LETTERS TO THE EDITOR

The ups and downs of high altitude mountaineering

EDITOR,—Professor Craig Sharp delighted us with a recent account of his world record ascent of Mt Kilimanjaro in the 1960s and voiced his concerns about the physiological demands inherent in such a feat; the madness and exuberance of youth! It is interesting to note that this record was established during the height of one of the most unforgettable debates in mountaineering history provoked by the initial uncertainties of Barcroft, Margaria, and Henderson, the possibility of an “oxygenless” ascent of Mt Everest. The epochal ascent without supplemental oxygen by Messner in 1978 subsequently put paid to any speculation and reinforced what H Huxley (1825–1895) once remarked “The great tragedy of science; the slaying of a beautiful hypothesis by an ugly fact!”

The “get up and get down” philosophy of mountaineering has become an increasingly popular among enthusiasts who are either pitting their physical attributes against the stopwatch or, as Messner would maintain, merely limiting their time spent in the “death zone.” Perhaps the most astounding feat of all was achieved during an Italian expedition to Mt Everest in May 1996 when Hans Kammerlander summited via the North Col in a record time of 17 hours and then descended to basecamp on skis! However, although extending the envelope of human endurance, the risks inherent in such an extreme sport simply cannot be ignored.

For example, research in our laboratory has recently indicated a pronounced increase in metabolic biomarkers of free radical and skeletal muscle damage at 5100 m due primarily to the oxidative and reductive stress imposed by physical exercise and environmental hypoxia respectively. We have also incriminated free radicals in the pathophysiology of acute mountain sickness and endothelial dysfunction at high altitude. Thus, which limit the average hourly ascent rates by Sharp and Kammerlander of about 611 m and about 215 m respectively compared with the more leisurely 12–30 m typically encountered during a Himalayan expedition, the potential for suffering at the hands of more appropriately electrons! of these ubiquitous biomolecules is all too apparent. Free radical generation may be further compounded during a rapid as opposed to a steady controlled descent because of the mechanical trauma of eccentric muscle contractions and greater increase in arterial pO2, implicit in reoxygenation injury.

But how do these mountaineers achieve such remarkable feats and survive to tell the tale when others falter even at the slightest whiff of hypoxia? The fact that Professor Sharp was effective a native highlander at the time of his record suggests that acclimatisation may have conferred at least some protection. Or perhaps he is one of the genetically gifted with the I allele of the ACE gene recently associated with improved performance at high altitude? While this remains a riddle wrapped in a mystery inside an enigma, it would seem wise counselling to ensure that those antioxidants are packed before visiting one of nature’s wonders!

DAMIAN MILES BAILEY
Senior Lecturer in Physiology, 1998 Mt Kanschenjunga Medical Expedition, c/o Hypoxia Research Unit, Health and Exercise Science Research Laboratory, University of Glamorgan, Pontypridd CF37 1DL, UK


Professionalism and injuries in rugby union

EDITOR,—Garraway et al are to be congratulated on their meticulous investigation of the incidence of rugby injuries.

Rugby has a very high incidence of injuries. Garraway et al state: “An injury episode occurred in a professional team for every 59 minutes of competitive play”—that is, one serious injury among 30 professional players every 59 minutes. Of greater concern is the fact that Garraway et al reported two neck dislocations, one of which resulted in permanent neurological damage, in this recent paper compared with nil in the earlier one.

The question of rugby injuries is an emotive one and has been the subject of much speculation. Garraway et al have shown that injury rates vary considerably between rugby player groups, with a direct correlation between the standard of professionalism and the degree of force and skill exaggerates the likeliness of injury. This is not in accord with my earlier findings. It has been suggested that rugby league is a much safer game as the ruck and maul have been abolished. However, the incidence of injury is four players out of 26 000 with broken necks for rugby league versus five players out of 500 000 for rugby union, which does not support this claim.

J R SILVER
Fellow of the Institute of Sports Medicine Consultant in Spinal Injuries, National Spinal Injuries Centre, Stoke Mandeville Hospital, Bucks, UK


Effectiveness of stretching to reduce injury

There appears to be a conflict of ideas in two of the leaders in the October issue of the journal. Reid and McNair state on page 322 that “it is important for rowers to include hamstring stretches in their training programmes”, their argument being that stiffness of the hamstrings would prevent pelvic rotation and increase the likelihood of back pain. Shrier, however, demonstrates that there is no evidence that stretching before exercise reduces injury.

May I suggest that these views are not necessarily incompatible. Firstly, it would seem to me that there may be a difference between stretching abnormally tight tissues into a normal range of motion as opposed to stretching normal tissues into an excessive range. Is this difference specified in the studies of the effects of stretching on injury prevention referred to by Shrier? Perhaps it is a semantic quibble, but what is stretching? Secondly, Reid and McNair illustrate the concept of the kinetic chain. Did the studies of the ineffec-
tiveness of stretching look at stretching one link in the kinetic chain to reduce injury elsewhere or were they concerned with merely local effects?

P E SCHUR
Wiggo Cottage, 135 Main Road, Wytham, Nantwich, Cheshire CW5 7LR, UK


BOOK REVIEWS


General practitioners who have long lost the art of performing and applying the findings of
a neurological examination will find this cons agreeable. The presentation is thus well
The book is primarily written for medical
students, and achieves this aim as it is an excellent introductory text. It contains nu-
merous practical tips for carrying out a thor-
ough neurological examination in one excel-
lent chapter. Fortunately, the text also
contains many shortened or modified ver-
sions of aspects of the full examination, which
will allow the physiotherapist or student to identify
significant abnormalities, and then apply the
findings appropriately. Challenges are set throughout the book, such as “What’s the
lesion?”, and discussion of case histories pro-
vides practical and applicable examples of
application of the examination and accurate
diagnosis. The format of these case histories
is rather confusing initially, but a little
perseverance enables the reader to learn a great
deal from their application.

Common neurological disorders are cov-
ered broadly, but not in much depth, as the
title of the book suggests. There is good cov-
erage of new drugs and therapies for multiple
sclerosis and Parkinson’s disease for those
doctors who may have fallen behind the rapid
advancement of neurological treatments.

**Analysis**

- Presentation: 15/20
- Comprehensiveness: 15/20
- Readability: 15/20
- Relevance: 15/20
- Evidence basis: 15/20
- Total: 75/100

**MARK RIDGEWELL**

*Kings Road Surgery, Humble, Stanmore HA4 2AT, Wride, UK*

**Tendinitis: Its etiology and treatment.**

William D. Stanish, Sandra Curwin and
Scott Mandell. (Pp 140; £34.95) Oxford

I must say that I liked this book. In a most
logical and readable fashion it set about what
can be a rather dull, but yet most clinically
important topic. Opening chapters on the
normal tendon and the etiology of tendinitis
were followed by more clinically and explicitly
described related areas. Initial graphs and diagrams
were simple and clear but some of the later
clinical illustrations could have been
improved by the use of photographs or colour.

The renowned authors combine well to use
their obvious clinical experience to give a bal-
anced viewpoint of both conservative and
surgical treatments, with the emphasis being on
rehabilitation. All treatment options are
assessed and the evidence for their choice is
given. Throughout, any statements are
backed up by suitable references and with
suggestions for further reading.

The clinical chapters cover common
presentations—Achilles, jumper’s knee, hu-
meral epicondylitis—and take the reader
logically through pathology, etiology, diagno-
sis, and treatment. The book finishes with an
outline of the eccentric exercise programme
used in the authors’ Nova Scotia Sports
Medicine Clinic and analyses its application.

At 140 pages, this book is concise and
therefore easily readable. Although the title
does not mention exercise or sport, through-
out the book there are many references to the

**Analysis**

- Presentation: 18/20
- Comprehensiveness: 17/20
- Readability: 19/20
- Relevance: 18/20
- Evidence basis: 17/20
- Total: 89/100

**B THOMPSON**

*Sports and Orthopaedic Medicine Clinic, Craighaven Area Hospital, N. Ireland*

**Chronic ankle pain in the athlete.**

Edited by Glenn B. Pfeffer. (Pp 88; soft cover; $38.00) Illinois, USA: American Academy

In reviewing this book, I was first struck down
by the American terminologies, then bogged
down by too much information in uninter-
rupted essay format for two chapters (“Sprains and soft tissue injuries” and “Sub-
talar injuries”). There was a vast amount of
very relevant comprehensive information
to be found in these sections—for example,
different x ray views to request to visualise
specific problems, but sadly it was difficult to
access in essay format. This was let down
the book as a whole, as the last two chapters
(“Arthroscopic treatment of Osteochondral
lesions and soft tissue impingements” and
“Nerve injuries to lateral leg and ankle”) were
excellently laid out with clear, helpful infor-
mation for all sports physicians. They were
also very well illustrated, including a flow
chart for chronic ankle pain management.

I know I am a simple ex GP in sports
medicine but, with limited time to read
books, I like clear headings, major points
highlighted, and tables to compliment the
text. I also like pictures; the illustrations in the
first two chapters did not do anything to
clarify the text (reduced size, unclear, black
and white anatomy specimen photographs).

Although this book, I think, is aimed at
orthopaedic surgeons, it has certainly in-
creased my knowledge and enthusiasm to see
orthopaedic surgeons, it has certainly in-
creased my knowledge and enthusiasm to see
chance ankle problems and I would recom-
end that anyone serious about sports medi-
cine consider it as a reference book for those
difficult ankle problems. If only the authors in
the latter part had edited the first two
chapters.

**Analysis (chapters 1 & 2)**

- Presentation: 6/20
- Comprehensiveness: 15/20
- Readability: 6/20
- Relevance: 12/20
- Evidence basis: 12/20
- Total: 51/100

**Analysis (chapters 3 & 4)**

- Presentation: 16/20
- Comprehensiveness: 15/20
- Readability: 15/20
- Relevance: 15/20
- Evidence basis: 16/20
- Total: 78/100

**J DUNBAR**

*Sports Medicine Physician and GP locum, 63 Ochilieres, Dunblane FK15 0DJ, UK*

**NOTES AND NEWS**

**Institute of Sports Medicine masters course**

The Working Party of The Institute of Sports Medicine and University College London (UCL) proposed that a new Course in Sport and Exercise Medicine be set up. After eight-
een months of intensive preparation, the
course started in September 2000. It is based
on the Whittington campus of UCL but can
draw on the combined resources of the Whitting-
ton, Middlesex, Royal Free, and University
College Hospitals. The course is designed as an MSc in the Department of Surgery and
concentrates on high academic standards,
including training in research techniques and
a solid foundation in basic science.

Nevertheless, there will be a full clinical
display to all aspects and candidates will be
expected to sit for the Diploma in Sports and
Exercise Medicine of the Academy of the
Medical Royal Colleges.

The Institute have provided an annual
bursary to defray the tuition fees of one can-
didate, and in this millenium year have also
awarded a special Millennial Bursary.

**Annual awards ceremony**

The Institute of Sport’s Annual Awards Cer-
emony was this year held at The Royal Insti-
tute, chaired by Sir David Money-Coutts
KCVO. The Guest of Honour was Professor
Christopher Llewellyn Smith FRs, the Prov-
ost of UCL, who commented in his address
that the presence of The Institute physically
within the Department of Surgery was an
excellent example of the symbiosis between
the College and its many guest organisations,
each contributing to the good of the others.

Three fellowships were awarded by the Insti-
tute to Dr Richard Budgett, Director of
Medical Services, British Olympic Associa-
tion and Chairman, BOA Medical Com-
mittee (in absentia), Mr Graham Holloway,
Consultant in Orthopaedic Surgery and
Sports Injuries, Ridgeway and BUPA Cam-
bridge Lea Hospitals, and to Dr Patrick Mil-
roy, Regional Medical Officer to the British
Athletics Federation, who gave an entertain-
ing and informative lecture on pitfalls and
dilemmas that he had encountered. The Sir
Robert Atkins Award was presented to Dr
Peter Wilmshurst for services to Diving
Medicine, and the recipient of the Millennial
Bursary Award, Dr Amir Ali Narvani, was
congratulated by the Provost.

**Annual symposium**

The Institute’s Annual Symposium on “Cur-
rent Dilemmas, a journey through Sports
Medicine, Ethics and the Law” has been held
jointly with the Section of Sports & Exercise
Medicine of the Royal Society of Medicine on
8 November 2000. A total of 10 speakers of
international repute presented papers to a
packed Barnes Hall at the Royal Society of
Medicine. Details of further such meetings
can be obtained by contacting the RSM.

www.bjsportmed.com
The BASEM Congress 2001 is to be held at the Vale of Glamorgan Hotel, Golf and Country Club, Wales, from 25–28 October 2001. Hosted by BASEM Wales, various topics will be covered from the use of padding in Rugby Union to exercise in extremes of temperature. There will be a free afternoon for sporting pursuits and European Club Rugby Union matches are scheduled for that particular weekend. Further details are available from Mrs Sue Roberts, BASEM Company Office, 12 Greenside Avenue, Frodsham, Cheshire WA6 7SA. Tel/fax: 01928 732 961; email: basemo@compuserve.com.

CALL FOR ABSTRACTS
The BASEM 2001 congress committee invite submissions of abstracts for the presentation of short papers and posters. All abstracts will be peer reviewed externally and anonymously and those selected may be published in *BJSM*. Awards will be presented including the BASEM Young Researchers Award, presented to the best paper from an author less than 10 years qualified. Those not selected for oral presentation will be invited to present a poster, or poster only presentations may also be submitted. There will be a poster award presented. Enquiries and submissions should be directed to: Dr Tim Jenkinson, Royal National Hospital for Rheumatic Diseases, Upper Borough Walls, Bath BA1 1RL. Tel: 01225 473428; fax: 01225 473 437; email: Tim.Jenkinson@rnhrd-tr.swest.nhs.uk.

AIRCAST TRAVELLING FELLOWSHIP 2001
This fellowship, funded by Aircast Limited Partnership is open to medical practitioners under the age of 40 years, for unpublished work relevant to sport and exercise medicine. It will allow the holder to spend two weeks in a medical centre of excellence in the United States. Receipted expenses, including the airfare, will be awarded to a maximum of £2000.

The work should include a structured abstract of approximately 250 words and body text of a standard format (introduction, methods, results, discussion, conclusion, references and an acknowledgement of support received) of approximately 5000 words. The closing date for submission is 1 August 2001, and the holder will be expected to give a 20 minute presentation of his or her work at the BASEM Annual Congress. For further information, please contact the BASEM office.

CORRECTION
We regret that figure 2 was omitted from a recent article (*BJSM* 2001;35:34–7). The figure is reproduced here and we apologise to the authors and readers for this error.