ther during those three months of silence, he openly and actively encouraged a rival swimmer, and team-mate, to try to beat me. During rest periods, he would shout encouragement to my rival, telling him how to improve, pointing out my weaknesses to him, never addressing me directly. I hated my "rival" because I thought he was stealing my coach away from me. It's embarrassing to admit but I was completely dependent on my coach and felt that I would never achieve anything without him.

At one point relationships were so strained because of these psychological mind games that on a four man relay team, which set a record, the backstroke swimmer refused to talk to the breaststroke swimmer; the breaststroke swimmer in turn wouldn't talk to the butterfly swimmer; and all three barely acknowledged the freestyle swimmer. There was genuine hate among swimmers who were supposed to be team-mates. As it turned out, this coach—while abusing me psychologically—was doing far worse to other members of my swimming team. They were sexually abused. My coach did try to abuse me once; I was 9 years of age and away from home. Fortunately I was uneasy and requested him to leave my bedroom.

I have over the last few years tried to contact some of my team-mates from my years in swimming. I am glad to say that the rival whom I detested is now a good friend. Other swimmers have suffered long term problems. I have read widely on the outcome of people who have been abused as children. I can recognise many of the symptoms in people I know.

Ironically, there are others who may have gained in some way from the experience. These persons have a high self esteem, and developed very strong characters. It's extraordinary to think that there could be an unexpected positive side to abuse, but I would count myself among this group. My dependency on my coach has changed and I now consider myself strongly independent. I have emerged from my swimming years, certainly with some regrets that I didn't form the friendships many in swimming deserved, but I have an appreciation for the risks involved in sporting situations.

So how can we prevent persons getting involved in sport that should never be allowed to take charge of children? It's difficult. By definition the typical abuser is the very person you would never suspect, they have to be the "trustworthy type". But you cannot legislate against people who are determined to abuse children. What you can do is make people more aware of the potential situations that lend themselves to abuse. Any in my opinion that is the essence of any preventive programme, addressed at ending child abuse in sport.

# LETTERS TO THE EDITOR

EDITOR, – I was delighted to receive the BJSM in Bosnia, an improving journal.

I would like to make some observations on the occasional piece, "Clinical tests in sports medicine, Achilles tendon rupture" (June, page 124).

As noted, these injuries are sadly frequently missed, yet the diagnosis is very simple to obtain. The history should not be ignored, and the classic popping sensation at the back of the calf is highly suggestive.

The gait of a patient with a rupture of the achilles tendon can be remarkably normal, even in the relatively acute phase. There may be surprisingly little in the way of swelling, and the tendon can look quite normal.

The article describes some clinical tests.

#### Active plantar flexion when standing

This is not necessarily a good test for a rupture of the achilles tendon. As any sufferer will tell you, the pain from an acutely inflamed Achilles tendon will deter any attempts at tiptoeing. False positives are therefore very common indeed.

Thompson's test

Slight plantar flexion of the foot from applying this test can be achieved by including the peroneal muscles, toe flexors, and tibialis posterior in the muscles squeezed. Plantaris is a very small muscle, often absent, whose belly lies very high in the calf. The former muscles are those which will provide some active plantar flexion even against gravity, although not sufficient to stand tip-toe.

#### Copeland's test

This is really of historical interest and is not generally in clinical use. The same can be said

of O'Brien's test which consists of inserting a needle into the proximal tendon and looking for movement on attempting plantar flexion.

In my experience, the easiest way to assess the continuity of the Achilles tendon is to look at the angle at which both feet rest when the patient lies prone with both lower limbs from mid calf hanging over the end of a couch. The normal foot lies in some plantar flexion because of the intrinsic tone of the intact gastrocnemius-soleus complex. The affected foot hangs vertically, at 90 degrees to the couch. Thompson's test is then used to confirm the diagnosis. In the case of a rupture where the diagnosis has been delayed, the degree of loss of plantar flexion will provide the diagnosis, and the degree of shortening required if surgical intervention deemed necessary

Finally, I would like to put forward the psoas tendon as a candidate for the title the thickest tendon in the body!

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#### Verbal encouragement of voluntary muscle action: reply to Commentary by Roger Eston

EDITOR, - Thank you for the opportunity to address Mr Eston's comments (Vol 30, no 3, page 245), particularly those relating to the statistical analysis of the data. The statistical procedures undertaken in this study were carefully matched to the Latin squares crossover design. The procedures are detailed in Joseph Fleiss's book The design and analysis of clinical experiments. In respect to examining the effects of gender, in this instance a t test of the difference of the pre and post values for the verbal and non-verbal conditions of males and females, provides no less information than using an anova on pre and post values. If there had been more than two groups compared, anova would be a more appropriate test.

> PETER J MCNAIR Auckland, New Zealand

- 1 Fleiss J. The design and analysis of clinical experiments. New York: John Wiley and Sons, 1986:263-90.
- 2 Cody R, Smith J. Applied statistics and the SAS programming language. New York: Elsevier Science, 1987:92–117.

### **BOOK REVIEWS**

Quantum Strength and Power Training (Gaining the Winning Edge). By P O'Shea. (Pp 248; \$20.00.) Patrick's Books, 1996. ISBN 0 9648698 0 2.

There is perhaps no subject more underdeveloped in the area of sports performance than that of resistance training. Although there are many texts in this area, few, if any, address the fundamental issues of resistance training as they relate to sports performance (as opposed to general fitness). In this capacity alone the book is valuable. Dr O'Shea has combined his lifetime of practical and theoretical knowledge to skilfully write this text. Hence it is not surprising that it contains invaluable insights into many areas of resistance training for sports performance.

The book is inexpensive (it's a softback) and easy to read, and although I feel it has greater applicability for more advanced participants, the abundance of tables, photographs, and diagrams will make it attractive to the novice. I say the text may have more applicability for the advanced participant as it assumes a certain level of existing knowledge and contains little in the way of information about how to start a weight training programme. The author might consider this in future revisions.

The text contains strong sections on power lifting and Olympic style lifting and does a decent job on anatomical and physiological considerations for resistance training. From an academic point of view I would like to see primary and direct referencing to support the

more potent statements. I am sceptical about unreferenced statements. The reader will findchapter 11 (specific strength training programmes) a nice inclusion and one that could even be expanded further. Other novel topics include functional isometrics and hormonal adaptation to resistance training.

In summary, Dr O'Shea has done a nice job. I do believe, however, that in its current form the text has greater applicability for the more advanced participant. It will provide an excellent source of information and resource for training ideas and programme formulation. It is also good value for money. The reader is unlikely to come across a text written by an author with as much practical and theoretical insight in the area of resistance training as Dr O'Shea.

DECLAN CONNOLLY
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Sports and Exercise Medicine: Policy and Provision. (Pp 48; £6.95.) London: BMJ Publishing Group, 1996. ISBN 07279 109 56.

Many doctors in Britain do not have enough knowledge to advise patients on how to play sport safely or to treat them if they become injured, says a new report published by the BMA's board of science and education. Sport and exercise medicine: policy and provision says that a faculty of sport and exercise medicine should be created, that the provision of sports medicine facilities should be reviewed, and that athletes need better education on how to avoid injuries.

There are about 19 million sports injuries in England and Wales each year, about half of them are in people aged 16 to 25 years of age. Injuries are more common when the sport is competitive, with sports such as rugby, football, and hockey carrying the highest risks. As many as three fifths of new injuries are caused by collisions between players.

The skill and knowledge of doctors have an important effect on how well people recover from injuries; however, the NHS has no training structure for doctors in sports medicine. Thus a faculty of sports medicine should be established to set standards for postgraduate training and accreditation and sports medicine should be included in the undergraduate curriculum, says the report. It also emphasises the important role of doctors with existing expertise in sports medicine: sports medicine specialists should help sporting bodies to reduce the number of injuries by advising them about rules and regulations to improve safety.

The report asks the government to develop policy for the provision of services for sports injuries and suggests a national network of sports medicine centres with a standard system of accreditation. It sets out guidelines for such centres which should provide education for athletes and coaches on how to avoid injuries as well as treating people when injuries do happen.

If campaigns to increase the level of activity of the population are successful, even more people will be at risk of injury; thus the promotion of physical activity must be backed up by strategies to minimise these. Doctors who promote physical activity should know about the risks and ensure that medical services are provided. The report calls for clearer exercise targets to help both the public and doctors know what levels they should be aiming for. Emphasis should be placed on

moving individuals from the sedentary category to moderate levels of activity—a theme which is repeated in the Health Education Authority's guide

> S J LOUISE SMITH Edinburgh

Promoting Physical Activity in Primary Health Care. Health Education Authority. (Pp 31+10 inserts; £6.99.) Abingdon: HEA Customer Services. ISBN 075 210 2893.

Primary health care teams are urged to encourage their patients to take more exercise by a new Health Education Authority (HEA) guide. Promoting physical activity in primary health care is part of a three year campaign by the HEA, which says that six out of 10 men and seven out of 10 women are not active enough to benefit their health. The guide discusses how to develop a physical activity promotion programme and how to help patients become more active by giving opportunistic advice, counselling, and developing effective exercise prescription and referral schemes.

Traditionally, people have been advised to do 20 minutes of "vigorous" exercise three times a week. Moving away from this dogma, the HEA now recommends 30 minutes of "moderate" activity, such as washing the car, heavy housework, or gardening, five times a week. Advice such as this, with easy to understand examples, may go some way to answering the BMA's call for practical exercise targets against which individuals can assess whether they are active enough.

A common reason for not exercising is the problem of finding time, so activities which can be incorporated into a daily routine such as walking to work rather than driving are emphasised by this guide. Patients should not be discouraged by being told that the activity they are taking may not benefit their health, even if it is not of the maximum level, says the guide. Notably the guide refers to physical activity and not to exercise.

Patients who are contemplating starting to exercise or doing some exercise occasionally are identified as the groups that are the most profitable to work with. For these selected groups of patients it suggests approaches such as "prescription schemes". Alternative suggestions include links with community based classes, setting up a class for patients, and even taking your patients with you when you go for your own run or cycle. Thankfully, the authors acknowledge that this final approach may not suit everyone.

The potential risks of exercise, such as sudden cardiac death and musculoskeletal injury. along with the legal liabilities for doctors, are carefully covered. General practitioners must carry full clinical responsibility for the patients whom they refer for exercise. In Sport and exercise medicine: policy and provision the BMA also states that those who promote physical activity should be aware of the relevant risks and ensure that appropriate medical facilities are available. Full assessment of each patient and knowing what activities are provided by each exercise venue are essential, says the HEA. However, the guide concludes that for most people sensible exercise offers more benefits than risks. Physical exercise could be the "best buy" for public health in developed

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**Sports Psychology in Action.** By Richard J Butler. (Pp 144; paperback £14.99.) Oxford: Butterworth Heinemann, 1996. ISBN 0 7506 2436 1.

To those working in the field of applied sport psychology in the United Kingdom, Richard Butler's name will be both familiar and well respected. Coming from a background in clinical psychology, he has worked successfully with a number of sports but most especially amateur boxing.

Those working in sport psychology will also be too well aware of the chasm which has often separated the world of competitive sport inhabited by practising sport psychologists from the ivory towers populated by research sport psychologists. If this book is about anything, probably it is about helping to build a bridge over those troubled waters. In achieving this goal it is largely successful and it is easy to see the book being used by applied sport psychologists in the course of their work.

Performance profiling and the development of the athlete's self awareness are generally regarded as the linchpin of a successful intervention strategy, and it is these topics, close to the heart of Butler's own research interests, which from the focus of the early part of the book. Liberally sprinkled with quotes from sportspeople and coaches, chapters 2 to 4 take the reader easily through useful practical techniques, and later chapters often continue the theme of developing awareness. For example, chapter 7, on "feelings", considers various mood profiles of athletes using a device known as the feelings scale, presumably developed by the author. Familiar topics such as stress management, concentration and attention, self confidence, and visualisation make an appearance later, where again the emphasis is on the practical delivery of information to performers but set in the context of relevant theory and litera-

An overriding theme throughout is that mental training should not be divorced from physical or technical training, and that all should merge seamlessly together in an holistic approach to strategic interventions with sportspeople. This is a very important message and one which cannot be overemphasised. While the book is said to be aimed at a very broad audience, my guess would be that it may be a little beyond the average layperson but will be enjoyed immensely by those already familiar with the area, or other sport sciences, and it will be regarded as a valuable contribution to the literature.

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## NOTES AND NEWS

# The British Association of Sport and Medicine Congress Award

In this issue we have published as many of the abstracts from the BASM Annual Congress as can fit the allotted space. No implications about quality are attached to the abstracts which we unfortunately were unable to publish for lack of space. A prize is to be awarded for what was judged to be the best oral presentation and the best poster. This is to be known as "The British Association of Sport and Medicine Congress Award".