

ACUTE POLIOMYELITIS.

Poliomyelitis is a disease which, while greatly dreaded, is comparatively difficult to recognise in its initial stages, though it is important that it should be detected and cases isolated at the earliest possible moment. A Memorandum which has been recently issued by the Ministry of Health (Memo. 166 Med) to County Councils and Sanitary Authorities in England, embodying the most recent information on the present practice in its diagnosis and treatment, is therefore welcome. It is especially important that nurses should be acquainted with the early symptoms, so that if in the course of their work in district visiting, or otherwise, they come across suspicious cases, they may at once report them to the proper authority.

The Memorandum states:—

"Acute poliomyelitis (including polio-encephalitis and polio-encephalo-myelitis) is an infectious disease of the central nervous system. It has long been known under the name of 'infantile paralysis,' but the term is misleading, for the disease may occur in adults, though not so frequently as in children, and paralysis does not always supervene. Mild cases are not uncommon and failure to detect them masks to some extent the epidemic nature of the disease.

Although poliomyelitis is compulsorily notifiable, its incidence is largely conjectural inasmuch as it is difficult of recognition until paralysis has occurred.

Epidemiology.

Prevalence.—Poliomyelitis is a disease of the temperate zones; it has a well-marked seasonal prevalence in the autumnal part of the year, but sporadic cases and small outbreaks have been recorded in the winter months.

Transmission.—The presence of the virus has been demonstrated in the naso-pharynx of patients and of persons who give no definite history of having had the disease and who may, or may not, have been in known contact with it. Presumably infection may be spread directly not only by patients but by persons apparently healthy. There is not sufficient reason to believe that the virus of poliomyelitis is conveyed to man by foodstuffs or insects, or that the disease is associated with insanitary conditions.

Natural Immunity.—Individual natural immunity is high in the first six months of life; thereafter it falls quickly but rises in the later years of childhood.

Age and Sex.—The largest proportion of cases occurs between the ages of 1 and 5 years, with the highest incidence in the second year of life. The figures of almost all epidemics agree in showing a slightly greater incidence on males than on females.

Incubation period.—Clinical observations suggest an incubation period of from 2 to 10 days, and although shorter and much longer periods have been recorded, the average period may be regarded as from 3 to 4 days."

Clinical Character.

(1) "*Initial Stage.*—This stage is variable in duration; it may last only a few hours and be unrecognised, or on the other hand it may extend to 5 or even 10 days. The initial symptoms may be those commonly associated with the pre-eruptive period of the exanthemata—head-

ache, pyrexia (102°–103°), malaise, sore throat, tonsillitis, coryza, nasal discharge and irritability of temper. Epistaxis may occur and, in some epidemics, vomiting and diarrhoea are leading symptoms. There is no typical skin eruption; herpes and herpes zoster has been noted; erythematous or morbilliform rashes may occur, and cases have been erroneously diagnosed as scarlet fever or measles. The condition may clear up rapidly and complete recovery ensue. On the other hand, the initial stage more commonly merges into a second phase. Exceptionally there may be a remission period of some hours, or even days, between these phases in which the temperature falls to normal, the child appears to have recovered and perhaps is allowed to go about on the assumption that he has had a slight febrile ailment. But there comes a recrudescence of temperature and an accentuation of the disease."

Other stages are (2) *The preparalytic stage*, indicating subarachnoid or meningeal invasion. It varies in intensity and duration, being at times so slight and transient as to be unnoticeable, and at others of great severity, and (3) *The paralytic stage* (stage of invasion of the central nervous system) (a) the *poliomyelitic form*, and (b) the *polio-encephalitic form*. In the encephalitic form, though the risk of fatality is greater, there are commonly no after-effects on recovery.

Precautions against Infection.

"While it is difficult at present to say how long a patient remains infectious, he should be isolated from other children for six weeks, and personal association with him limited to the minimum necessary for proper care and nursing. Those in attendance should bear in mind that infection may be conveyed from the naso-pharyngeal secretions, the urine and excreta. A strictly surgical standard of nursing is indicated, and nurses should be advised to use nasal sprays or douches and to gargle the throat with normal saline solution. A solution of permanganate of potash, 1 in 5,000 in 0.8 solution of chloride of sodium (common salt), has been found to inhibit the action of the virus. Some authorities are of opinion that the employment of chemical antiseptics is liable to destroy the virucidal properties of the normal secretion of the naso-pharynx.

Children in the affected household should remain away from school for a period of three weeks after isolation of the patient."

The Memorandum may be obtained from H.M. Stationery Office, Adastral House, Kingsway, London, W.C.2, or through any bookseller, price 2d. net.

THE BEST OF NEWS.

We know that nothing will give more pleasure this New Year to a wide circle of devoted friends than the news that Miss Breay is making excellent progress towards recovery, and will soon be leaving the delightful Nursing Home at Wortling, where she has been so devotedly nursed since last April.

Let us hope that before long Miss Breay will undertake the work of writing "The History of the Registration Movement" which has long been her ambition. The present generation of Nurses need reliable instruction on the evolution of Nursing as a Profession.

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