

The existence of a positive Wassermann reaction of the blood serum in the type of case just described would be an indication merely of the constitutional state, but would not throw any light upon the condition of the central nervous system.

If, however, a positive Wassermann reaction was found in the cerebro-spinal fluid as well, and if with this there was associated a large increase in the lymphocyte count, a diagnosis of parasyphilitic disease, most likely general paralysis, might with confidence be made.

There is also evidence that the reaction of the blood serum may be negative while that of the cerebro-spinal fluid may be positive in these cases. There are also cases in which the lymphocyte count is above the normal, but does not reach the high number found in general paralysis. This latter type is usually associated with a positive cerebro-spinal reaction. The significance of this type is less certain, but it probably points to a chronic inflammatory condition of the central nervous system.

The proportion of cases of tabes dorsalis which show a positive Wassermann reaction of the cerebro-spinal fluid varies from 5 or 10 per cent. according to Nouné up to about 50 per cent. in Mott's⁵ experience.

The examination, therefore, of the cerebro-spinal fluid by the Wassermann test has come to be of immense practical value in the differential diagnosis of functional and organic nervous conditions occurring in syphilitic subjects. Many cases occur, however, in which such an examination is unnecessary; it should, in fact, be reserved for cases in an early or equivocal stage, or for those in which the physical signs are not sufficiently characteristic.

Lumbar puncture has also been adopted as a therapeutic means, but its application for this purpose is limited and has been confined mainly to cerebro-spinal meningitis. The removal of a quantity of fluid is an operation not unattended by danger, and in disorders characterized by an increase of the intracranial pressure, such as cerebellar tumors, the risk would seem to be great. Removal of some fluid, however, is often of advantage in the coma of a cerebral hemorrhage, and in hydrocephalus. Lumbar puncture is also used to assist the effects of operation upon meningitis secondary to ear disease, when it acts as a temporary drainage for the removal of inflammatory products.

Serotherapy. The diseases of the nervous system do not lend themselves, so far as their study has yet gone, to treatment by themselves and vaccines. There are, however, two maladies—cerebro-spinal fever and acute poliomyelitis—whose symptoms indicate