# **CORRESPONDENCE**

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## **Trapped Nerves**

SIR,-Your leading article on "Trapped Nerves" (6 May, p. 307) clearly outlines many examples of compression of sensory, motor, or mixed nerves causing paraesthesia, pain, tingling, and pins-and-needles, sometimes with muscle wasting and weakness, from pressure of the thickened fibrous tunnels through which the nerves run. The leader refers to compression of the median nerve where beneath a thickened anterior carpal ligament the nerve is attenuated to two-thirds its normal size with corresponding proximal swelling of the nerve trunk (so called "neuroma," which of course it is not). This is seen so commonly that busy orthopaedic surgeons operate on not less than 10 or more patients with this disability every year. The immediate relief from paraesthesia, even when wakening from the anaesthetic, leaves no possible doubt as to the compression nerve lesion.

There is reference to meralgia paraesthetica where there is pain, numbness, and tingling over one-third of the anterolateral aspect of the thigh from below the anterior superior iliac spine to just above the knee. The patient I operated on yesterday had compression of the lateral cutaneous nerve of the thigh to almost half its normal dimension in the two-cm long fibrous tunnel below the iliac spine, with oedematous expansion of the nerve trunk immediately proximal to the site of compression, exactly as in median nerve compression at the wrist. He was cured overnight.

Your leader refers also to entrapment of the lateral popliteal nerve in its fibrous tunnel two or three cm below the neck of the fibula-a site well removed from the well-recognized area of nerve compression against bone by tight bandages, strapping, or splints. This source of lateral popliteal

nerve compression causing paraesthesia is undoubted.

There is also reference to fibrous tunnel entrapment of other nerves: the ulnar nerve at the wrist; the median nerve at the elbow; the posterior tibial nerve at the ankle in the "tarsal tunnel syndrome." It might well have included the plantar digital nerve in its narrow fibrous tunnel at the proximal margin of the transverse metatarsal ligament causing Morton's metatarsalgia; and compression of the inner cord of the brachial plexus in its fibrous tunnel beneath scalenus medius "the scalene syndrome" in which neurolysis is no less dramatic in complete relief of pain and paraesthesia within a few hours.

There is no need whatsoever for electromyographic investigation of weakened muscles, neurological study of skin changes, or histological examination of excised nerve trunks. We know all this. We know that the nerves are compressed. But why did the surrounding fibrous tissue thicken to such a degree as to compress them? That is what we must study.

Consider carpal tunnel compression of the median nerve at the wrist. First dismiss obvious encroachment on the floor of the tunnel from old bone injury, displacement of the lunate, fracture of the scaphoid, or osteophytic spurs which cause "tardy median palsy." Consider a wrist joint which is radiographically normal. We know that in acromegaly, Leri's pleonosteosis, and many of the mucopolysaccharidoses, including gargovlism, Morquio syndrome, Brailsford's chondrosteodystrophy, and the Scheie syndrome that the anterior carpal ligament may be thickened; as in one case I reported from 0.4 cm in a control to as much as 1.2 cm in the patient.12

But the vast majority of patients with

carpal tunnel compression of the median nerve have never had a bone injury, and have no evidence at all of these general constitutional disorders. They do have thickening of the anterior carpal ligament, and clinical study will show that many have also had idiopathic fibrosis elsewhere. They may have had entrapment of tendons from fibrous thickening of their sheaths-trigger finger, clicking thumb, de Quervain's stenosing tendovaginitis at the wrist, or clicking great toe from the tarsal tunnel syndrome. Moreover, even when this idiopathic fibrosis is disclosed less obviously because it does not involve a nerve tunnel or tendon tunnel, it may still be evident in tennis elbow, supraspinatus tendinitis, intercostal myalgia, coccydinia, and pain under the heel-the so-called calcaneal sour. The probability is that it is related also to the more massive abnormal fibrous tissue reactions of idiopathic retroperitoneal fibrosis and idiopathic fibrosis of the mediastinum.

I discussed all this in the Hunterian oration of the Royal College of Surgeons when I changed the text of the great Lord Moynihan in his oration: "I am a physician doomed to the practice of surgery" to my own text "I am a surgeon destined to the practice of medicine."3

At the London Hospital we have pursued many histological and other studies of excised fibrous tissue but have not yet found convincing evidence of the auto<sup>i</sup>mmune reaction that seems probable. Will rheumatologists and general or orthopaedic surgeons with their research associates continue study of idiopathic fibrosis or what I called the fibrilosis syndrome? It seems probable that we will then understand why these entrapment lesions of nerves and tendons sometimes recover without any treatment at all, and are often assisted in recovery by local infiltration with hydrocortisone; and thus avoid London W.1

the need for scores or hundreds of operations for division or excision of thickened fibrous tissues?-I am, etc.,

**REGINALD WATSON-JONES** 

- Watson-Jones, R., Journal of Bone and Joint Surgery, 1949, 31B, 560.
  McKusick, V. A., et al., Medicine, 1965, 44, 445.
  Watson-Jones, R., Surgery is Destined to the Practice of Medicine, Hunterian Oration Royal College of Surgeons of England, Edinburgh. Livingstone, 1961.

#### Smoking and Health

SIR,-Those of us who daily see the protracted misery and loss of life associated with cigarette smoking are appalled by the recent change of emphasis on cigarette advertising. The advertisement in the Observer Magazine (17 April, p. 17) shows a cricket bat and pads with a packet of Benson and Hedges Special Filter cigarettes, together with an announcement of the sponsored Cricket Competition Final at Lords. The invitation to save cigarette coupons to help our athletes win gold medals at Munich is equally noxious.

Must we, as a profession, stand idly by, attempting to persuade our younger patients not to start and our older patients to stop smoking, while such advertising attempts to nullify our efforts?

Letters to the national press on this matter are rarely published, which is understandable in view of the financial support they receive from tobacco advertising. But one of the strongest attacks comes from the magazine of the advertising industry Campaign (10 March 1972), "It is disgraceful that the tobacco industry is being allowed to violate -with seeming impunity-the spirit of its 'voluntary' agreement with the Government on cigarette advertising. . . . Smoking is not only a dirty habit, it is dangerous. Yet it would be impracticable and unreasonable to ban the sale of cigarettes completely. . . . But cigarette advertising, because it encourages the view that smoking is socially acceptable, must be banned.

The Council of the B.M.A. advised that a controlling body "should be appointed to vet all advertisements for manufactured tobacco products" (Supplement, 8 May 1971, p. 91), and this was accepted by the Representative Body.

Can we be assured that the B.M.A. is making strong representations to the Government on behalf of the profession, not only to control cigarette advertising but also to make the sponsorship of sports events by the tobacco industry illegal?-I am, etc.,

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Keith P. Ball

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SIR,-The question whether tobacco smoke can harm other people besides the smokers themselves has often been asked. One might assume that, if atmospheric pollution is harmful, then this form of pollution of the micro-climate within the home might also be harmful. In Hertfordshire we have had an opportunity to test this hypothesis during the routine school medical examination of 5-year-old new entrants, which is done during their second or third term. It is well known that these children tend to get increasing respiratory infections when they

first go to school, and we compared the incidence in children from non-smoking families with those from smoking families. From the records of 1,119 children, there was a clear indication that a history of respiratory troubles (coughs, colds, sore throat, earache, etc.) increases as the level of domestic smoking increases. In 341 heavy smoking families (that is, those with one or more persons smoking over 20 a day) 44.5% had such symptoms, whereas among 457 children from non-smoking families only 33.5% were sufferers. This difference is statistically significant. In families where the only smoke was from a pipe or cigar, the incidence of the various symptoms was roughly similar to families where less than 20 cigarettes were smoked, but still worse than the non-smokers. These results have been published recently in more detail.1

It is of course known that low-income families tend to smoke more than high income ones,<sup>2</sup> and a higher incidence of respiratory infection might be expected in lower income groups, so that this relationship is not necessarily due to cause and effect. However, general practitioners dealing with recurrent respiratory infections in children might care to inquire of the parents whether they are exposing their children to this form of irritation of the respiratory mucosae. It is one thing to ruin one's own health, but the possibility that one might be harming one's children in the process is quite another.-I am, etc.,

W. NORMAN-TAYLOR

Public Health Department, St. Albans, Herts

- Community Medicine, 1972, 128, 32.
  McKennell, A. C., and Thomas, R. K., Adults' and Adolescents' Smoking Habits and Attitudes. Government Social Survey. London, H.M.S.O., 1957

SIR,---I think it important to bring the attention of the profession to a current advertising campaign which unhappily marries two incompatible ideas, and may well impair intelligent health education about smoking.

I refer to the campaign "Help Win Medals for Britain" advertised in the press (for example, Observer Magazine, 17 April, p. 17) and seen by millions for long periods as part of the back-cloth to sporting events. It exhorts people to buy cigarettes with which they will receive tokens to help the British Olympic Appeal Fund to raise £200,000 needed to support the British Olympic team at the 1972 Olympic Games.

Sport has some dangers but is generally considered to improve health. Smoking, quite apart from arguments about its causal relationship to lung cancer, can certainly damage health in several ways.

The section of the public who smoke and cannot stop will presumably be only too delighted by something that not only suggests that smoking does not matter, but encourages them to smoke for a good cause.-I am, etc.,

NEVIL SILVERTON

## **Private Practice**

SIR,-I read with astonishment Professor C. A. Wells's letter extolling the virtues of private practice as a necessary training for consultants who teach medical students (6 May, p. 346).

Whether or not it is the case that the lessons that students "remember with most gratitude are those in personal human relationships unconsciously imparted by precept and example" is arguable. However, the suggestion that such relationships can be developed only in the arena of private practice, and the implication that to succeed in the National Health Service a consultant does not need "to establish a good relationship with general practice, be accepted by and give confidence to his patients, and to produce results" is one which to me and to many, many medical students shows a complete misunderstanding of the role of a health service dedicated to treating the sick rather than the sick who can pay to be treated.-I am, etc.,

> JOHN R. KIRWAN Vice-president, British Medical Students' Association

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SIR,-Professor C. A. Wells (6 May, p. 346) is correct in stating that "the medical student may very well see less of his chief because of the latter's preoccupation with private practice," but in his other assumptions he attempts to "cite scripture for his own purpose."

I am not opposed to private practice, but it is important in discussion to be honest about its drawbacks (and advantages); it is wrong to imply that teachers of medical students should attend "the hard school" of private practice, so that they may learn "by experience to come to terms with their colleagues and their patients." Perhaps Professor Wells inadvertently omitted to qualify the word "terms" with "financial," in which case his letter would have made some sense.-I am, etc.,

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### Maternal Influenza and Perinatal Mortality

SIR.--The annual report of the Department of Health and Social Security for 19701 showed that the national perinatal mortality had risen from 23.2 in 1969 to 23.4 in 1970 owing to an increase in neonatal deaths in the second quarter of the year. The report suggested that this might be associated with the influenza epidemic in December 1969 and January 1970, but that no definite conclusions could be drawn. Nevertheless a causal relationship between maternal influenza and perinatal death was implied.

Information has been recorded on all the mothers delivered in the maternity units of St. Thomas's group since 1966.<sup>2</sup> In 1969-70 14 mothers were recorded as having had influenza during their pregnancy (of these nine had influenza in December 1969). All of these mothers and babies were discharged from hospital alive and well.

Dr. D. L. Miller and colleagues (27 February 1971, p. 475), however, reported that about a third of the sample of male population of Lambeth showed serological evidence of infection during the epidemic. In order to detect any influence that a mild

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