lowering of mental tension. Either a quiet or restless talkative somnolence is usual. The mental content has rather a superficial character, one patient showing an occupation delirium, another a fear reaction.

Prognosis is always grave, if mild abortive cases be excepted. Of three cases reported only one recovered. The duration may extend over weeks or months.

Treatment is symptomatic, having in mind the disease is a general infection. Nourishment must be given freely. This and careful nursing are important. Encourage elimination. Sodium bicarbonate with plenty of water is advised. Urotropin is recommended, but is contra-indicated by albuminuria and any kind of kidney irritation. For the relief of restlessness and delirium, veronal in small doses proved surprisingly efficient. W. J. A. ERSKINE.

Mental Forms of Epidemic Encephalitis [*Formes mentales de l'encephalite épidemique*]. (*L'Encéphale, August*, 1920.) *Bremer, M.*

The author narrates 4 cases presenting syndromes of acute delirium (2 cases), confusion (1 case), and mania in a child, æt. 9.

(i) In the first case, a man, æt. 34, the clinical signs were the following: hallucinatory delirium with extreme motor and verbal agitation, insomnia, and fever. The bacillary antecedents of the patient, his rapid wasting, the marked lymphocytosis of the cerebro-spinal fluid made one think, in spite of the absence of clear meningeal symptoms, of a prolonged bacillæmia, while it appeared on questioning the family that he had been sharply attacked by a diplopia, of which no traces remained. The fever and delirium diminished very slowly. Coldness of the legs persisted. A month and a half later myoclonic twitchings of great amplitude developed, affecting the abdomen and the right leg, and at the same time an extreme hyperæsthesia, superficial and deep, of the outside of the left leg and the dorsal aspect of the foot. These persisted. There still exist an accommodative asthenopia and a slow optic neuritis. On the contrary there is no psychical sequel.

(ii) A woman, æt. 47, attacked suddenly by terrifying hallucinations, of the absurdity of which it was possible to convince her and of which she preserves a curiously precise memory. She showed delirium, fever, acetonæmia, diplopia, and myoclonic twitchings. She became normal in mind, but had a myoclonic condition three months after the malady.

(iii) A man, æt. 26, in a state of stupor. There was a past history of insomnia in 1912, shell-shock in 1915, and confusion after an air raid in 1916. After several weeks he complained of insomnia and diplopia. On March 14th he got lost in Paris, was taken home by the police and did not recognise his mother; aspect dull, head hung; when questioned answers only after a long interval; gives his age and knows where he is, but nothing more can be got out of him. There exist diplopia and myoclonic twitchings in the neck and left half of the body. Two months later there was only a certain slowness in response and a want of equilibrium in the external and internal ocular muscles.

(iv) A boy, æt. 9, entered hospital in February last presenting then

an oculo-lethargic type. He had afterwards a phase of somnolence with slight hemichorea which lasted about two months, then a phase of diurnal somnolence and nocturnal insomnia for a month, then finally a phase of constant insomnia and excitation with mania, especially at night, which still exists. He had to go to an asylum. The mania was generally in the first part of the night, sometimes after a short sleep produced by large doses of hypnotics. He presented the ordinary symptoms of acute mania and never was still, was threatening, gesticulating; and performing monkey-tricks all the time. There were no confusion and no hallucinations. At another time he was furiously maniacal, threw himself against the wall, broke a window and tried to strangle himself, shouting "Death! Death!" and cursing those who essayed to master him. He seemed then to have very transient hallucinations at rare intervals, and these did not worry him, but made him angry. All these accesses of his trouble were present for about three hours at a time, and were followed by a calm sleep lasting until morning. At the present time the boy, in spite of an excellent appetite, is very emaciated. He behaves as a hypomaniac, is inattentive, disturbing, jeering, accusing, but wheedling and affectionate. For the rest he is very intelligent, capable of reasoning, and without antecedent pathology. The ocular symptoms have disappeared some time. A slight choreic instability of the left arm persists.

What is the significance of these psychical forms of epidemic encephalitis? The toxic pathogeny of acute delirium and mental confusion is classic. The symptoms of toxæmia were evident in the patients. They were such in the second case that the diagnosis of typhoid suggested itself. In the three first cases no psychical sequelæ were ascertained. It does not, then, seem necessary to invoke for them a special cortical localisation of the infectious processes. It is necessary to note, however, that none of the patients presented any Parkinsonian symptoms. In the child the toxic phenomena were not evident.

We are still ignorant whether it is a state of infection. But what we know of the persistence, sometimes very prolonged, of the virus of encephalitis and of sudden awakenings of the "fire which smoulders" (Netter) invites us to keep in mind that possibility, although everything seems to indicate that the infectious processes are extinguished.

W. J. A. ERSKINE.

Mental Disturbances in Lethargic Encephalitis. (*Journ. of Nerv. and Ment. Dis., September*, 1920.) *Abrahamson, I.*

The toxins of lethargic encephalitis attack all cells, but nerve-cells are the most vulnerable. Irritability both to internal and external stimuli diminishes. Thought is a function which must suffer in this disease, and lethargic encephalitis invariably gives rise to mental disturbances. Somnolence and insomnia, mania and depression, delirium and coma, confusion and catatonia may all be observed, but these are essentially variations in the severity and phase of its disturbance, not in its nature. At the onset of the disease there is a variable period in which the patient finds increasing difficulty in attending to his work. Next a time of yawning ensues, and then the eyes close. As a rule the patient lies on his back with closed eyes as if in deep sleep. His