Use of imaging data for predicting clinical outcome

EDITOR,—We would like to air three points that arise from the paper Sonographic incidence of tendon microtears in athletes with chronic Achilles tendinosis.1

Firstly, unfortunately the word “partial” has been omitted from the conclusion (abstract). The comment currently reads “there appears to be an association between microtear formation and Achilles tendon rupture”. The distinction needs to be made, as the paper’s title suggests, that this ambiguity is clarified.

Secondly, although it well accepted that in many cases tendinosis precedes “spontaneous” tendon rupture,2 it does not necessarily follow that sonographic abnormality will lead to (complete) tendon rupture. The tissue based pathologies found by Kannus and Jozsa may be more subtle than can be detected by sonography. We feel that, without longitudinal data in a large cohort with an appropriate control group, Gibbon and colleagues are not in a position to draw a conclusion on sonographic screenings of athletes.

Thirdly, given the cross sectional study design, the authors should provide caveats emphasising that their theory of tendon remodelling paralleling that of bone is purely speculative. Cross sectional athlete-control comparisons (such as those provided to sustain the argument on tendon remodelling) do not provide evidence of causality—such differences can result merely from selection bias. If athlete-control difference were causally related, then one could take up basketball in order to grow tall.

We emphasise the need for prospectively collected data to predict future outcome. Researchers and clinicians should desist from speculating as to the longitudinal clinical significance of imaging data collected at one point in time only. To our knowledge, there is only one published prospective ultrasonography and clinical correlation study in the tendon literature at present,3 and it shows rather poor predictive value of ultrasonography in terms of development of symptoms and clinical findings of patellar tendinopathy in female basketball players. Until researchers and reviewers acknowledge the importance of longitudinally collected data for predicting clinical outcome, our imaging field will continue to be mired in a debate based on speculation rather than science.

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REFERENCES

What is sports medicine? Medical students don’t know

EDITOR,—A large proportion of the population participates in sport occasionally and these envelopes a sport related core that plays often. As sport is a large part of British culture and its practice has direct effects on the body, one may infer that its study is of significance to doctors. Logically, a medical student would have an interest in learning about such a topic, as it would be a factor in future patient care. It should follow that medical schools would seek to include compulsory sports medicine training as part of a well rounded undergraduate curriculum. This is, unfortunately, not the case.

Few medical schools include compulsory training in sports medicine. Often, the only exposure a student receives is sport related fracture management during an orthopaedic rotation. Consequently, many medical students have little idea what sports medicine is and do not realise that it encompasses much more than treatment of injury.4 A sports trained doctor may be better able to advise on sport as part of a healthy lifestyle for both the lay population and athletes. This type of training allows the doctor to have greater understanding of how sport can affect a patient’s health and how their health can be affected by sport.

It is encouraging that some medical schools have begun to include sports medicine in their curriculum, including Newcastle upon Tyne and Edinburg.5 More compulsory sports medicine needs to be instituted, so that even if a student is not interested in it as a career, he/she will be better equipped to understand and deal with sport related issues in future clinical practice.

Greater exposure at the undergraduate level is also likely to spark further interest and recruitment to what is a new and exciting area of medicine.

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REFERENCES

CONFERENCE REPORT

Active aging in the new millennium: fifth world congress on physical activity, aging, and sports.

The 5th PAAS congress Active aging in the new millennium took place in Orlando, Florida on 10–14 August 1999. It was attended by a large number of delegates from all over the world and gave birth to ISAPA, the new International Society for Aging and Physical Activity.

One session which had been planned by Dr Michael Pollock, who died earlier this year, went ahead much as he had planned it, but sadly as a memorial and tribute to him. The highlight of this event was the opening presentation from Professor Per-olaf Astrand, who used the opportunity to take us, with gentle skill, very seriously and thoroughly back to our roots in the physiology of exercise, charming us along the way with snatches of song and cartoon drawings. A veiled reminder perhaps that in our haste to get new funding we should not neglect to read and ponder the findings of those who have gone before us.

Flenary sessions covered topics as diverse as feminist perspectives, health benefits, interdisciplinary research, public policy issue, the needs of the oldest old, and how to translate research into programmes. These were accompanied by full days of invited symposia, oral presentations and posters. The programme ran from May 10–14 August 1999. It was attended by a large audience is really all of us—those that it affects, those that it involves, those that it concerns. The book’s target audience is the growing and developing audience that will be the beneficiaries of this congress, the confluence of medicine and aging, and sport.

BOOK REVIEWS


The report of the British Nutrition Foundation Task Force on obesity is a very important document. It is a pity therefore that it is so boring to dip into and read. Certain of the importance of this report, and mindful of my responsibilities to the British Journal of Sports Medicine, I brought this book with me on holiday. I tried to read it, oh yes I did. Every attempt was soon met with a gradual dropping of the eyelids and then blessed sleep in the sunshine. The presentation, with few illustrations, was the problem, but this, however, is my only criticism.

This multi-author report is chaired by Professor Garrow, an expert in the field of obesity, and the members and contributors comprise some of the most important workers on obesity in the United Kingdom. It is very timely, given that the prevalence of obesity in this country in 1995 (body mass index greater than 30 kg/m²) had risen to 13% of men and 16% of women, and over half the population are now overweight (body mass index greater than 25 kg/m² but less than 30 kg/m²) or obese. The report is extremely up to date, covering such areas as the new genetics of obesity (leptin and human obesity syndromes) and new treatments such as use of the pancreatic lipase inhibitor Orlistat. The references are relevant, and go right up to 1998. Every aspect of obesity, from epidemiology and health risks through clinical assessment, aetiology, prevention, treatment, and suggestions for further research are covered. The book’s target audience is really all of us—those that it defines as communicators, including government, health and local authorities, health care professionals, researchers, the food industry, and journalists. Traditionally, exercise has not been given priority in obesity treatment programmes or commercial weight loss programmes. However, the prevalence of obesity
is increasing in our population despite the fact that the total energy intake of the population has actually fallen for the last 25 years. This is totally due to an increase in the sedentary nature of the population, with lifestyle related inactivity (resulting from increased availability of labor saving technology) and fewer people participating in active exercise.

“Lose weight fast” diets are exposed for their non-physiological and ineffective approach. An optimal treatment combining diet, physical activity, and behavioural modification will enable weight loss maintenance to continue after an achievable goal, such as loss of 10% of weight, has been achieved.

The book has two very good sections. The first is recommendations from the Task Force—to prevent the increasing prevalence of obesity, to change the national diet to lower the consumption of energy dense food, to change the national lifestyle to have a higher level of physical activity, and lastly to institute strategies nationally for both prevention and treatment of obesity. The second contains answers to questions from medical journalists, which are in fact questions that many of the population would ask us.

To summarise, would I want to buy this book personally? No, because it does not excite me enough to grab some of the limited space on my shelves. Would I want to have it to hand? Yes, Yes, Yes. This is a definitive text on obesity. Am I glad I got to keep it for doing this review? Yes, I am, thank you.

**Analysis**

- **Presentation**: 10/20
- **Comprehensiveness**: 20/20
- **Readability**: 12/20
- **Relevance**: 18/20
- **Evidence basis**: 20/20
- **Total**: 80/100

**DAVID C WILSON**

Royal Hospital for Sick Children, Edinburgh


This book has some useful guidelines for any physiotherapist contemplating a switch from hospital employment to being a full time physiotherapist with a sports team. The author is realistic about the commitment required and weights up the benefits and disadvantages of such a move. The dynamics of a team approach to providing medical/physiotherapy support and the need for excellent communication between members of the team and other coaching and management staff at a club are covered very well. His experience of what a team doctor with a qualification in sport and exercise medicine might be able to deal with before making a secondary referral is somewhat limited.

Overall the book lacks structure. There is no systematic approach to chapter headings, or the layout within the chapters, which makes it difficult to follow. It falls between being a conventional textbook and a practical handbook. The book is littered with case studies intended to illustrate points. I felt these were a distraction; many were anecdotal and served little purpose. The mixture of sport specific areas and general topics means that there is repetition. There is also consider-

erable variation in the detail between topics; some issues such as isokinetic testing and some areas of rehabilitation are covered in depth whereas other areas are superficial and incomplete. The section on concussion is particularly poor. The suggested grading scale for an athlete to return to sport once the duration of loss of consciousness with no regard to post-traumatic amnesia or post-concussion syndrome. This is very out of date and not what one would expect in a book specifically dealing with collision sports.

Each chapter is well referenced and, where appropriate, the limitations of the research discussed, and the difficulties in comparing injury rates when different methods or definitions for the severity of injury differ in each study are acknowledged. The book ends with two very good sections. The first is recommendations from the Task Force—to prevent the increasing prevalence of obesity, to change the national diet to lower the consumption of energy dense food, to change the national lifestyle to have a higher level of physical activity, and lastly to institute strategies nationally for both prevention and treatment of obesity. The second contains answers to questions from medical journalists, which are in fact questions that many of the population would ask us.

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- **Comprehensiveness**: 20/20
- **Readability**: 12/20
- **Relevance**: 18/20
- **Evidence basis**: 20/20
- **Total**: 80/100

**PAUL D JACKSON**

General practitioner and sports physician, Devizes, Wiltshire


This book is too good to hurry. I was at first disappointed as I had misunderstood that it would address itself more exclusively to postgraduate issues, my chief domain. Its 36 chapters pertain to the education of the so termed “beginning practitioner”, defined as “the level of competence and stage of preparation the graduate has achieved on entry to their profession”. However, as the sections were unveiled, it was apparent from the scope of the book that it had intended to address comprehensively the education of the beginning practitioner by considering the entire process, from even before the undertaking of the initial training programmes. The chapter on the development of professionalism was particularly interesting in referring back to the earliest stages even before the conscious selection of a chosen profession occurs. As the themes of the book continued to be developed, so I found myself engrossed in the topics addressed. The whole of section two, exploring “The context of health science education” was a challenge, but worth the perseverance, and these terms of the provocative elements of chapter 13, “Designing and implementing a learning programme: a feminist and critical perspective”, which was both irritating and enlightening. From then on the remaining sections drew together all the strands relating to the undergraduate and initial postgraduate phases and were most interesting and informative. The book does well to cover the links and similarities across the board of all the health professions and manages to span the world effectively in its referencing, although, understandably, the weight appears to be on the antipodean side.

The target audience has been well identified, although I doubt that the student will have either the time or inclination to dip into its chapters. The book’s promotional material omits the medical profession from its list of prospective readership, but I do believe that it is extremely pertinent to the medical educator, particularly with consideration for the breadth of experience of those contributing and the literature research base.

The editors have also made a huge contribution to the chapters within the book, and their knowledge and experience in the field is most apparent. It is a book that needs to be read thoughtfully in its entirety and then referred back to. To dip into the index only for selective reading would wholly miss the point. The editors and authors are to be congratulated on bringing together a thoroughly comprehensive work and I feel much the richer in being asked to take part in its review.

**Analysis**

- **Presentation**: 17/20
- **Comprehensiveness**: 19/20
- **Readability**: 19/20
- **Relevance**: 20/20
- **Evidence basis**: 19/20
- **Total**: 94/100

**ELAINE ATKINS**

Chartered physiotherapist in private practice, Woodford Green, Essex


This handbook is designed as a reference book for students of sports massage and complementary therapies.

The book is divided into easy reading chapters, and terminology used is basic medical language. Sections of the book outlining basic massage techniques have good detail and are supported with clear referenced photographs. The chapter identifying injury problems is somewhat lightweight, and little reference is made to the importance of making a specific diagnosis. Timing of the healing stages and effects that massage may have at these stages is also not detailed.

Throughout the chapters there are no references to current scientific literature to support the authors’ comments. Information on the relation to specific sports and the different massage techniques found to be beneficial—for example, for before and after competitions—is also not evident. The later chapters introduce the reader to a variety of complementary medicines—for example, aromatherapy and reflexology—but no further practical techniques are outlined.

A short bibliography of further reading is available, although this is somewhat dated.

The quality of information provided is somewhat basic, and regrettable has nothing practical for the experienced sports massage practitioner. The book does, however, provide a basic introduction to the art of sports massage for a student wishing to pursue this field.

**Analysis**

- **Presentation**: 12/20
- **Comprehensiveness**: 11/20
- **Readability**: 11/20
- **Relevance**: 12/20
- **Evidence basis**: 9/20
- **Total**: 55/100

**TIM ATTER**

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