patients do ask for, and some doctors do provide, assistance in shortening life. For these patients and these doctors the law is clearly unsatisfactory, and furthermore restricts open discussion on both a professional and personal level.

BARNEY WARD
Medical student
PAT TATE
General practitioner

East Barnwell Health Centre,
Cambridge CB5 8SP

- 1 Rodway A. Euthanasia. *BMJ* 1994;309:52. (2 July.)
- 2 Ward BJ, Tate PA. Attitudes among NHS doctors to requests for euthanasia. *BMJ* 1994;308:1332-4. (21 May.)
- 3 Collins K, Gilhooly MLM, Murray K. Euthanasia. *BMJ* 1994;309:52. (2 July.)

Sports medicine

Booster doses are not needed

EDITOR,—J C M Sharp's advice on tetanus immunisation¹ is contrary to that specified in the current edition of the "green book."

For immunised adults who have received five doses of tetanus vaccine, either as children or according to the recommended schedule of immunisation for those aged 10 years and over, booster doses are not recommended, other than at time of injury, since they have been shown to be unnecessary and can cause considerable local reactions.² Sharp's recommendation that people should have booster doses at 10 year intervals and that boosters should be considered at five year intervals for athletes is now out of date.

FIONA SIM
Clinical medical officer, community child health

Forth Valley Healthcare,
Stirling Royal Infirmary,
Stirling FK8 2AV

- 1 Sharp JCM. Infections in sport. *BMJ* 1994;308:1702-6.
- 2 Department of Health, Welsh Office, Scottish Home and Health Department, DHSS (Northern Ireland). *Immunisation against infectious disease*. London: HMSO, 1992:37-43.

Author's reply

EDITOR,—The Department of Health's recommendation limiting the number of doses of tetanus vaccine for prophylaxis in adults is well known and its validity generally accepted. My suggestion that rugby and soccer players should be considered for further occasional booster doses during their playing careers is based on the experience of a 26 year old Scottish rugby player: in 1988 he developed clinical tetanus after sustaining a deep stud wound despite having received tetanus vaccine with penicillin as part of treatment given in hospital on the occasion of his injury (unpublished case). He had reportedly received the full immunising course of five doses of vaccine before leaving school, his last booster dose having been in 1978, 10 years previously.

J C M SHARP
Consultant epidemiologist

Scottish Centre for Infection and Environmental Health,
Ruchill Hospital,
Glasgow G20 9NB

Heel tabs can cause injury

EDITOR,—Peter N Sperry made scant mention of equipment as a cause of overuse injury in sport yet included in his article two photographs of a glaring example of faulty equipment.¹ That same equipment recently caused bilateral injuries to my heels and ankles. I walk for 90 minutes most mornings, and recently replaced worn out jogging shoes. I made the grave error of buying new sports footwear with high heel tabs exactly as illustrated by Sperry, although of a different brand. Halfway through my first walk in the new shoes I had blisters over both

Achilles tendons. I had no alternative to walking home. It took three weeks for the wounds to heal. These high heel tabs, whatever their intended practical application, can and do cause injuries to the wearer. They seem to be no more than a fashion fad. Perhaps a couple of writs against the various manufacturers might cause them to mend their ways and produce more ergonomically sound footwear.

Sperry's photographs illustrate yet another sports hazard. If people wear such footwear without socks the environment within the shoe becomes a mixture of sweat, desquamated cells, sebum, bacteria, and fungi. In my experience (which is limited to Australia), tinea pedis is much more common and severe in those who do not wear socks when wearing enclosed shoes.

KEN HAY

Mandurah 6210,
Western Australia,
Australia

- 1 Sperry PN. Overuse injury in sport. *BMJ* 1994;308:1430-2. (28 May.)

Anaesthetist attends boxing contest

EDITOR,—I question the statement in Greg McLatchie and Bryan Jennett's article on head injury in sport regarding the management of the unconscious patient at the scene of injury. The authors suggest that the airway should be protected until arrival of paramedics, who would then institute suction and intubation. If in this situation the unconscious patient still had a gag reflex, any attempt to facilitate intubation without giving a general anaesthetic could potentiate an already severe injury, with catastrophic consequences.

Following the injury received by the boxer Michael Watson, I sought the advice of local specialists with regard to ringside management of acute head injury in professional boxing. As a result there has been an anaesthetist present at all professional boxing contests in Wales since October 1991. Provision has been made for giving a neuro-protective general anaesthetic at the scene, before transfer to hospital. All drugs and equipment are on site, and a basic protocol has been agreed.

Only an anaesthetist following strict guidelines should attempt to intubate the unconscious head injured patient at a sporting venue.

R M MONSELL
Welsh area medical officer

British Boxing Board of Control,
Cardiff CF2 7DS

- 1 McLatchie G, Jennett B. Head injury in sport. *BMJ* 1994;308:1620-4. (18 June.)

Syncope

A good history is not enough

EDITOR,—The editorial on syncope by M C Petch invites comment.¹ The thrust is to oversimplify the diagnosis of syncope. We agree that this may be appropriate but depends on the history from patient and observer. However, in a substantial minority there are real difficulties. In this context Petch's definition of malignant vasovagal syncope does not match either the British or the North American definition.² The British definition hinges on the lack of warning experienced, which results in injury in attacks, and the American definition emphasises the duration of asystole on tilt testing. For these patients testing is necessary, and until the mid-1980s there was no test that could, in the laboratory, reproduce vasovagal syncope. In 1986 Kenny *et al* first showed the clinical value of tilt testing and provided the basis for the British definition.³ Since then tilt testing has spread worldwide, which reflects not only its clinical utility but also its economy.

We agree that many aspects of tilt testing remain to be fully evaluated, including use of drug challenge, reproducibility, and serial testing, but we underline the value of the test. After only eight years we are not surprised that scientific work in the field is incomplete. The consideration of a few patients for implantation of dual chamber pacemakers has not been lightly undertaken,⁴ and our recommendations now are that a patient with recurrent syncope, which meets the British definition of malignant vasovagal syncope, should undergo repeat tilt testing with temporary dual chamber pacing to show the benefit. Lastly, it must be stated that no therapy for vasovagal syncope has yet survived the rigours of a randomised controlled trial.

The matter of tilt testing is not the only way in which Petch is misleading. Patients sustaining a simple faint or vasovagal component, and debility, nausea, or headache are often seen. Furthermore, every age is affected. Diagnosis of any kind of syncope by event recording sometimes proves unrewarding. It is contradictory to state that warning is insufficient in a simple faint to apply the recorder and to maintain that the warning in such a faint is diagnostic. Finally, carotid sinus massage causing symptomatic asystole cannot be ignored, especially when no other explanation of syncope has been determined; this is confirmed by all series directed towards this.⁵ The clinical history here is paramount but not perfect, and tilt testing is a necessary adjunct in the investigation of syncope.

RICHARD SUTTON
President
ANTHONY NATHAN
Secretary
JOHN PERRINS
Treasurer
DOUGLAS SKEHAN
Member
WYN DAVIES
Member

British Pacing and Electrophysiology Group,
Royal Brompton National Heart and Lung Hospital,
London SW3 6NP

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History may be inaccurate in elderly people

EDITOR,—M C Petch's editorial on syncope is misleading.¹ It is untrue that "an accurate history tells all." In older patients, in whom the annual incidence of syncope is at least 6% with an annual recurrence of 30%, the history is unreliable.

In 1993 colleagues and I investigated 900 new referrals with a diagnosis of syncope or possible syncope. Over two thirds were aged over 65; a witness account of events or an accurate history was available for only two fifths of these elderly patients. Of the elderly patients in whom loss of consciousness had been witnessed and symptoms recurred during provocation testing, one third maintained on presentation that they had suffered only recurrent unexplained falls; they denied syncope, thus showing retrograde amnesia for loss of consciousness.^{2,3} Half of the patients referred for investigation had sustained a serious injury during a syncopal episode, and symptoms had been present for four years on average. Patients had experienced a mean of 13 syncopal episodes or unexplained falls.² The reasons why such patients are not referred earlier are unclear.

Patients benefit from diagnosis and intervention.^{4,5} A diagnosis can be made in 83% of older