

anoxia. The symptoms and acid-base balance of these patients during anoxia were no different from those of dogs or normal human beings. The acid-base balance during the interparoxysmal period was normal. The writers conclude that anoxia *per se* is not a factor in the production of epileptic seizures.

G. W. T. H. FLEMING.

Carbon Disulphide Poisoning. (*Journ. Amer. Med. Assoc.*, vol. cx, p. 1543, May 7, 1938.) Gordy, S. T., and Trumper, M.

In the six cases reported there was a relative paucity of neurological signs. Two patients showed corneal anæsthesia, two complained of "wavy vision", two had retro-bulbar neuritis, and in one acute case Lilliputian and Brobdingnagian hallucinations were present. Psychotic episodes were of a periodic or cyclic character, and accompanied by paræsthetic or hallucinatory phenomena and occurred as sequelæ in four cases. Asthenia occurred in two cases, amnesic features in two and progressive mental deterioration in one. Four cases showed diminution or loss of libido and all the cases are invalids.

T. E. BURROWS.

Head Trauma. (*Journ. Amer. Med. Assoc.*, vol. cx, p. 1727, May 21, 1938.) Gotten, N.

The author reports 141 cases having either a fracture of the skull or a period of unconsciousness of more than five minutes. He concludes that the most important feature in treatment is good nursing care. Operation should be avoided whenever possible, and the reduction of intra-cranial pressure carried out by conservative methods. Complications occurring in what appears at first a mild injury should receive particular attention. The age of the patient is the greatest factor favouring recovery, the prognosis being best in the young.

T. E. BURROWS.

Meralgia Paræsthetica. (*Journ. Amer. Med. Assoc.*, vol. 110, p. 1650, May 14, 1938.) Ecker, A. D., and Woltman, H. W.

This condition is a neuritis of the lateral femoral cutaneous nerve, and is usually caused by pressure or tension of the overlying fascia. It most commonly affects obese middle-aged men, and usually begins as a sense of numbness over the anterior lateral aspect of the thigh. Later paræsthesiæ and pain occur which are aggravated by movement. There is usually slight impairment of all sensations over the area involved. The condition may be bilateral and is usually self-limited, but if necessary can be relieved by severance or resection of the nerve.

T. E. BURROWS.

Fatality Rates in Cerebro-spinal Meningitis. (*Journ. Amer. Med. Assoc.*, vol. cx, p. 1894, June 4, 1938.) Walsh, G.

The experience of some twenty million urban dwellers over a period of sixteen years is recorded. The fatality rate varied between 67.7% and 38.1%, with an average of 51.2%. Several clinicians of wide experience have expressed the view that the fatality-rate in the pre-serum era varied between 20% and 80%. Rosenau listed six thousand cases during the years 1904 and 1905 with a fatality-rate of 51%. The author believes that the fatality-rate during the years 1920 to 1936 has altered little if at all, and that the use of recent treatments may be harmful rather than beneficial.

T. E. BURROWS.

The Control of Meningococcic Meningitis Epidemics. (*Journ. Amer. Med. Assoc.*, vol. 110, p. 484, Feb. 12, 1938.) Kuhns, D. M., Kisner, P., Williams, M. P., and Moorman, P. L.

7,339 enrollees in 48 different camps in Missouri were given intradermal tests; 53% showed a "1 plus" reaction. 3,517 of the original positive reactors were retested after an interval of approximately two months, and the reaction of 78.9% had changed from "positive" to "plus-minus" or negative. All enrollees with a "1

plus" or greater reaction were inoculated with 0.5, 1, 1.5 and 1.5 c.c. of a full-strength filtrate at four-day intervals. The greatest reactions were of a mild systemic type, and occurred after the third dose. One month after immunization three enrollees with plus-minus reactions, who were not immunized, in three different camps had meningococcic meningitis. After immunization of the remainder of the group no further cases occurred. Twenty-six cases of meningitis have occurred in these camps in the past two years. None have occurred in those immunized persons in the same groups in the seven winter months since inoculation. Prior to inoculation there were nine outbreaks of meningitis of one case each, and eleven outbreaks in which the number of cases varied from two to twelve. Only one case occurred in the period of from one month to one-and-a-half years since the immunizations were completed in those twenty camps.

T. E. BURROWS.

5. Pathology and Biochemistry.

Histopathologic Changes in the Brain in Experimental Hyperinsulinism. (*Arch. Neur. and Psychiat.*, vol. xxxix, p. 467, Mar., 1938.) Weil, A., Liebert, E., and Heilbrunn, G.

The authors found that in rabbits the injection of doses of 200-400 units of insulin was followed by severe damage to the cortical neurones. In those rabbits dying in a seizure there was liquefaction, vacuolation and homogenization of the ganglion cells. In those which survived some months there was marked shrinkage of the cytoplasm and nuclei. In both groups there was diminution in the number of neurones to a marked degree. The changes appear to be the result of intra-cellular anoxæmia.

G. W. T. H. FLEMING.

Lesions of the Brain following Fever Therapy. (*Journ. Amer. Med. Assoc.*, vol. cix, p. 2116, Dec. 25, 1937.) Hartman, F. W.

Decreased oxygen saturation of the blood occurs constantly after fever therapy. Animals having a saturation below 65 volumes per cent. died. Factors producing this anoxæmia are alkalosis, accelerated blood-flow, increased temperature, and increased demand for oxygen by the tissues. The pathological changes resulting from fever therapy are typical of anoxæmia produced in other ways. Anoxæmia may be prevented by the administration of oxygen throughout the fever therapy, and carbon dioxide may be used to counteract the alkalosis and apnoea.

T. E. BURROWS.

Significance of Acetylcholinesterase as well as of Specific Receptors of the Acetylcholine-sensitive Contractile Substrates. (*Skand. Arch. Physiol.*, vol. lxxviii, pp. 40-58, 1938.) Kahlson, G., and Uvnas, B.

The relation between the acetylcholinesterase and the sensitivity to acetylcholine is very complicated. Even in such perfect objects as the back muscle of the leech or the rectus muscle of the frog, as the experiments with ergotamine and quinine show, the extreme inhibition of the enzymic activity does not necessarily lead to an increased sensitivity to acetylcholine. In the smooth ring muscle of the frog stomach which shows typical acetylcholine contraction none of the powerful enzymic inhibitors augmented the sensitivity, but the weakly inhibiting ergotamine had such an effect. However, the authors do not suggest that there is no relation between the enzymic activity and acetylcholine sensitivity. It is pointed out that acetylcholine is only effective so long as there is a concentration gradient, and as soon as the inside and outside concentrations are equalized it becomes dynamically inactive. The reason that the gastric muscle responds so much more quickly than the rectus muscle or the leech muscle is the more rapid diffusion of the drug into it. In an