

Reviews.

Die Geschwülste des Gehirns, von Professor Dr. OPPENHEIM in Berlin. 2te, erweiterte Auflage. (Alfred Hölder, Vienna, 1902.)

INCREASING knowledge of the functions of the various parts of the brain has led to a correspondingly greater exactitude in the diagnosis of intracranial lesions, and the prognosis has thereby in many cases become materially improved. The value of a text-book such as that of Professor Oppenheim, dealing with brain tumours, is therefore a high one, and in this new edition we find a succinct account of our present-day knowledge on the subject.

Commencing with a description of the pathological anatomy and histology of intracranial growths, Oppenheim discards as unpractical any rigid classification, whether based on grounds of histology, embryology, starting-point, or direction of growth, and prefers to consider each variety of tumour separately.

The various forms of new growth in the brain, meninges and cranial bones are fully described, and an interesting section follows in which is discussed the influence of intracranial growths upon the brain, the cerebral ventricles and the cranial nerves. Local softening, which not infrequently occurs in the vicinity of a tumour, is sometimes inflammatory in origin, due to an encephalitis; in other instances it is the result of compression and occlusion of neighbouring vessels. Internal hydrocephalus may be produced either by venous stasis, the arteries remaining pervious, or by direct pressure on the channels of communication between the cerebral ventricles.

The general etiology of intracranial new growths (apart from developmental, infective and parasitic forms), is briefly discussed. On the question of a possible association between local trauma and a subsequently forming neoplasm, he points out that the antecedent head injuries described in certain cases are sometimes the result of vertigo or other sudden cerebral symptom, which latter may in its turn be due to a pre-existing cerebral tumour. In other cases, a trauma serves merely to excite more

rapid growth in a latent tumour. But, in spite of such cases, he admits that all post-traumatic cases cannot be so accounted for, notably instances of tumours forming in the site of old scars in the bones or meninges.

The great mass of the book is devoted to the description of the symptomatology of intracranial growths and their focal diagnosis. The care with which this is done cannot be too highly commended. There is also a short discussion as to the pathological diagnosis of the nature of a tumour, apart from its anatomical position. Special attention is drawn to the multiform clinical appearances which may be met with in cases of hydatid cysts.

As to treatment, he recalls Wernicke's dictum as to the value of massive doses of potassium iodide, even in non-syphilitic growths. Thus sarcomata, gliomata and tuberculous tumours are sometimes favourably influenced by this drug. Oppenheim himself inclines to think that the cystic tumours, cystic gliomata and sarcomata, are those which best respond to potassium iodide, but tend to be aggravated by mercury. The iodide should be commenced in moderate doses and pushed boldly to large quantities.

The surgical treatment of brain tumours is carefully considered, and it is gratifying to the British reader to find the generous manner, all too rare in German text-books, in which the work of English and American observers is acknowledged.

von Bergmann's statistics of 285 cases of cerebral tumour treated by operation are of great interest, and their main points may here be recapitulated. In 116 cases the tumour was correctly localised and reached, whilst in 157 operation was undertaken for exploratory or for palliative purposes. Of the 116 cases of radical operation, 29 (or 25 per cent.) died immediately after operation, whilst 87 (75 per cent.) survived. In 60 (51.59 per cent.) improvement or cure resulted. Of the 157 cases in which the cranium was opened without extirpating the tumour, in 13 the operation could not be completed owing to hæmorrhage, shock, &c. In 16 no tumour was present. In 89 (56.65 per cent.) it was present in a different situation from where it had been expected, and in 43 it was either too large or too diffuse for removal. Only in 14 cases of the 157 was the operation deliberately undertaken solely for palliative purposes. The mortality of the 157 unlocalised cases was 75 or 47.77 per cent. Thus the combined mortality of the whole 278 cases was 104, *i.e.*, 36.4 per cent. Allowing for other unsuccessful, and therefore pro-

bably unpublished, cases, Oppenheim considers that this figure rather underestimates the actual mortality. He has since added to Bergmann's statistics those of cases collected by himself from the literature, and the following are the results so obtained:—Out of 371 cases in which the cranium was opened with the diagnosis of intracranial tumour, 140 or 37·7 per cent. died within a day or two of the operation. Eighty-eight cases, 23 to 24 per cent., were cured, or appreciably improved. In 111, or 29 to 30 per cent., only transient improvement resulted. This includes some of the palliative operations, and also those in which the tumour was either not found or only partially extirpated, or in which transient improvement followed the draining of a cyst, while the actual tumour was not removed. In 166 radical operations for correctly localised tumour 82, or nearly 50 per cent., were cured or distinctly improved.

It must always be borne in mind that even successful removal of a tumour can only relieve the general intracranial symptoms, such as headache, vomiting, vertigo and optic neuritis, but cannot restore local paralytic phenomena due to destruction of brain tissue, though a certain slight amount of compensation by surviving areas may take place.

Opening of the cranium and dura mater, whether the actual tumour be accessible or not, generally relieves optic neuritis. The improvement sometimes begins within twenty-four to forty-eight hours after operation. The other general symptoms, headache, vomiting, giddiness, mental dulness, &c., also improve within the first few days in favourable cases, whilst focal symptoms take much longer to become compensated.

Next to fibromata, lipomata, or other simple tumours, those which offer the best prospect of radical cure are the sarcomata, though favourable results are sometimes attained with gliomata, solitary tuberculous masses, patches of tuberculous meningo-encephalitis, angiomata, gummata and parasitic cysts.

He quotes *in extenso* Sir Victor Horsley's opinion as to the advisability of operation at the earliest possible date after a tumour has been diagnosed, and as to the serious responsibility of waiting till the patient is half blind from optic neuritis or atrophy, or until the tumour has increased to such an extent as to greatly increase the risks of its removal.

In cases of inoperable tumour, Oppenheim refers to the plan of repeated withdrawal of cerebrospinal fluid by lumbar puncture for the purpose of relieving intracranial pressure, but only approves of this in cases where the symptoms point to interna

hydrocephalus, such, for example, as tumours in the posterior fossa of the brain.

It is difficult, within the limits of a short review, to give an adequate account of the wealth of material in this book, or of the exactitude with which it has been compiled.

PURVES STEWART.

Handbuch der pathologischen Anatomie des Nervensystems.

Edited by Dr. E. FLATAU, Dr. L. JACOBSON, and Dr. L. MINOR. (Published by Williams and Norgate, 14, Henrietta Street, Covent Garden, London.)

THE first volume of this work has already been reviewed in the summer number of this journal, and the work is now complete in four additional numbers. The first chapter of the second volume is written by Dr. H. Stroebe, and deals with the changes found in the skull and membranes of the brain. The pathology of chondrodystrophia foetalis, rickets, osteomalacia, osteitis deformans, leontiasis ossea and acromegaly are all dealt with. The various views held with regard to the formation of hæmorrhagic pachymeningitis interna are discussed at some length.

Tuberculosis of the skull and membranes is described, and it is stated that a tuberculous osteitis frequently occurs in children in the supraorbital region, and leads to perforation of the bone and to a tuberculous pachymeningitis externa, these perforations being not uncommonly multiple.

The syphilitic affections of the skull and membranes are next described. Actinomycosis of the base of the skull and the membranes arising from carious teeth or other foci in the mouth or jaw is a rare affection, but cases have been described in which the dura mater has been perforated, and the pia mater and the brain substance invaded.

In discussing the pathology of epidemic cerebrospinal meningitis the view is taken that the disease is not necessarily due to one specific organism, such as that described by Weichselbaum, but may be due to a variety of organisms. In acute leptomeningitis there is almost always an inflammatory œdema of the brain, with thrombosis of the smaller vessels. Chronic leptomeningitis most frequently arises in connection with some disease of the neighbouring structures, but may be found in chronic lead