the hands or arms frequently complain of pain, numbness, swelling, and weakness. These symptoms are usually transient and most subjects who develop these symptoms do not seek assistance from doctors. More important, Higgs and colleagues have shown that workers who would change repetitive jobs involving the arms and hands were much less likely to complain of symptoms than those who carried out the same task every day.²

Lucire has proposed a model to explain how symptoms of this nature can persuade the victim that he or she has a compensable injury.³ If the sufferer believes that repetitive movement can injure the hands or arms; if this belief is reinforced from fellow workers, the press and others; if there is a conflict at work; and if a medical certificate is issued indicating work related injury, these symptoms are likely to persist. Although it is known that those who litigate have poorer response to treatment,⁴ this is in part due to inactivity of the affected limbs after stopping work because of the conviction that movement will cause further injury. Inactivity leads to weakness and atrophy of muscles and bone decalcification as well as to depression and anxiety. The delay in actions of this sort coming before the court further maintains symptoms and disability.

The lack of evidence of neurological injury and the association with work persuaded Gowers over 100 years ago to describe the symptoms and signs arising in repetitive strain injury as one of the occupational neuroses.⁵ Gowers's description would clearly include the symptoms that occur in repetitive strain injury today: "a group of maladies in which certain symptoms are excited by the attempt to perform some often-repeated muscular action, commonly one that is involved in the occupation of the sufferer." Plus ça change.

S P TYRER

Royal Victoria Infirmary,
Newcastle upon Tyne NE1 4LP

- 1 Brooks P. Repetitive strain injury. *BMJ* 1993;307:1298. (20 November.)
- 2 Higgs P, Young VL, Seaton M, Edwards D, Feely C. Upper extremity impairment in workers performing repetitive tasks. *Plast Reconstr Surg* 1992;90:614-20.
- 3 Lucire Y. Social iatrogenesis of Australian disease "RSI." *Community Health Stud* 1988;12:146-50.
- 4 Mendelson G. Chronic pain and compensation. In: Tyrer SP, ed. *Psychology, psychiatry and chronic pain*. Oxford: Butterworth Heinemann, 1992:67-78.
- 5 Gowers WR. *A manual of diseases of the nervous system*. London: Churchill, 1892:710-30.

Musicians helped by team approach

EDITOR,—Peter Brooks's editorial on the recent decision in a British court that repetitive strain injury does not exist as a separate medical condition is important.¹ Musicians are prone to aches and pains that are specific to their profession; they may also suffer from the health problems to which everyone is prone. If these problems are not recognised and tackled quickly the resultant inability to work for even quite short periods may lead to the loss of a career. The epidemic of repetitive strain injury in Australia destroyed the career of many fine professional musicians, but enforced inactivity and the use of prolonged splinting were almost certainly responsible for the effects seen.

A recent audit of over 200 musicians with upper limb pain attending the performing arts clinic at the Royal Free Hospital showed that half of them had clear cut orthopaedic or rheumatological problems. In the other half, who had no physical signs other than vague generalised muscle tenderness, a diagnosis of a regional pain syndrome was held to be appropriate.

There is no evidence that repetitive movements are causative.² On the other hand, data indicate that increased tension in the affected muscles may be an important causative factor.³ Postural

problems therefore need to be corrected by physiotherapists or teachers of the Alexander technique; technical problems should be corrected by skilled teachers of the instrument; and emotional problems and problems related to stress need to be alleviated with help from trained counsellors or psychologists. For many patients simple relaxation techniques are sufficient. β Blockers have a role in some cases if emotional stress or performance anxiety results in increased muscle tension. Antidepressants should be used if there is an element of depression. In our view, a multidisciplinary approach is essential.

Fortunately, repetitive strain injury has not affected musicians in Britain to anything like the extent that it affected musicians in Australia. There are several possible reasons for this. Firstly, the importance of a multidisciplinary approach has always been emphasised at meetings organised by the British Association for Performing Arts Medicine. Secondly, an important initiative was launched by the British Performing Arts Medicine Trust four years ago, supported by the Musicians' Union and the Musicians' Charities. A scheme was set up whereby some 30 primary care doctors trained in performing arts medicine were appointed as honorary medical advisers to all the main professional orchestras in Britain.⁴ These advisers now deal with the health problems of orchestral musicians quickly and efficiently and adopt the multidisciplinary approach to regional pain syndromes outlined above. Maybe other professional groups could benefit from this "music lesson."

I M JAMES

C B WYNN PARRY

Royal Free Hospital,
London NW3 2QG

- 1 Brooks P. Repetitive strain injury. *BMJ* 1993;307:1298. (20 November.)
- 2 Brooks PM. Repetition strain injury. *Lancet* 1987;iii:738.
- 3 Moulton B, Spence SH. Site specific hyperactivity in musicians with occupational upper limb pain. *Behav Res Ther* 1992;30:375-86.
- 4 James IM, Wynn Parry CB. Performing arts medicine. *Br J Rheumatol* 1992;31:795.

Alcohol and heart disease

Drinking advice inconsistent and unscientific

EDITOR,—John Kemm claims that advice about drinking "to individual members of the public has been fairly consistent over the past decade."¹ This is surprising.

In 1979 a special committee of the Royal College of Psychiatrists stated that the absolute upper weekly limit was about 56 units of alcohol.² In 1981, however, the Department of Health and Social Security stated that these weekly limits "were in fact quite high" but declined to give precise advice because this was "not necessarily appropriate" in view of variations in both drinkers and drinking circumstances.³

Thus at the beginning of the decade no good medical guidance was available and so various bodies framed their own. For instance, in 1984 the Health Education Council stated that 21-36 units a week for men, and 14-24 units a week for women, was unlikely to damage health.⁴ At around the same time the Scottish Health Education Group advised that 35 and 20 units a week were the maximum upper limits for men and women respectively.⁵

In 1986-7 the Royal Colleges of Psychiatrists, General Practitioners, and Physicians all issued guidelines on safe consumption. Although some confusion was caused by the use of the words "levels" and "limits" at various places in the text, they seemed to be fixing 21 units a week for men and 14 for women as sensible levels/limits, but they did not offer scientific justification for them.

Better Living, Better Life was published under the auspices of the Department of Health and the Royal College of General Practitioners last year.⁶ It gives inconsistent advice but at one point defines sensible drinking as about two units a day because at this level there is a "possible beneficial effect on the heart." But it then muddles this advice by saying that these effects are outweighed by the risk of other diseases and events such as child abuse and divorce.

I therefore suggest that the advice has been far from consistent. The only consistency is that it has become progressively more conservative, with no supporting scientific justification. Indeed, what has been consistent over the past decade is accumulating evidence that about 28 units a week for men and probably somewhat less for women not only is unlikely to be harmful but may be beneficial to health.

GEORGE WINSTANLEY

Portman Group,
London W1M 7AA

- 1 Kemm J. Alcohol and heart disease: the implications of the U-shaped curve. *BMJ* 1993;307:1373-4. (27 November.)
- 2 Royal College of Psychiatrists. *Alcohol and alcoholism. Report of a special committee*. London: Tavistock, 1979.
- 3 Department of Health and Social Security. *Drinking sensibly*. London: HMSO, 1981.
- 4 Health Education Council. *That's the limit*. London: HEC, 1984.
- 5 Heather N, Robertson I. *So you want to cut down on your drinking*. Edinburgh: Scottish Health Education Group, 1986.
- 6 Department of Health. *Better living, better life*. London: Knowledge House, 1993.

Current weekly limits too mean

EDITOR,—John Kemm uses careful selection from the evidence to defend the current recommendations on weekly limits of alcohol consumption.¹ Several studies have shown an inverse association rather than a "flat curve" between the risks of various cardiovascular diseases (morbidity and mortality) and alcohol consumption.² Whether men who drink about seven units a week have rates of heart disease close to the lowest depends on the studies chosen and the grouping of consumption.

In the British regional heart study the mortality from cardiovascular disease among moderate consumers (16-42 units a week) was three quarters that among those drinking 1-15 units a week.³ When a quadratic risk function over the range of consumption was assumed, the lowest risk of death from cardiovascular disease was estimated to be associated with consumption of 30 units a week, with the risk corresponding to consumption of seven units a week being 40% greater than the minimum. The Busselton study,⁴ which was based on small numbers and did not achieve significance, found that the lowest mortality from cardiovascular heart disease occurred in the group with the highest alcohol consumption; the minimum risk was estimated to occur at a consumption of 32 units a week, and the risk corresponding to consumption of seven units a week was 27% higher.⁴

Observed mortality from cardiovascular heart disease as a function of alcohol consumption in the American Cancer Society's study was irregular: this is one of the few studies that seems not to conflict with Kemm's assertion.⁵ The estimated minimum risk occurred at a consumption of 32 units a week, with the risk corresponding to consumption of seven units a week being only 12% greater.

All cause mortality shows more variation among studies, as expected,⁶ but analysis of two major British studies shows the minimum all cause mortality occurring at a consumption of about 26 units a week,^{3,7} with a 95% confidence interval (Fieller's theorem) of 20 to 32 units a week (J C Duffy, 19th annual alcohol epidemiology symposium, Krakow, 1993).

Alcohol contributes to problems of family and social life, public order, and employment, but such problems seem to be associated with a higher