

an analogy between this process and the mechanism of reciprocal innervation in spinal reflexes. The relaxation of the antagonist muscles at the same time as the agonists are contracted is brought about by the interposition of an additional intercalary neuron in the reflex arc, through which a portion of the impulses to the antagonists are made to pass. The granule-cells of the cerebellum appear to play a similar part as intercalary neurons. Every impulse thus reaches the Purkinjé cells along two planes in space, and at two successive moments in time, and the result would appear to be a transformation of the irregular incoming impulses into an orderly pattern, correctly orientated in space and having a phasic rhythm in time. The author discusses possible mathematical formulæ for expressing this rhythmic activity, and also touches on the question of compensatory activity by the thalamus and cerebral cortex in cases of cerebellar agenesis.

A. WALK.

Physiological Herniations of the Brain. (*Arch. of Neur. and Psychiat.*, July, 1928.) Brockbank, T. W.

Physiological herniations are found in about 20% of *post-mortems*. According to the author they occur in about 38% of cases of brain-tumour. The size of the herniations varies from the microscopic up to (rarely) 1 cm. in diameter. They are of the colour and consistence of cortical tissue and consist of glial tissue with an occasional atypical nerve-cell, probably embryonic in nature, but possibly of degenerative origin as suggested by the presence of a mild satellitosis.

G. W. T. H. FLEMING.

Macrocephalia Resp. Macromelia Paræsthetica. (*Journ. of Nerv. and Ment. Dis.*, August, 1928.) Ratner, J.

The author describes in cases of hyperpituitarism a feeling that the head is growing until in some cases it appears to the patient to fill the room. In other cases the arms appear to grow in a few seconds until they appear to touch the opposite wall of the room. In some cases these symptoms were undoubtedly hypnagogic hallucinations. Ratner's symptom appears to resemble the *pseudomelia paræsthetica* of Bechterew. It may be observed in other endocrine-vegetative disturbances, and is apparently produced by irritation of the proprioceptive fibres that transmit the sense of position. Increase of intracranial pressure is one of the most important causes, whether due to increased secretion by the choroid plexus, to retention of water owing to diminution of salts of calcium in the brain, to meningitis serosa, to an angio-neurotic œdema of the brain, to "Reichardt's *Hirnschwellung*," or to other factors.

G. W. T. H. FLEMING.

Cerebellar Symptoms Produced by Supratentorial Tumours. (*Arch. of Neur. and Psychiat.*, August, 1928.) Grant, F. C.

In the presence of marked intracranial pressure clinical evidence commonly indicative of a cerebellar lesion may be present although the tumour lies elsewhere. Many well-recognized cerebellar

symptoms—nystagmus, asynergia, ataxia, positive Romberg sign, tinnitus, deafness, suboccipital tenderness and occipital headache—may all be present in a cerebral lesion. Masked by these symptoms there are always cerebral symptoms. To localize the tumour in these cases it is essential to perform bilateral puncture of the posterior horns of the ventricles. If there is still doubt, a ventriculogram must be made.

G. W. T. H. FLEMING.

Tumours of the Nervus Acusticus. Signs of Involvement of the Fifth Cranial Nerve. (*Arch. of Neur. and Psychiat.*, August, 1928.)
Parker, H. L.

In 52 out of 53 cases of proved tumours of the eighth nerve there were some signs of involvement of the fifth nerve, second in importance to those of eighth nerve lesion. Paræsthesia was common, and in 5 cases antedated the symptoms of involvement of the eighth nerve. Disturbance of the corneal reflex was present in 51 cases. Objective signs, such as anæsthesia and weakness of the muscles of mastication, were less marked. Pain occurred in only 4 cases.

G. W. T. H. FLEMING.

Acute Toxic Encephalitis in Children. (*Arch. of Neur. and Psychiat.*, August, 1928.) Grinker, R. R., and Stone, T. T.

The authors describe cases in children, in which an acute toxic encephalitis was revealed on histological examination. There was no evidence of actual microbic invasion of the brain. The stress of the toxic agent was directed against the ganglion-cells and the vascular system. The toxin is believed to act *viâ* the blood-stream. The proliferation of the glia-cells in these cases of endogenous toxæmias was mostly of the cytoplasmic and oligodendroglial type and represented the fixed type of Abbau. The clinical course was: rapidly developing symptoms of diffuse cerebral involvement, often associated with meningeal symptoms, early stupor, hyperpyrexia, and death in from 3-4 days. The spinal fluid was usually normal. Two cases recovered. The encephalitis followed acute infections of the upper respiratory tract, acute otitis media, acute mastoiditis, pneumonia, scarlet fever and septicæmia.

G. W. T. H. FLEMING.

Circumscribed Suppurative (Non-Tuberculous) Peripachymeningitis. (*Arch. of Neur. and Psychiat.*, July, 1928.) Hassin, G. B.

The author describes a case of epidural abscesses and peripachymeningitis secondary to an extensive furunculosis of old-standing due to *Staphylococcus aureus* and with the clinical picture of a transverse myelitis. There was scattered degeneration of the white columns of the cord confined to the lower thoracic region. The changes were similar to those found in so-called pressure myelitis produced experimentally. The author thinks that if recognized early the condition is suitable for surgical treatment.

G. W. T. H. FLEMING.