# **PostScript**

### **BOOK REVIEWS**

### Keeping in time with your body clock

Edited by J M Waterhouse, D S Minors, M E Waterhouse, T Reilly, and G Atkinson. London: Oxford University Press, 2002, £9.99, pp 199, softcover. ISBN 0198501748.

The book was difficult to access as it was very broad based and general and tended to be repetitive. It was difficult to identify the most suitable audience. Although it contained examples from research studies, no referencing to source material was included.

Rating	
<ul> <li>Presentation</li> <li>Comprehensiveness</li> <li>Readability</li> <li>Relevance</li> <li>Evidence basis</li> <li>Total</li> </ul>	8/20 7/20 10/20 10/20 8/20 43/100

M O'Brien

# The practical guide to range of motion assessment

Edited by J Gerhardt, L Cocchiarella, D Randall. Published by American Medical Association Press USA, 2002, US\$69.95, hardcover, pp 108. ISBN 157947263X

This text has been written as additional instruction to the American Medical Association guides to the evaluation of permanent impairment (5th edition, 2000), and Master the Guides (5th edition, 2001). Primarily for physicians, this text is also relevant to other healthcare professionals. The authors, who have a long standing association with issues relating to measurement of joint range of motion, aim to achieve greater accuracy and reliability of measurement by the use of standardised protocols, instrumentation, and reporting. This is a laudable goal as the patient's range of motion and the expected normal range of motion are used with other measures as a basis for evaluation of percentage permanent impairment (American Medical Association, 1993). In countries adopting these impairment ratings, such measurements form a substantial component of the permanent disability compensation award, which translates directly into the dollar amount paid to the patient by a compensatory body.

The book is divided into two main sections. Part 1 describes principles for measurement of joint range of motion. Part 2 provides instructions for range of motion measurement of individual joints and spinal regions.

In Part 1, sound recommendations are made for preparing the subject, both physically and psychologically. Information on factors and conditions that may be associated with altered motion are tabulated, and a list

of possible warm up exercises included. Instructions are also provided to facilitate reliable identification of relevant spinal landmarks such as the spinous processes of T1, T12, and S2.

A comparison is made of the two instruments mainly used for measurement of joint range of motion: the two arm (universal) goniometer and the gravity based inclinometer. However, despite the authors' preference for the inclinometer, the two measurement instruments appear to share sources of error more closely than suggested. In this respect, although the "step by step" pictures aim to facilitate understanding of the measurement technique, the examiner sometimes appears to have been photographed to maximise the view of the inclinometer location rather than the optimal examiner position. It can be appreciated that because of the possible sources of error outlined, the difference between a valid measure and an exercise in futility may be small with either instrument.

The SFTR system of recording developed by these authors is well described in the text and illustrated in accompanying tables. There may be some confusion for readers where currently accepted conventions for naming movements have been changed "for practical purposes"—for example, "upper ankle" joint (hind foot) plantar and dorsiflexion, and "lower ankle" joint (hind foot) inversion and eversion. As the movements of the foot are complex, and often misunderstood, an approach consistent with the current literature should preferably have been maintained.

Part 2 of this book provides descriptions and clear photographic illustrations of techniques for the measurement of the range of spinal and peripheral joint motion. One of the key principles in measurement of range of joint motion is to exclude, wherever possible, movement of adjacent joints, often termed "trick movement".

Thus it is pleasing to see in this text that spinal motion is measured using two inclinometers and tangents to the curve over the limit vertebra of the curve of interest.

Relevant landmarks for each anatomical segment are listed at the top of each page. However, it is not always easy to determine which of the landmarks in the series is pertinent to a particular movement. For those less familiar with measurement these landmarks may be better described for each individual joint motion

Aiming for reproducibility, the authors recommend establishing a neutral or zero starting position of the joint with reference to gravity. Although this recording method clearly allows a variety of possible movement limitations, no suggestions are provided for adapting the method when the subject cannot adopt the neutral position—for example, in the wrist after Colles fracture or in cases of knee flexion contracture. In addition, for the measurement of some lower limb joints, the method described is not entirely practical. For example, during hip extension, all but the most athletic may have difficulty in adopting the start position.

Another disadvantage of a standardised technique is that errors may occur if the examiner fails to fully comprehend the underlying principles. For example, the examiner may need to be made aware that the accuracy of measurement from a single inclinometer relies on the adjacent body segment (usually proximal) being either vertical or horizontal and remaining stationary during the movement. Thus for the new examiner, some instructions in the text for preventing likely "trick" movements during the test may be beneficial.

References reporting the reliability of "inclinometry" have been provided. However, as a "stand alone" text on measurement of joint motion, it is disappointing that the results of research supporting the measurement techniques described have not been included.

The goal of obtaining reliable and valid measurement of joint range of motion continues to present a challenge to the clinician and researcher alike. Multiple possible sources of error remain to be overcome. Overall, the authors have attempted to minimise measurement variability by providing standardised measurement processes. Unfortunately improved reproducibility may not always guarantee the validity of the measurement, which is relevant when the patient's range of motion is compared with normative data for evaluation of impairment. It is recognised that it is difficult to develop a standardised measurement technique that adequately addresses all issues and can be applied to all joints and regions. Nevertheless, this book represents another step in the right direction.

Analysis	
<ul> <li>Presentation</li> <li>Comprehensiveness</li> <li>Readability</li> <li>Relevance</li> <li>Evidence basis</li> <li>Total</li> </ul>	16/20 15/20 15/20 16/20 10/20 72/100

E Tully

#### Science and soccer, 2nd edition

Edited by T Reilly, A M Williams. London: Published by Routledge, 2003, £24.99, softcover, pp 332. ISBN 0415262321

The editors are to be congratulated for their work in the field over the years represented in this text which has arisen from a series of World Congresses of Science and Football which began in 1987 in Liverpool. Unfortunately this also reveals a weakness in the limited pool of authors from which the text draws, the majority of whom list their professional addresses as Liverpool. As an Aussie with an AFL background, it may be a bit presumptuous of me to criticise those from the birthplace of the game (and the current home of a champion Australian player). However, bearing in mind recent international results, it is fair to assume that some sports science knowledge in soccer may

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exist in places such as South America, Asia, Africa, and possibly Greece! And what was the score at Upton Park in 2003 anyway!

This text is certainly comprehensive in the areas it covers and easily read from the first whistle to the full 90 minutes. As stated, it covers every key facet of the game including players' anatomy, physiology, biomechanics and psychology, coaching and training methods, nutrition, injury prevention and rehabilitation, surfaces and equipment, match analysis, growth and development of younger players, and talent identification. The allocation of space given to each area perhaps fairly reflects the strengths and areas of interest of the contributors. If readers of this journal such as team doctors and physiotherapists are after detail on sports medicine and injuries in soccer, they will be disappointed particularly by the 10 page chapter on injury prevention and rehabilitation.

The value for many readers in this text perhaps lies in the knowledge and understanding they can gain in fields of the sports science professionals around them, rather than their own fields. An understanding of the psychology of injury, coaching, and skill acquisition is provided in some detail and will doubtless improve communication and understanding between team support staff. Other chapters such as those on nutrition and environmental issues provide excellent practical advice for team physicians planning team travel and season routines. I am not sure how the chapter on soccer hooliganism fits into the rest of its section covering coaching science—perhaps this is better in a sociological text.

As a medical professional actively working in soccer, I certainly found this text a useful read and it will retain a place on my bookshelf. It certainly improves my knowledge in the fields of the sports scientists who work with our teams and thus helps me converse from a position of understanding. And of course it will be of value to those undertaking the masters course in Liverpool. For a reference text for sports injuries and soccer, I suggest you look elsewhere.

Rating	
<ul> <li>Presentation</li> <li>Comprehensiveness</li> <li>Readability</li> <li>Relevance</li> <li>Evidence basis</li> <li>Total</li> </ul>	13/20 13/20 17/20 15/20 17/20 75/100

(PS: The score was Australia 3, England 1!)

A Jowett

### **CALENDER OF EVENTS**

## UK Radiological Congress 2005 (UKRC 2005)

6-8 June 2005, Manchester, UK

The UK Radiological Congress (UKRC) meeting will encompass the medical, scientific, educational, and management issues that are of interest and relevance to all those involved in the diverse fields of radiological sciences and oncology.

The UKRC provides a forum in which to bring together clinicians, scientists, radiographers, technicians, and other professionals to present and discuss the latest developments and challenges in diagnostic imaging, radiotherapy, and allied radiological sciences.

Key subjects to be covered include: diagnostic radiology; ultrasound; nuclear medicine; interventional radiology; veterinary radiology; emerging technologies; image analysis; computer applications; PACS; radiobiology; radiological physics; management & audit; computed tomography; magnetic resonance; equipment development.

Expected attendance (conference and exhibition): 4000

Further details: UKRC 2005 Organisers, PO Box 2895, London W1A 5RS, UK; Website: www.ukrc.org.uk; Fax: +44 (0)20 7307 1414; Conference tel: +44 (0)20 7307 1410, Email: conference@ukrc.org.uk; Exhibition tel: +44 (0)20 7307 1420, Email: exhibition@ukrc.org.uk

### 1st World Congress on Sports Injury Prevention

23-25 June 2005, Oslo, Norway

This congress will provide the world's leading sports medicine experts with an opportunity to present their work to an international audience made up of physicians, therapists, scientists, and coaches. The congress will present scientific information on sports injury epidemiology, risk factors, injury mechanisms and injury prevention methods with a multidisciplinary perspective. Panel discussions will conclude symposia in key areas providing recommendations to address the prevention issue in relation to particular injuries and sports.

Further details: Oslo Sports Trauma Research Centre and Department of Sports Medicine, University of Sport and Physical Education, Sognsveien 220, 0806 Oslo, Norway. Email: 2005congress@nih.no; website: www.ostrc.no

#### Osteosynthese International 2005

15–17 September 2005, Curiohaus, Hamburg Congress-Chairman: Johannes M. Rueger, M.D., Professor and Chair

Topics:

- Innovations in intramedullary osteosynthesis
- New frontiers in osteoporosis and fracture treatment
- Current trauma research
- Special topic: Recent development in pelvic and acetabular fractures

Abstract submission deadline: 31 March 2005

Further details: INTERCONGRESS GmbH, Martin Berndt, Düsseldorfer Str. 101, 40545 Düsseldorf-Germany. Tel: +49 211 585897-80; fax: +49 211 585897-99; email: martin. berndt@intercongress.de; website: www. osteoint2005.de

# 4th European Sports Medicine Congress

13–15 October 2005, Lemesos, Cyprus *Further details*: Email: pyrgos.com@cytanet.com.cy

#### **BASEM Conference 2005**

10–12 November 2005, Edinburgh, Scotland *Further details*: Email: BASEMinfo@aol.com

#### **BASEM Conference 2006**

5-7 October 2006, Oxford, UK

Further details: Email: BASEMinfo@
aol.com

### **CORRECTIONS**

doi: 10.1136/bjsm.2003.010587corr1

Young M A, Cook J L, Purdam C R, et al. Eccentric decline squat protocol offers superior results at 12 months compared with traditional eccentric protocol for patellar tendinopathy in volleyball players (Br J Sports Med 2005;39:102–5). The total percentage scores in the final line of figure 4A are incorrect; the correct totals are 6% and 94%. We apologise for this error.

doi: 10.1136/bjsm.2003.009969corr1

Kordi R, Dennick R G, Scammell B E. Developing learning outcomes for an ideal MSc course in sports and exercise medicine (*Br J Sports Med* 2005;**39**:20–3). In table 2 of this paper the Queen Mary University of London course has been listed as an MSc in sports medicine. The course actually concerns sport and exercise medicine, and also offers diploma and certificate level qualifications. We apologise for this error.