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BRITISH MEDICAL ASSOCIATION TAVISTOCK SQUARE LONDON WC1H 9JR TELEPHONE 01-387 4499 WEEKLY PRICE 42p

CORRESPONDENCE

Correspondents are asked to be brief

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 gargoylism, 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.[1 2]

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 spur. 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 autoimmune 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