

nervous breakdown, but without definite physical signs of tabes dorsalis, would scarcely be sufficient ground on which to base a diagnosis of this disease. This combination of symptoms is not uncommon, and considerable difficulty may be experienced in forming a differential diagnosis as to whether the case in question is of a functional or organic character.

Since the introduction of the Wassermann test a further reaction of importance has been added to diagnosis; but there are some physicians who rely upon cyto-diagnosis as of equal value in the differentiation of these cases.

It should, however, be mentioned that a lymphocytosis has been found in certain diseases of a non-specific character such as herpes zoster, Landry's paralysis and enteric fever.

The observation of Mott<sup>4</sup> and Haliburton that cholin was present in the cerebro-spinal fluid in organic diseases was at one time regarded as a possible means of establishing a diagnosis between organic and functional disorders of the nervous system. As this observation has not assumed sufficient pathological importance, and as the technique is complicated and difficult, the method has been abandoned as a diagnostic resource.

Recently the examination of the cerebro-spinal fluid for the Wassermann reaction has been undertaken, especially in the early stages of those diseases in which a specific causation is probable, and when the usual physical signs are either not present or only to an uncertain or equivocal extent.

Most practitioners see from time to time cases having a definite neurological or mental aspect, in which it is difficult to say from the physical signs alone, such as Argyll-Robertson pupils and alterations in the reflexes, whether the symptoms are functional and temporary, or indicate the onset of serious organic disease.

The cases to which reference is made are usually of adult age and commonly of the male sex. They may show signs of neurasthenic breakdown, some degree of mental depression or excitement, or acute insomnia for which no obvious cause is apparent. On the other hand, persistent headache, progressive loss of memory, epilepsy, and eclamptic convulsions or symptoms of arterio-sclerosis may be the outstanding features.

In this type of case, the examination of the blood and cerebro-spinal fluid by the Wassermann test is regarded as being of great diagnostic value, and as throwing much light upon the underlying structural changes. It is also a means of differentiating between functional and organic nervous conditions, occurring in syphilitic subjects.