

disposal of house refuse, were very abundant in Barrow during the time of the epidemic. No similar disorder was noted in the domestic animals or pets. A severe outbreak of so-called influenza, however, did occur in the town during the spring of 1913. Consideration of the question of poliomyelitis carriers showed a few instances in which the patient, or some person coming in contact with the patient, may have transmitted the infection to others. But against all theories of the personal carriage of infection is the striking fact that there was not a single example of multiple cases in the same house in the whole of the 56 instances of poliomyelitis investigated; yet there were 139 persons, brothers and sisters of the patients, only 7 of them aged 18 and over, living in the houses where cases occurred. It seems difficult to reconcile the supposition that the disease had been spread by direct or indirect personal contact with this fact, unless, indeed, it is assumed that the total number of persons susceptible to the virus of poliomyelitis is very limited indeed.

CEREBROSPINAL SYPHILIS. George Draper. (Journal A. M. A., Feb. 5, 1916.)

The author attempts to present the relationship between the discomforts from the intravenous and intraspinal treatment and the results in terms of the individual's increased or restored economic value to the community. His material for the study has been thirty-eight patients observed for periods varying from three months to three years and of different clinical types. The usual technic was employed, the doses spaced according to the case. A table is given showing the different kinds of reactions met with and their relative frequency. The most frequent is the so-called anaphylactoid phenomenon, appearing as a slight flushing of the face, urticaria or more severe shock. This appeared in about 55 per cent. of all the cases at one time or another, but in the total of 1,126 injections its incidence is about 73, or 6.5 per cent. The disturbance may be prevented to a certain extent by a very slow administration of the drug, and while usually trivial it may be serious, and in one case artificial respiration was required. The other kinds of reaction are more infrequent, gastro-intestinal upsets being the commonest. Under discomforts are classed a number of symptom reactions varying from slight intensity to severe wracking pains. There are several types, some of them, as in tabes, an aggravation of the usual pains of the disease. Another type presents the symptoms of meningism and in one case coma occurred. The details of the symptoms are too numerous to be given in a brief abstract. As regards the benefits derived, a table is given as to the results in persons suffering from neurasthenic conditions, as well as with general physical debility, and which were relieved in a large proportion of cases to a greater or lesser extent. The true paretic is apparently not helped, though patients are designated as such apparently by their response to treatment. Summarizing his article, Draper says: "The purpose of the paper has been to show the number and severity of undesirable reactions to treatment, on the one hand, and the results in terms of working capacity, on the other. The severest reaction to intravenous injections is of the anaphylactic type. The most frequent reaction to the intraspinal injections is pain. The severest is an aseptic meningitis, which may be anaphylactic in origin. Twenty-six patients out of a total of thirty-eight were economically useless before treatment. After treatment twenty-two were back on full-time work. Rapidity and degree of improvement depend directly on this intensity of treatment. It is important to keep patients at work during the months of treatment."

A CLINICAL CONSIDERATION OF MIGRAINE. John A. Litchy. (International Clinics, Dec., 1917.)

Migraine is considered by the author as the most frequent headache, occurring in 700 of his 15,000 patients sick from all causes. He believes that

the so-called acidosis in children may often be a forerunner of a well-established sick headache habit. The interesting relation between migraine and epilepsy deserves further study. Among the author's 15,000 patients epilepsy occurred in 7, and both migraine and epilepsy in 70. Auerbach's theory, which attributes migraine to an actual disproportion between skull-capacity and volume of brain, needs further proof. Dr. Litchy shows that the diagnosis is easy when there are headaches which are unilateral, periodical and hereditary, but when only one or two of these symptoms are present, or when there is only a periodicity of some of the minor symptoms or possibly of the auræ, the diagnosis may be difficult. Migraine is frequently mistaken for pelvic disease, for acidosis or cyclical vomiting in children, and organic disease, when some of the auræ are present. The psychasthenic and the gastric symptoms frequently lead to confusion in diagnosis. While the underlying causes of migraine are vague and furnish little light as to treatment, much can be done to ameliorate the symptoms by proper handling of the exciting causes that aggravate the patient's general condition and precipitate the attacks. Most thorough investigation and careful individualization are indicated. Systematic administration of the bromide salts and avoidance of undue fatigue are especially recommended.

**ACUTE SYPHILITIC MENINGITIS.** Boris Bronstein. (International Clinics, Dec., 1917.)

Bronstein considers that the term acute syphilitic meningitis should be more particularly applied to acute meningeal phenomena of the secondary period, sometimes preceding, but more frequently accompanying the cutaneous manifestations of this period. The pathology is essentially a meningovascularitis with hypersecretion of the cerebrospinal fluid. Prodromal symptoms, such as headache and insomnia, may or may not occur. Acute syphilitic meningitis at its height, as Bronstein says in the December International Clinics, presents the clinical picture of the tubercular form, differing from the latter by the indistinctness of the symptoms, such as contractures and stiffness of the neck, and by the absence of any marked disturbance of the pulse and respiration. In the luetic form fever is apt to be absent and there may be remissions and relapses. Lumbar puncture reveals a considerable hypertension of the cerebrospinal fluid, albumin in quantity, and a marked lymphocytosis with plasmazellen. The cerebrospinal fluid may yield a positive Wassermann even when the blood serum is negative. Other manifestations of syphilis are to be looked for. The immediate prognosis is rarely fatal but the ultimate prognosis should be reserved. Prophylactic treatment is recommended whenever the cerebrospinal fluid shows a lymphocytosis, even when all meningeal symptoms are wanting. The treatment consists in frequently repeated removal of the cerebrospinal fluid in considerable amount, combined with intravenous injection of cyanide of mercury and intraspinal injections of colloidal mercury. Neosalvarsan or salvarsan have a much more rapid action, but must be prudently handled in neurologic lesions of syphilis.