

3. Intramedullary group: Numbness and tingling in one or more extremities, followed by motor disturbances.

Tumours of lumbar region produce early sphincter troubles. Those in the upper cervical region cause respiratory disturbance.

Starr gives the sequence of the symptoms, as they arise in spinal-cord tumours, in the following order: (a) Peculiar pains with a limited distribution; (b) Increase of reflexes below the lesion; (c) Paraplegia; (d) Sensory loss; (e) Loss of all subjacent reflexes.

TREATMENT.—Gumma being excluded from the diagnosis, removal by operation is indicated. For the severe pain in inoperable malignant disease of the spine, the posterior spinal roots may be divided, or—and this gives more lasting benefit—the anterolateral columns of the cord may be cut.

Extradural tumours are removable, with a mortality of 33 per cent; intradural present more difficulty, but the mortality is no more than 35 per cent. Caudal tumours, on account of the involvement of the roots of the cauda equina, also present great difficulty. The mortality is 46 per cent. Intramedullary tumours are very satisfactorily dealt with by the two-stage operation. In the first stage the tumour is exposed only, and then at a later date removal takes place. (Horsley and Elsberg both had a nil mortality in dealing with these tumours.)

PATHOLOGICAL TYPES IN 330 SPINAL TUMOURS, WITH THEIR RELATIVE FREQUENCY.—

1. Vertebral group: Primary growths (mostly sarcomata), 13·6 per cent. Secondary growths (especially carcinomata mammæ), 4 per cent.

2. Extradural group: (a) Extradural (mostly fibromata and sarcomata), 16·6 per cent. (b) Intradural from pia arachnoid (mostly fibromata, endotheliomata, psammomata, and sarcomata), 29·4 per cent.

3. Intramedullary group (mostly gliomata, gliosarcomata), 11 per cent.

4. Caudal group (mostly endotheliomata, fibromata, and sarcomata), 9·1 per cent.

Location unstated in 16·3 per cent.

Tables are given illustrating further analyses of the cases. In the recoverable cases, the author lays stress on the necessity for early and careful operation, followed by efficient post-operative treatment.

W. JOHNSON.

TREATMENT.

[32] Treatment of causalgia.—LEWIS and GATEWOOD. *Jour. Amer. Med. Assoc.*, 1920, lxxiv, 1.

FOUR cases are described as occurring in 550 peripheral nerve injuries. Of these four, three were operated upon and injected with 60 per cent alcohol, being cured after a previous simple neurolysis had failed to abolish the symptoms. The remaining case was under observation at the time of writing. Only one was observed as long as four months, and in this there was no return of the causalgia. No gross changes in the nerves were observed except superficial adhesions. The cases all occurred in the median, except one which affected the internal popliteal division of the sciatic nerve.

J. LE FLEMING BURROW.

- [33] **The medical treatment of Graves' disease, with special reference to the use of corpus luteum extract.**—H. A. HOPPE. *Jour. Nerv. and Ment. Dis.*, 1918, xlvii, 254.

THE author begins his article with a review of the present-day knowledge of the corpus luteum. Its structure is glandular, being formed of epithelial cells derived from the membrana granulosa of the Graafian follicle. These cells supply an internal secretion, which is poured into the neighbouring blood-vessels and exerts an important influence in preserving the normal course of menstruation and pregnancy. Further, it exerts a decided influence on the mammary glands and the metabolism of secondary sexual characters. The internal secretion is to be regarded as the active agent of the sex glands represented by the interstitial cells in the male and the corpus luteum in the female. Its tendency is to promote assimilation and retard metabolic activity—an action which is directly opposed to that of the thyroid secretion, which accelerates metabolism and increases excitability. Thus, these two structures, the interstitial sex glands and the thyroid gland, possess directly antagonistic actions. Graves' disease, the author suggests, may be the result of undisputed thyroid sway, in conditions where the interstitial cells have ceased functioning adequately.

As a result of treating cases of Graves' disease with extract of corpus luteum, the author has become satisfied that marked improvement follows. This has been particularly noticeable with regard to the cardiovascular symptoms. The administration of the extract must be for an indefinite period.

W. JOHNSON.

- [34] **Blepharo-contractures: treatment by local alcohol injections.** (Blépharo-contractures, traitement par l'alcoolisation locale.)—SICARD and POULARD. *Revue neurol.*, 1918, xxv, 24.

THE authors suggest that convulsive movements of the eyelids may be classified into three groups: (1) Blepharo-tics: these have a purely tic origin (i.e., have originated as a voluntary movement) and are frequently part of a wider habit-spasm movement (face, neck, etc.). (2) Blepharo-spasms: in this type, the convulsive movement is limited to certain definite groups of muscles. One or other, or even all, of the branches of the facial nerve distribution may be involved. These are characterized by the fact that, once the spasm has begun, no amount of voluntary effort can control the movement (as is possible with a tic). An organic cause underlies this form. (3) Blepharo-contractures: here the condition is analogous to the local contractures which are seen in hands and feet, and like them follows on some slight local trauma. Thus it is generally unilateral. The muscles are in a continuous state of contracture, and there is no periodic return to the normal as in cases of spasm. Active resistance is encountered in attempting to raise the closed lid, and the patient complains of pain when this is done. The treatment of this third group presents considerable difficulty. Psychotherapeutic measures proving unsuccessful, the authors decided on producing a complete inability to close the affected eye by paralyzing the superior branch of the facial nerve. This was effected by

means of injecting a few drops of alcohol into the superior branch where it crosses the ascending ramus of the inferior maxilla—in which position it is separated from the inferior branch of the facial nerve, which therefore remains undamaged by the injection. The paralysis lasts some weeks, and, during recovery, active re-education is carried out with the object of re-establishing the patient's normal control.

W. JOHNSON.

[35] **Post-herpetic pain and its surgical treatment** (Algies post-zostériennes et leur traitement chirurgical).—J. A. SICARD. *La Médecine*, 1920, i, 278.

PAIN after herpes is relatively frequent; it is most severe in the trigeminal area, less on the trunk, and least on the limbs. Age is the most important factor; pain is never present under 30, but even in old age it may be absent. Many cases of post-herpetic neuralgia recover, but if the pain lasts more than a few months it is almost certain to persist. Applications to the skin, and injections into the nerves concerned, fail to cure.

Various operations have been described, such as removing the posterior-root ganglia, or dividing the posterior roots between the ganglia and the cord, and at the same time destroying the sympathetic fibres. The fibres to four segments should be divided. The author and Desmarest cut the anterior and posterior roots of four segments in the epidural space between the dura and a ganglia, and in a second stage avulse the ganglia. This was done in 7 cases, with 3 cures, 2 failures, and 2 deaths. The reason for failure after a correct operation is not known. Perhaps the pain arises from cells of the posterior horn which were affected by the original inflammatory process.

W. J. ADIE.

Psychopathology.

PSYCHONEUROSES AND PSYCHOSES.

[36] **Psychoses associated with influenza** (Psychosen nach Grippe).—K. HITZENBERGER. *Monats. f. Psychiat. u. Neurol.*, 1919, xlvi, 267.

OBSERVATIONS on psychoses associated with the influenza epidemic of 1918. The material is divided into two groups: (1) Cases in which influenza was the direct cause of the psychosis—fever-delirium and post-febrile amnesia; (2) Cases in which the toxic condition aroused a latent tendency to mental disorder.

Naturally only the severest cases of delirium came under treatment in the clinic, and 15 are included in this study. The symptoms were confusion, terror, psychomotor excitement, and delusions of persecution and poisoning associated with hallucinations. The majority of cases were men; the earliest onset was the second day of fever, and the latest the eighth; the prognosis in respect to life was bad, 12 cases ending fatally, whilst the mental symptoms subsided with the fall of the temperature in