A review of the literature of this subject is given in respect of both focal choreas and chronic progressive choreas. Three cases with necropsies are described—two cases of Huntington’s chorea and one of arteriosclerosis.

Macroscopically, all cases showed convolutional atrophy involving the frontal and central gyri and a corresponding diminution of the white substance. In two cases the cortex and white substance of the rest of the brain were considerably shrunken, while in the third these parts were fairly well conserved in volume and consistency. There was a moderate dilatation of the lateral ventricles, particularly of the anterior and posterior horns in the first two cases, but no true hydrocephalus.

The caudate nucleus and putamen were atrophic in two; in the third these nuclei were fairly normal in size. The globus pallidus was considerably shrunken in the first two cases only.

Microscopically, the cortex in the first two cases showed unmistakably that the cytoarchitectonic arrangement of the third and fourth layers was in obvious disorder. In the third case all layers presented this disarrangement and in addition many areas of softening. If these cortical changes in the frontoparietal areas are responsible for the mental defect, and the author is willing to subscribe to this theory, the mental deterioration in all three cases certainly goes hand in hand with their pathology.

Changes in the small cells of the neostriatum of the first two cases were of a chronic degenerative type, while those in the third were of an acute type due to arteriosclerotic changes with a great many areas of softening. The large cells in all cases were fairly well preserved. The pallidal cells were not involved in any case. In the third, the thalami, red nuclei and olives were markedly affected. The cell destruction was of a chronic nature antedating that of the neostriatum. The changes of the cerebellum in the first two cases were relatively slight and then only in a few places. In the third the dentate nuclei showed considerable cell destruction of a chronic type.

If the changes in the thalamus, red nucleus or cerebellum were solely responsible for the choreiform syndrome it would certainly have been evident in the third case long before its noted appearance. As an inmate of a home, the patient was observed for several years before her admission to the hospital, and according to trustworthy reports she was to all intents and purposes in a
fair state of health. Six months before admission choreiform movements of the head and much later of the facial muscles were observed, and two months later the extremities became involved. From this time on she became progressively and rapidly worse.

In view of the pathology of the third case, and the lack of involvement of the thalami, red nuclei, olives and cerebellum in the others, the author claims that the assumption is justified that in all three cases the choreiform syndrome was probably due to the destruction of the small cells of the neostriatum.

R. G. G.


The brains of three children who in the course of attacks of whoopingcough developed various complex symptoms referable to the central nervous system were examined. The various theories are referred to and especially the question of the pathogenesis of the haemorrhagic lesions that were found. The literature of this subject is thoroughly reviewed and a comprehensive bibliography is given.

R. G. G.


Using the silver stain of Lugaro the author has examined the protoplasmic neuroglia. He compares two cases of non-treated general paralysis, one acute and one chronic, with two treated by malaria, and two with the sulphur pyretic treatment. In all cases the neuroglia exhibited a pathological appearance, and the lesions showed themselves to be definitely progressive. In the malarial cases the neuroglia was slightly less pathological, since although definitely hypertrophied it showed less tendency to proliferation and fibrous transformation. In the cases treated by sulphur the neuroglia manifested no lessening of pathological characteristics as contrasted with the usual course of the disease.

R. G. G.


A diffuse glial reaction all over the cerebrum has been found in cases of cerebral tumour, in the form of hypertrophy and hyperplasia at a distance from the tumour. The author considers that the most important factor
accounting for this reaction is the toxicity of the tumour, and points out the importance of the appearance of this glial reaction in cases of cerebral tumour in post-mortem examinations.

R. G. G.


In the first case an encephalopathy was found bearing the ear-marks of a toxic process and consisting of patchy demyelination with replacement of the disintegrated tissue by proliferated glia fibres and concomitant involvement of the cellular elements of the cortex, particularly in the frontal, central and temporal areas. In the second case the process was one of diffuse sclerosis, and the pathological changes were severe though unaccompanied clinically by neurological manifestations. The reason for presenting these two cases is to call the particular attention of clinicians to the fact that cases of so-called functional psychoses exist in which the clinical manifestations of any organic component may be lacking, and that such cases may nevertheless have as a basis a definite pathological process of the brain. Attention is also drawn to the fact that in clinical diagnosis reliance should not be placed too much on the existence of the so-called organic type of reaction, as this may be absent clinically though a definite organic pathological process is present in the brain. Hence it is not safe to assume that at the basis of dementia praecox no organic disease will be found.

C. S. R.


The author has examined the biochemical changes in the urea, uric acid, and the cholesterol in the course of meningeal and encephalic diseases, and points out that in many cases it is altered with a tendency to rise above the normal, sometimes markedly. The modifications in the rate of the urea have nothing to do with that of the chlorides, with elevation of temperature or renal alterations.

To check these results he has experimentally punctured the floor of the fourth ventricle in rabbits and has obtained the same modifications; in some cases these modifications have been obtained also by means of lesions of cortical regions, but probably they are to be explained as being caused by the excitement at a distance of the regulative centres of metabolism, which the author, in accordance with his investigations, is inclined to localize in the floor of the fourth ventricle.

R. G. G.