

ABSTRACTS FROM PAPERS

TRAUMATIC QUADRIPLEGIA: A. L. GARRETT, J. PERRY & V. L. NICKEL (1964),
J. Amer. med. Ass. **187**, 7.

The authors draw attention to the increasing number of tetraplegics each year and stress that these patients need not remain bed-ridden in hospital. A fairly high degree of independence and self-sufficiency can be achieved for most patients, if a programme based on making maximal use of remaining function is begun as early as possible. The tetraplegics are classified in four levels of disability, according to functional loss in the upper limbs:

- (1) Loss of hand intrinsics.
- (2) Loss of hand muscles.
- (3) Loss of triceps and latissimus dorsi.
- (4) Loss of wrist extensors and upper arm control.

According to this classification, the authors give details of conservative and surgical methods employed, which include a wrist-driven flexor hinge hand splint, tendon transplants and tendon tenodesis. From the transfer of these patients from bed to wheelchair, an automatic lift is recommended, and they are also able to control an electric wheelchair.

With regard to surgical risks, the authors mention only the post-operative respiratory infections, but an editorial on spinal cord injuries published in the same edition of the journal emphasises that laminectomy in these patients is not an innocuous procedure, which certainly increases the instability of the spine produced by the injury. Therefore, it should not be used as routine procedure but reserved for specific circumstances. In order to restore stability of the spine, either anterior or posterior fusion of the broken vertebrae may be necessary.

HEREDITARY SPASTIC PARAPLEGIA: PETER F. ROE (1963). *J. Neurol. Neurosurg. & Psychiat.* **26**, 516.

Hereditary spastic paraplegia is a rather rare disease and histo-pathological reports even rarer. The condition is familial and transmitted on a recessive or a dominant basis. According to Wilson in 1954, sporadic examples may also occur. No external cause is known.

The author studied 66 members over 5 generations. With a few exceptions, all members of the family lived within a few miles of each other. The average age at onset was about 50 years. There was no consanguinity. The clinical symptoms in the 6 patients described in detail consisted of increased spasticity, which although less marked in the legs also affected the trunk and upper limbs. In one female member of the family—who also showed definite weakness in both arms, especially in the small muscles of hands, and impairment of both posterior column and spinothalamic tracts—osteoarthritis in the C4-C7 region with posterior disc protrusion was found.

CHLOROQUINE NEUROMYOPATHY: J. P. WHISNANT, R. E. ESPINOSA, R. R. KIERLAND & E. H. LAMBERT (1963), *Proc. Mayo Clin.* **38**, 501.

Chloroquine (a 4-aminoquinoline derivative) is used not only as a drug for short-term treatment of malaria but has become widely used as a long-term treatment for a number of dermatological conditions, such as lupus erythematosus, pemphigus, sarcoidosis, etc.

The authors report four cases of their own and three of other workers in this field, in which weakness of skeletal muscles developed during administration of chloroquine. As a rule, the paresis appeared after 500 mg. of chloroquine per day had been taken for one year or longer and was of lower motor neurone type, with loss or diminution of the tendon reflexes and loss of bladder response. The author's conclusion is that the clinical features and the electromyographic pattern of the condition suggest neuropathic as well as myopathic components. The condition appears to be reversible with discontinuation of the drug.

BOOK REVIEWS

UNFALLCHIRURGISCHE OPERATIONEN AN KNOCHEN UND GELENKEN. (Accident surgical Operations on Bones and Joints.) By GERHARD LEIMBACH. 316 pp. Stuttgart: Hippocrates Verlag, 1962.

In this book, the author, a very experienced accident surgeon, describes in detail not only the indications and techniques of surgical procedures following injuries to the long bones and spine but also the after-care of the injured person. To everyone concerned with the treatment and rehabilitation of patients with injury to the spinal cord this book will be of particular interest, as it contains a comprehensive account of the management of these patients in both the early and late stages of paraplegia.

Dr. Leimbach rejects reduction and fixation of the fractured spine by forceful reduction and fixation in plaster bed. Every patient admitted to this unit in a plaster bed showed at least one pressure sore, but in the majority of patients there were pressure sores over all predilection places. The author also rejects open reduction and fixation by plating, as well as laminectomy, as immediate management of traumatic paraplegia. He has adopted the method of postural reduction and immobilisation on pillow packs with regular turning as the method of choice. Satisfactory alignment of the broken spine to be achieved by this method is demonstrated by a case of profound fracture-dislocation of the 3rd lumbar vertebra.

For the initial management of the paralysed bladder, the author employs intermittent catheterisation, and he also describes in detail the conservative as well as surgical management of the bladder in later stages of paraplegia. Special chapters deal with the treatment of spasms, contractures, pressure sores, and the physical rehabilitation of the injured by exercise and sport.

The book is very well illustrated—and this applies to the chapter of traumatic paraplegia as well as to the chapters which deal with injuries to other parts of the skeletal system—and can serve as a useful guide to any accident surgeon.

RECENT ADVANCES IN SURGERY OF TRAUMA. Edited by D. N. MATTHEWS
London: Churchill, 1963.

This book deals with many aspects of traumatic surgery, with special reference to burns and plastic surgery. To those concerned with the treatment of traumatic paraplegics, two chapters may be reviewed here in some detail: 'Traumatic Paraplegia' by E. W. Meurig Williams and 'The Bladder in Traumatic Paraplegia' by J. Cosbie Boss.

'Traumatic Paraplegia' by E. W. Meurig Williams. The title of this article is mislead-