INJURIES OF THE SCIATIC NERVE

Injuries of the sciatic nerve are uncommon in civilian practice; consequently few surgeons are able to give a sound opinion on the prospects of recovery after suture, or a severe contusion of the nerve. All of us are likely to be faced sooner or later with one of these problems, for sciatic nerve palsy complicates about one in ten of all hip dislocations, and is even more frequent when there is an associated fracture of the posterior rim of the acetabulum. The two authoritative papers by Clawson and Seddon, which appear in this issue of the Journal, will repay careful study, especially the one on the late consequences of sciatic nerve injury which is based on a study of no fewer than 329 patients followed for three to eighteen years after injury.

In their first paper the authors analyse the results of repair of the sciatic nerve and its branches. They confirm the observations of Platt and Bristow (1924), and the Medical Research Council Report (1954), that useful recovery of motor power cannot be expected in the long flexors of the toes or intrinsic muscles of the foot after suture of the sciatic nerve at any level. It is true that the severe intraneural scarring and the delay in suture which is often unavoidable in gunshot wounds had an adverse influence on recovery, and that somewhat better results might be expected in the occasional clean wound encountered in civilian life. It is also evident that sensation in the foot may continue to improve for a longer period after injury than motor power. An important practical point emerges from the study. A gap of up to twelve centimetres in the sciatic nerve after resection of the nerve ends can be successfully sutured without prejudice to the ultimate recovery. There is therefore every inducement to be generous in the trimming of the nerve ends—within the above limit—until healthy nerve bundles are exposed.

One of the most surprising observations in the second paper is how little the functional result is influenced by the quality of the neurological recovery. The factors that particularly affect function are pressure sores and sensory over-response in the foot. Persistent ulceration is more likely to occur when there is a fixed equinovarus deformity; indeed, lack of sensation in the foot did not by itself cause persistent pressure sores though it was an aggravating factor in the presence of a fixed deformity. Since pressure sores are the usual reason for amputation the greatest care must be taken to prevent a fixed deformity by splinting, physiotherapy, and early tendon transfer when muscle imbalance about the foot makes a deformity inevitable. Lambrinudi's operation was not a successful procedure for the correction of drop foot in these patients, possibly because a rigid foot is never wholly satisfactory when sensation is defective.
Sensory over-response is a common and persistent cause of disability in lesions of the medial popliteal and posterior tibial nerves. When suture of these nerves is required one may have to consider whether the risk of a hypersensitive foot may outweigh the possible gain in function from recovery of motor power. The authors have not attempted to answer this difficult question except for lesions of the posterior tibial nerve at the ankle, where they suggest that suture should be performed only in children. The writer supports this view, having had the experience of sectioning a posterior tibial nerve some time after suture to relieve severe hyperaesthesia in the foot. Finally, amputation should never be performed for persistent pain after a sciatic nerve injury: failure is certain and the unfortunate patient becomes even more apprehensive and introspective. 

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REFERENCES
