many, and also too 'high-tech' for practitioners in sports medicine who normally do not have access to the sophisticated laboratory necessary for this sort of work.

My fears were only partly realized, as although much of the book is definitely for the hospital-based clinician with elaborate exercise testing facilities (in particular, pulmonary and cardiology professionals), there is still much to commend it to others. Most of the chapters include a section on the basic physiology which underpins the type of testing addressed in that chapter. Further, exercise testing is placed nicely in context, with explanations of the rationale behind the testing protocols, and not just the protocols themselves. The latest equipment and techniques are discussed in some detail, as is the interpretation of test results. A most welcome facet of the book is its identification of areas where future research is needed.

All in all, the book is more than just a manual for exercise testing – is also an interesting and informative 'read' in its own right as long as one selects carefully and appropriately (however, at £32, it might be considered a rather expensive read). In particular, the book may find a significant readership among staff and students in non-clinical exercise testing laboratories based in universities and colleges.

My one quibble with the book is that, as far as I can ascertain, no input to the conference or the publication was sought from outside the USA. There may be good reasons for this, but given that a great deal of paediatric exercise testing has been conducted elsewhere I feel that the label 'state-of-the-art' might not be fully deserved.

However, this should not detract from what is a good reference book. Sports medicine professionals, whether involved in laboratory research or clinical diagnosis, would do well to have a look at this book, as it does constitute the most up-to-date information in this area.

Chris Riddoch PhD

Sports and Exercise Science, Essays in the History of Sports Medicine

J. W. Berryman and R. J. Park, eds.
Chicago, USA: University of Illinois

Press, 1992, 230 × 150 mm, 372 pp, illustrated

A major rationale for writing or compiling histories of sports medicine is to help justify the whole subject towards codification, to help bring the subject into a medical speciality in its own right. A nation has been defined as a language with an army and navy; a discipline might be defined as a subject with an intrinsic literature and a respectable history. This book helps establish the latter.

Ten essays by historians or physical educationalists offer a scholarly and historical perspective on the growing field of sports medicine and the scientific study of exercise, sports and physical education. The topics range through the exercise tradition from Hippocrates, and the 1870–1920 debate on athleticism and 'athlete's heart', to a history of British and American 19th century training methods. The rationale of the 'eternally wounded woman' being unable to compete in vigorous sports is balanced by the following essay on Bernarr Macfadden, the physical culture reformist, with his 'perfectly developed woman' who could 'play golf all day and dance all night'. Exercise has always attracted pseudoscience, and a chapter includes the history of such charlatanism. The penultimate chapter assesses 'muscular vegetarianism', and the final chapter details the surprisingly long history of anabolic steroids in exercise and sport, dating from the 1940s and possibly even the 1930s.

A scholarly, interesting and often compulsively readable book.

Craig Sharp BVMS, FIBiol

Spinal Manipulation 5th ed.

J. F. Bourdillon, E. A. Day and M. R. Bookhout
Oxford, UK: Butterworth-Heinemann,
1992, 272 pp, 246 × 189 mm, ISBN 0
7506 0576 6, £35.00

This well presented and easy-to-use textbook looks at the examination and treatment of spinal, pelvic and rib joint problems. It examines the role of manual therapy in the care of neuromusculoskeletal problems, particularly from an osteopathic viewpoint.

This expanded edition has a more detailed chapter on anatomy and biomechanics, which approaches the subject in a clear and informative way with some excellent diagrams to support the text. The examination chapter, especially that for the pelvis, make interesting reading, although they are limited to biomechanical implications and omit examination of spinal accessory movements and consideration of neural tension signs. Although the chapters are well illustrated, some of the photographs used to illustrate techniques appear a little dated.

The treatment chapters are well laid out, with clear step-by-step instructions for the manipulations described. Again the chapter dealing with the pelvis is particularly interesting and informative for those regularly treating sportsmen.

The other addition to this fifth edition is an introduction to examination and treatment of muscle imbalance, and a chapter on self treatment, both of which are well researched and give a comprehensive view of evaluation and treatment, with clear photographs of test positions and auto/auto-assisted stretches, which would prove valuable when treating the less supple sportsman.

In general this is an interesting textbook, which gives a good insight into the osteopathic approach to manual treatment. It would be a useful addition for any manipulative therapist, particularly because of its clear approach to pelvic assessment and treatment.

Jan Hampton MCSP, SRP