter. In order to show this book is abreast with contemporary thought, there is a chapter on minimally invasive surgery, disc replacement and the new technologies of dynamic stabilisation and computer-assisted intra-operative guidance. The various techniques for fusion in the lumbar spine are discussed but without reference to the TLIF

procedure which is surprising, and there is only a limited discussion of deformity. I felt the return to work timings were conservative.

The book concludes with a chapter entitled 'please don't make my mistakes' which was well written and will be painfully familiar to spinal clinicians. This is an excellent and very necessary book. It will be of use to generalist orthopaedic surgeons and neurosurgeons, and for the trainees of both disciplines. It will also be useful for allied practitioners such as physiotherapists, chiropractors and osteopaths, and I recommend that a copy be present in every General Practice for reference when informing patients of the options and indications for surgery.

A. Quaile

Dahlin's bone tumours. Sixth edition

K. Krishnan Unni and C. Y. Inwards

Pp. 402. Philadelphia: Lippincott Williams & Wilkins, 2010.

ISBN: 978-0781-76242-7 \$199.00

This beautifully illustrated book gives a thoroughly sensible view about the challenges of diagnosing bone tumours based on the massive archive available at the Mayo Clinic, numbering some 10,165 cases. The introduction points out the well known challenges and pitfalls in the diagnosis of bone tumours, reiterating the importance of multidisciplinary study and how important both the clinical and radiological features are in reaching a final diagnosis.

K. K. Unni, the senior editor, is a highly respected pathologist with a string of publications to his name, dating back to 1971. This latest version of this classic text combines tips and wisdom derived from four decades. I was particularly interested to see how he dealt with well known contentious areas of diagnosis. He emphasises the difficulty of differentiating between enchondromata and low grade chondrosarcoma using the criteria first described by Mirra; despite all his experience the author remains sceptical of the possibility of enchondroma becoming chondrosarcoma. Another contentious area is the link between osteofibrous dysplasia (OFD) and adamantinoma. Although some believe that OFD can turn into adamantinoma and as a result recommend that all OFD should be aggressively excised, Unni does not believe that this takes place and is happy to differentiate the two conditions. Despite ongoing concerns about its existence, MFH of bone still deserves a chapter.

This book is a safe reflection on the pathology of bone tumours over the past 70 years. Whilst mention is made of immunohistochemical techniques, especially in Ewing's sarcoma, these are not extensively considered. Treatment is outlined for most conditions but reflects very much the work done at the Mayo clinic rather than cutting edge techniques available elsewhere. This book should be available in all bone

tumour units for reference and will also be popular with general pathologists. It is more a reflection on what has been, rather than a statement of the current art.

R. Grimer

The nonsurgical treatment of fractures in contemporary orthopaedics

A. Sarmiento and L. L. Latta

Pp. 411. New Delhi: Jaypee Brothers Medical Publishing, 2010.

ISBN: 978-81-8448-907-1. \$150.00

Sarmiento and Latta have compiled a very readable book on the management of fractures without the use of internal fixation. One might describe it as their own Festschrift to a lifetime's philosophy, championed by Dr Sarmiento. He has been steadfastly supported by Dr Latta, the Director of Orthopaedic Research at the University of Miami, where he has, perhaps rather unsung in the past, provided scientific evidence in a laboratory replete with engineering rigour. Any discipline needs iconoclasts and philosophers and Trauma and Orthopaedics are no exceptions. We are properly influenced by thinkers such as Watson Jones, Charnley, and McKibbin; now Sarmiento and Latta have added persuasively about the nature of fracture healing and how this should influence how we manage broken bones. All of them remind us that we are meant to be inquisitive, influenced by evidence, open minded and holistic - indeed physicians who happen to practice orthopaedic surgery.

One of their simplest demonstrations is an experiment reprised, quite justifiably in this book, fondly known as the 'hot dog' test of stiffness of a cylinder of meat wrapped around a broomstick. The preparation is then compressed without a wrapping, and repeated with the meat first enclosed in simple brown paper and then with thermoplastic. The wrapping confers stiffness to the construct - proving (as with Clinton's "it's the economy, stupid" that "it's the strain, stupid" when it comes to the mechanics of fracture healing. This elegant demonstration shows the power of engineers and clinicians working together. This rich partnership between an inquisitive and thoughtful clinician and a clear-thinking engineer concentrates, inevitably, on the mechanical aspects of healing. Readers should not look to the text to help them understand the cellular and humeral factors; this can be found elsewhere.

This book asks us to remember that fracture healing is a powerful product of evolution, and we tinker with it at our peril. They show that with selected fractures we are better harnessing these ill-understood forces rather than literally pushing them aside in our rush to get a quick fix. The authors' appeal that Trauma surgeons must avoid becoming 'cosmetic surgeons of bone' is memorable.

The book is well laid out and lavishly illustrated with selected, if time honoured, radiographs. Every chapter is provided with experimental evidence so that the basic principles of non-operative management have been honed and revised; the associated literature review is extensive. This is a book for surgeons who want to see all viewpoints and not to rely on the maxim that Alan Apley was so fond of teasing us with - "fixation is fun". Sarmiento persuades us to put our heads as well as our hands into gear, appreciating that every fracture is a unique problem to be solved.

This book belongs with Charnley's own monograph on the *Closed treatment of fractures* and gems such as Henry's *Extensile exposure* which go well beyond the cookbook approach and remind us of the richness of our heritage and the need to develop philosophies based on evidence beyond commercial advertising.

D. Rowley

A practical guide to hand and carpal fracture management

G. Giddins, A. Abbassian and I. Langdon

Pp. 200. London: Imperial College Press, 2009.

ISBN: 978-18481-6261-7. £34.00

Subtle differences emerge from a review of our 'book reviews' over the years. The expansion of specialist journals has reflected the contraction of orthopaedic scope for the average surgeon. The subspeciality journals have assumed the role of collectors and presenters of statistical evidence, from which biased opinion slowly develops towards truth.

The comprehensive textbook, such a standard 50 years ago, and so famously contributory to postgraduate and undergraduate education, has quietly faded from the scene. Those texts assumed biblical authority from the monographs by Watson Jones, Crawford Adams, Mercer, Apley etc, in the United Kingdom, but now they have given way to the Instructional Course Lecture notes, the occasional review article, or sadly the commercial blurb on implant technique. In the form of the latter, surgical education has been subsumed by industry, based upon manufactured equipment, designed to be disposable.

It is therefore refreshing to recommend a brilliant little book, by a hand surgeon of rich personal experience, who's single purpose is to present his experience, and through it his observations and conclusions. The essence of the work is simplification with a real appreciation that open surgery is itself an injury. With that basis there remain instances in which planned intervention is essential if function is to be restored. The book fulfils two functions; apart from presenting the

'why' and 'how' of hand reconstruction, it will fascinate any orthopaedic surgeon in the presentation of reasons, and it will open several doors for the non-specialist to perform perfectly simple first aid repairs. There is no doubt that the sooner traumatic lesions are recognised and reduced, the better the result (given, of course, good and delicate surgery).

I cannot recommend this work too highly. The writing is a delight to read, and it satisfies all the claims on the back of its jacket.

M. Laurence

Gait analysis: normal and pathological function (2nd edition)

J. Perry and J. M. Burnfield

Pp. 576. Thorofare: SLACK Incorporated, 2010.

ISBN: 978-1-55642-766-4. \$92.95

The first edition of this book represented the standard text for understanding human locomotion. The second edition provides an update on several areas. It is not a primer on human walking for someone with a passing interest. The level of detail and the different views of the process of walking will present a challenge for the enthusiast. For example the gait cycle is considered according to its phases, the basic functions and then from an anatomical perspective, joint by joint. Kinematic and kinetic tracings are presented at the point where the function of each joint is considered, but it is not until chapter 20 that motion analysis is discussed; and kinetics (which underpins the motions seen) is considered two chapters further on. There are one or two curious assertions, for example that the knee is straight at initial contact; and on occasions the text is not entirely clear as to what the authors intend. Again, the handling of pathological gait problems is tackled from the perspective of gait deviations and then, a second time around, by clinical examples.

The mechanics of instrumented gait analysis, from how to set up video cameras to marker and electrode placement, are not covered. Although different proprietary systems have differing fine details, the general principles and the consequences of poor technique are not critically addressed. The last chapter on energy expenditure measurement is good but there is no mention of less demanding surrogates such as the physiological cost index.

I will continue to use this book on a regular basis during clinical gait analysis. As a source of answers when puzzling findings arise, it remains a valuable addition to any gait laboratory bookshelf.

A. Roberts