Abstracts.

Neurology.

NEURO-ANATOMY AND NEUROPHYSIOLOGY.


The author pays particular attention to the positions of the nucleus in the dark cell area, to the relationship between the pigmented Nissl's granules and the neurofibrillary network, and to the extension and distribution of the latter amongst the dark cells. He has tried to define the behaviour of the black pigment to reactions for fat and its relationship to the latter substance, more particularly in the absence of lesions of the region and independently of the rest of the nervous system.

The research has been carried out in cases which if not entirely normal have had no lesion of the nervous system and particularly none of the extrapyramidal nervous system.

R. G. G.


Two patients with hemiplegia are described in whom the experiencing of an emotion produces exaggerated pilomotor phenomena on the hemiplegic side. The simple pilomotor reflex in the same zone is normal. The behaviour of the pilomotor system in these two cases is contrasted with that in one of partial section of the spinal cord, in which, while the simple reflex is exaggerated, there are no abnormal phenomena in response to an emotional stimulus.

The human cortex is probably the site of the origin of a neurone which exercises a definite influence over, and is a part of, the sympathetic nervous system. The neurone (1) probably terminates in the hypothalamus and in parts of the thalamus, from which the second one (11) descends to the intraspinal cells of the first peripheral sympathetic neurone. In the hemiplegic
cases there is interruption of neurone 1, and in the spinal cord case, of neurone 11. Both neurones 1 and 11 are probably anatomically associated with the pyramidal tract and may decussate with it.

The release phenomenon is a general principle, and applies to the sympathetic as well as to the other parts of the nervous system. When neurone 1 is interrupted, hyperfunction of neurone 11 is exhibited upon stimulation; destruction of neurone 11 causes exaggeration of the activity of the peripheral sympathetic neurones.

Because of their arrangement the sympathetic tracts are suitable for a study of certain properties of the phenomenon of inhibition, which leads to the following conclusions:

1. The ability of any neurone to inhibit is an inherent part of the function of that particular neurone, independent of the activities of neurones situated higher up.

2. The inhibitory power is not of such a nature as to be transmissible from one neurone to another.

R. G. G.

NEUROPATHOLOGY.


The author reviews the problem of the nerve-cell-containing gliomas, and reports a tumour of this type in the right temporal lobe. It fulfilled the essential characteristics of the group, but differed from some in its greater cellularity, the small amount of stroma, and the presence of mitotic figures. The characteristics of gangliogliomas of the temporal lobe are presented, together with a table of the cases reported. They are similar in many respects, if not identical with, the 'spongioblastoma unipolare' described by Bailey and Cushing. The suggestion is made that the pronounced mental phenomena which are present in the clinical picture in most of these cases, as well as their fatal issue in the absence of local serious damage, are the result of a toxic product elaborated by the tumours.

R. M. S.


In a well illustrated paper the author calls attention to the preponderance of giant-cells in some types of glioma. A spongioblastoma multiforme with numerous giant-cells is described, and their presence in other gliomas is discussed.

In summary, one may consider the formation of multiple nuclei as a phenomenon of amitosis, which is frequently frustrated before total separation of the nuclei and division of the protoplasm take place.

R. M. S.