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BASM Annual Congress, Selsdon, 10–12 November 1989

Some seventy members joined groups of yuppies at south-east London's premier conference hotel for a lively weekend combining sport with academe.

After Friday's registration cup of tea, Dr. Simon Payne of the Medical Protection Society spoke on Ethics. This was followed by a Reception sponsored by the Sports Council. Then Dinner – and the very late bar extension encouraged lively political discussions on both nights!

Saturday's first feature was the Tate & Lyle sponsored Dietary Misconceptions. Prof. Fred Bruons from Maastricht gave a brilliantly entertaining account of carbohydrate metabolism in the endurance athlete and his co-worker, Dr. Nancy Rehrer, described detailed studies of gastro-intestinal symptoms in marathon performers (of whom some 40% suffer). Some of her messages were: concentrated drinks cause gut symptoms; excess high fibre diet causes cramps; pre-race fats cause upper g.i. nausea. Editorial Board member Prof. Tim Noakes from Cape Town described the metabolic fortunes of his group of ultra-long distance runners. His detailed accounts of collapse and fluid problems brought home the substantial differences between the ultra and mere Marathoners. Notable was the tendency for the former to get themselves overhydrated – a state almost unknown in the more intensively exercising latter group.

After coffee Imaging – State of the Art gave the clinicians much to ponder. Mr. Francis Ring from Bath gave a beautifully illustrated account of Thermography. Though the equipment can be cheap, more sophisticated colour crystal techniques are becoming more widely available and are better in allowing more detailed studies both of pathology and recovery. Dr. Terry Bloomer from Guildford showed good examples of ultrasound and CAT scanning and nuclear magnetic resonance imaging techniques in difficult clinical cases. There is little doubt about the diagnostic revolution posed by these newer techniques.

Saturday afternoon was given over to more hedonistic pursuits. There was squash for the coronary prone, walking and talking for the leisureed classes and there would have been swimming but for the absence of water in the exclusive pool. Runners paired up in the frosty sunlight for an extended fashion parade which turned out to be a pair-laugh in which only teams of excessive combined IQ seemed to have a chance. The golfers, as usual planned the evening's prize-giving.

A tea-time session by Drs Steven Young and Ian Adams reviewed Basic Treatments – that perennial source of dogma, confusion and controversy for the therapists. The Dinner, with pre-lubricant reception, followed the now traditional pattern of food, drink, speeches and increasing ribaldry as the tension rose in the golfers' corner. The problem was that one of the distinguished guest speakers was nowhere to be found! Eventually, the bottles being empty, Tim Noakes drew the short straw and had to add a speech to his lecture! As he delivered a tour de force the situation was brilliantly retrieved. Sir Arthur Gold proposed 'Sport' and Chairman Dan Tunstall-Pedoe responded to all and sundry. This left to the floor clear for prize-giving. PhiEPPides cannot exactly vouch for the details, but thinks that the delectable Kirsten Skjett actually won the golf, but the boys carved up the freebies in the usual overcompensatory reaction. Modest marathoner Pat Milroy was awarded new balls; more aggressive recidivist Geoff Gardner won something called Golden Ram Balls and Tom Crisp had his bag replaced. To put the wind up the mafia, Peter Thomas gave himself a prize too and the Mayor of Southampton Memorial Speech Lottery was tied between John Rees and Geoff Gardner, the result being 37 minutes. Sunday saw Dr. Frank Sanderson of Liverpool reviewing Motivation, then followed the Short Paper Session, with contributions on Diagnostic Ultrasound in Ankle Ligament Injuries, Physiological Assessment of Rowers, The Doctor in Professional Cycling, Psychological Factors associated with Injury Rehabilitation, and Nutrient Intake of Synchro and other Swimmers.

We then had the first ever BASM Open Forum at which the Executive faced the membership in discussion and debate. The success of this session is indicated by the list of no less than twenty-seven subjects raised, ranging from subs (raised) to sponsorships, Amsterdam to Bruges, position stands to team doctoring and the floating of a Football Team Doctors Group (coordinator Geoff Gardner). This was the first comprehensive and informative meeting of its type in memory and, by acclaim, will be a regular feature of future annual meetings. After this, it was no surprise that the AGM of BASM was dealt with expeditiously in record time.

Thanks are due to the Organizing Committee – Peter Thomas, Malcolm Bottomley, Di Middleton, Tom Crisp, Roger Hackney and Nancy Laurenson – and the Sponsoring Companies.

Thanks also to:- Lederle, Milk Marketing Board, Nomeq, A. H. Robbins, Panpharma, Wyeth, Pfizer, Rhone-Poulenc, Thomas Mason, Bauerfind, Medi-post, MRI Clinic, Glaxo, Tate & Lyle, The Sports Council.

PhiEPPides
Sports medicine current awareness service

Prepared by Kathryn Walter and Nancy Laurenson at the London Sports Medicine Institute (LSMI) Library

The following summaries are taken from a selection of recent journals indexed in the LSMI database. A full listing is published monthly in the Sports Medicine Bulletin.

Copies of the complete articles are available (price £10 per sheet except to Copyright Law) from the Library, LSMI, c/o Medical College of St Bartholomew’s Hospital, Charterhouse Square, London EC1M 6BQ. Tel: 01251 0583.

Tennis player Michael Chang was the surprise winner of last year’s French Open despite having to stave off severe muscle cramps. In Outwitting muscle cramps – is it possible? (Physician and Sportsmedicine 1989, 179, 173, 117–6) Chuck Benda reviews the possible causes of muscle cramp and the variety of treatments which have been proposed for its relief. Low glucose, fluid loss, electrolyte imbalance, inadequate conditioning, overexertion, fatigue and injury may all play a role in the aetiology of muscle cramp. Applying pressure to the affected muscle, drinking fluids, stretching and potassium intake (often via bananas) are some of the methods used by athletes to overcome cramp. There is, however, no guaranteed treatment. One of the more unusual remedies is that of pinching the athlete’s upper lip. The mechanism for the reported success of this method is unclear, but it may cause some alteration of neurotransmission to the muscle.

Competing in international events often involves travelling across several time zones. The resulting desynchronisation of physiological and psychological cycles has adverse effects on performance. General symptoms arising from this dysrhythmia are described in Jet-lag and human performance (Loat, C.E.R. and Rhodes, E.C. Sports Medicine 1989, 8(4), 226–38) and include malaise, appetite loss, tiredness during the day and disturbed sleep. Phase shifts occur in body temperature, ability to mobilise energy substrates, excretion of water and metabolites, arousal levels, sleep/wake cycles and reaction time. The severity of these adverse effects and thus the time needed for resynchronisation depends on the ability to preset the bodily rhythms prior to flying, the number of time-zones crossed, the direction of flight, the type of individual (introvert/ extrovert), age, social interaction and activity, diet plan and prescribed use of chronobiotic drugs.

It has been assumed in the past that because isokinetic testing protocols at the knee were considered reliable, they were also reliable for other extremity joints such as the ankle. Such generalisations should and are being questioned (Karnofel, H., Wilkinson, K. and Lentell, G. Reliability of isokinetic muscle testing at the ankle Journal of Orthopaedic and Sports Physical Therapy, 1989 11(4), 150–4). The results from this study suggest that a standardised protocol for isokinetic evaluation of the ankle for plantar flexion/dorsiflexion, and inversion/eversion using a Cybex II isokinetic dynamometer can be reliable for obtaining mean peak torque values in a healthy adult population.

Physiological evaluation of 862 participants in the 1985 World Masters Games seems to indicate that in middle-aged and elderly individuals a moderate level of regular physical training can improve the quality of life, reduce exercise-related ischaemic manifestations and slow the age-associated decline in cardiovascular function (Kavanagh, T., Mertens, D.J., Matosevic, V., Shephard, R.J. and Evans, B. Health and aging of masters athletes Clinical Sports Medicine 1989, 12(2), 72–88). Training regimens were quite modest and 90 per cent of the group participated in sport for social rather than competitive reasons. There were 756 competitors who underwent maximal exercise testing. Eleven per cent of tests were stopped because of ST-segmental depression, abnormal blood pressure response or complex ventricular ectopy. Peak power output and peak oxygen uptake were above norms for the general population, resembling values for a sedentary adult of 25 years. The cross-sectional decline in peak oxygen (age range 29–79 years, average 3.5 ml kg m⁻¹ per decade) were considerably less than reported for a similarly aged sedentary population.

Short term health effects of anabolic steroids have been increasingly studied but long term effects are still unknown. This issue is addressed by Yesalis, C.E., Wright, J.E. and Bahrke, M.S. in Epidemiological and policy issues in the measurement of the long term health effects of anabolic- androgenic steroids (Sports Medicine 1989, 8(3), 129–38). The authors discuss the ramifications of the continued absence of information in this area, review the short-term health effects of anabolic-androgenic steroid use and describe methodological issues which must be considered when studying the long term health impact of these drugs.

A special issue of the Internal Journal of Sports Medicine 1989, 10, (3) S117–S190 presents the results of a 20-month longitudinal study in which 114 untrained volunteers (31 females and 83 males) were trained stepwise in a standardised way. At the end, 18 females and 60 males succeeded in running a marathon. The topics of this marathon study focused on some aspects of performance and on morphological, biochemical, hormonal, metabolic and haematological changes as a consequence of training and marathon running. In addition, the prevalence of injuries was studied during the whole period. A series of articles in a recent supplement of Medicine and Science in Sports and Exercise (1989, 21(5) A198–S225) is also devoted to the physiology and medicine of an endurance sport – the triathlon. ‘State of the art’ information concerning physiological changes observed during different length triathlons is offered, together with comments on the medical implications of these changes. Additionally, practical advice is given on how to set up

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The literature examining the relation between training, RMR and TEF are conflicting however. It appears that RMR may be elevated in (only) very highly trained individuals whereas TEF may be enhanced by moderate exercise training. Genetic variation, timing of the exercise bout relative to caloriometry measurements, and different criteria to define trained and untrained individuals are probable contributors to the divergent results found in the literature.

Achilles tendinitis commonly affects athletes in the running and jumping sports and is reviewed in Nichols, A.W. Achilles tendinitis in running athletes Journal of the American Board of Family Practice 1989, 20(3), 196–202. It results from repetitive eccentric load-induced microtrauma that stresses the peritendinous structures causing inflammation. Training errors such as excessive running mileage and training intensity, hill running, running on hard or uneven surfaces and wearing poorly designed running shoes are frequently responsible for the onset of Achilles tendinitis.

Biomechanical abnormalities which predispose to this injury include gastrocnemius-soleus muscle weakness or in flexibility and hindfoot malalignment with foot hyperpronation. Initial treatment is conservative with rest, cryotherapy, NSAIDs and biomechanical correction. Surgery is recommended only for persons with chronic symptoms who have not benefited from conservative therapy but who wish to continue running.

Magnetic resonance imaging for the diagnosis of Achilles tendinitis is described in Fast scan magnetic resonance of Achilles tendinitis (Berthoty, D., Sartoris, D.J. and Resnick, D. Journal of Foot Surgery 1989, 28(2), 171–3). A case report shows the most useful imaging sequence to be a sagittal low flip, angle-fast scan.

In Skeletal system: A limiting factor to sports performance? A brief review (Journal of Orthopaedic Rheumatology 1989, 2, 123–32) N. Maffulli examines how the structure and composition of some parts of the skeletal system may limit maximal sports performance capability. This paper looks at stresses under which the skeletal system is placed during sporting activities, highlighting the contribution of tendons, ligaments, entheses, articular cartilage, synovial fluid and bone to the locomotor apparatus.

Most occurrences of low back pain in athletes respond quickly to reasonable and acceptable forms of conservative treatment. Many of these incidences are related to either acute traumatic injury or effects of accumulative overuse activity. However, persistent low back pain in the athlete may be a potential indicator of serious low back dysfunction. Biomechanical considerations for clinical application in athletes with low back pain (Deusinger, R.H. Clinics in Sports Medicine 1989 B(4), 703–15) discusses the biomechanics, structure and movement of the lumbar spine as the basis for suggesting some alternative approaches to preventative treatment and rehabilitation of low back pain in the athlete.

The meaning of fitness in its association with physical activity and the relative importance of each in deriving health benefits is well examined in the article Being habitually active in leisure time: Today's best buy for public health (Mercer, T. British Journal of Physical Education 1989, 20(3) 137–44). The author also attempts to throw light on the patterns of habitual physical activity in late industrial societies and the methods used to determine its prevalence in these populations.
Notes for Authors

Scope
The British Journal of Sports Medicine covers all aspects of sports medicine and science - the management of sports injuries; all clinical aspects of exercise, health and sport; exercise physiology and biophysical investigation of sports performance; sports psychology; physiotherapy and rehabilitation in sport; and medical and scientific support of the sports coach.

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Original papers (not normally over 3000 words, full length accounts of original research)
Review articles (up to 4000 words, providing concise in-depth reviews of traditional and new areas in sports medicine)
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21 Sperryn, P.N. *SpA and Medicine* Butterworths, UK 1983

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