

in the mental state. It is pointed out that the method is simple, inexpensive, not dangerous, and not contra-indicated by tubercle or feeble health; that it seldom causes alarming pyrexia, but that, like all methods of protein shock, it is inconstant in its results.

S. M. COLEMAN.

Presentation of General Paralytics Successfully Treated by Sodium Stovarsol. (Soc. Clin. de Méd. Ment., November, 1929.) Marchand, L.

Twelve women were treated by three series of twenty intramuscular injections of 1 grm. of sodium stovarsol, three injections being given each week, with a rest period of one month between each series. Six of the cases are reported to be in a state of remission; two have resumed their normal occupation. One case is still under treatment, but shows improvement, while another has shown some decrease in affective unbalance. In the other four cases the treatment has been without effect. In all the improved cases there has been some modification in the reactions of the cerebro-spinal fluid, but there was no change in the blood Wassermann and Meinicke. The paper is followed by a discussion disclosing a marked diversity of opinion as to the relative merits of malarial, tryparsamide and stovarsol therapy.

S. M. COLEMAN.

The Use of Sulphur for the Production of Fever. (Arch. of Neur. and Psychiat., July, 1931.) Mackay, P. P.

The author carried out experimental work on rabbits with injections of sulphur in oil. He thinks that the fever is due to the liberation of protein from necrosed muscle, the destruction of the muscle being due either to the sulphur or to the liberation of hydrogen sulphide. Sulphur is superior to typhoid vaccine, in that the fever is of longer duration and that chill is usually avoided, but inferior in that local pain and tenderness may be very troublesome. It has several advantages over malaria, and is easier to control.

G. W. T. H. FLEMING.

4. Neurology.

A Clinical Contribution to the Study of Cerebral Tumours. (Rassegna di Studi Psichiatrici, May-June, 1930.) Antonini, G.

The author gives a detailed account of twenty cases of cerebral tumour varying in type and situation, to which he adds a description of the *post-mortem* findings. He analyses systematically the physical signs and symptoms, and the results of chemical and radiological examinations. In discussing the symptoms in general, he lays stress upon the frequency and earliness of headache, which he attributes to the early stages of hypertension in the cerebro-spinal fluid. He pays special attention to mental symptoms, describing in detail the general picture, and analysing the localizing value of certain groups of symptoms.

He distinguishes carefully between symptoms which constitute

a reaction to the somatic disturbance, on the one hand, and those of a definitely psychotic nature on the other. As regards the former, he mentions the depression associated with preoccupation, which differs essentially from melancholia and stupor. Tormented with headache, such patients avoid even the minimum effort of mind and body. But in the author's experience most cases present definitely psychotic symptoms, which are very numerous and which vary greatly in different individuals. The cerebral tumour, in disturbing the normal equilibrium of cerebral processes and diminishing the organic resistance of the brain, may cause a predisposition to succumb to other psychopathological influences. He refers to Gianelli's case of juvenile alcoholism in whom the advent of a cerebral tumour ushered in symptoms of an alcoholic psychosis, and adds that paranoidal tendencies may be intensified.

He finds that confusional states are the most frequent, and that it is possible to distinguish between that due to general intracranial pressure and that produced by a frontal or callosal tumour. In the former the patient can be roused. He talks slowly and seldom and his responses are retarded. Remote memory is good, but recent is impaired. Reflex attention is reduced, but voluntary attention is preserved. Such symptoms are prodromal, and tend to pass into more severe confusion as the tumour grows, when disorientation becomes prominent and associated with that form of amnesia in which the patient regresses to an earlier stage of his life. Recent memory becomes more impaired, but the patient still retains his critical faculties. This stage is apt to pass into pathological sleep, which must not, however, be confused with coma. In a still more advanced stage apathy supervenes, from which the patient can be roused with difficulty, and in which there is reduced activity, complete lack of initiative, no spontaneous speech and an expressionless and immobile face. Finally there is coma, with, sometimes, a catatonic state with *flexibilitas cerea*, due, possibly, to cerebellar catalepsy. Other symptoms of interest are automatism, as in epilepsy, with subsequent complete amnesia for the period of the fugue, typical melancholia with suicidal tendencies, compulsion neuroses, and states simulating paralytic dementia and Korsakov's syndrome.

The author concludes that mental symptoms are of notable value in the diagnosis of cerebral tumour but of little value in its localization. He stresses the fact that they are early and constant in tumours of the frontal lobes. He further agrees that prodromal symptoms and signs, whether mental or neurological, are of more value in localization than late ones.

H. W. EDDISON.

Some Obscure Symbolic Muscular Responses of Diagnostic Value in the Study of Normal Subjects. (*Amer. Journ. Psychiat.*, July, 1931.) Krout, M. H.

Given a certain signal in a certain situation, reference is at once made to a pre-existing system of relationships, of which the signal is symbolic, and in which it acquires meaning. This is, briefly,