The Present Status of the Widal Reaction.

Although the Widal test has not so far fulfilled the hopes at first entertained, experience has shown it to be capable affording very valuable assistance in the diagnosis of obscure cases of typhoid fever, and in differentiating this disease from others which happen to simulate the clinical aspects of the typhoid state. Opinions are at variance as to the trustworthiness of high dilutions, allowing a correspondingly protracted time for the phenomenon of agglutination to take place, as compared with the opposite plan of employing lower dilutions with a shorter period for completion. In the United States the tendency is in favor of employing low dilutions, whereas in Europe high dilutions are gaining ground. Taking a large number of cases which clinically appeared to be typhoid, only four or five per cent. failed to give the reaction, and in very few indeed of the positive cases was there any reason subsequently to question the accuarcy of the diagnosis. It may be borne in mind, however, that the power to cause agglutination remains in the blood for long periods of time after recovery from typhoid. It may, indeed, remain as long as ten years, though the average duration is under five years, and this may conceivably explain a certain proportion of the cases in which the reaction has been obtained in persons obviously not then suffering from typhoid. Examination of recent statistics shows that the agglutinating power is weaker in children than in adults, that it appears earlier in the disease and does not persist so long. The agglutinating power can pass through the placenta, or may be acquired through the mother's milk; but, in either case, it is of comparatively short duration. It may be remarked incidentally, that the presence or preservation of the agglutinating power does not appear to afford immunity against infection or reinfection by typhoid. One conspicuous drawback in the employment of this test is its tendency in certain cases to yield negative results until very late in the disease. It sometimes happens indeed that the existence of the agglutinative power cannot be demonstrated until convalescence has been established, no explanation is at present forthcoming of this delay. The fact is that we are in ignorance of the precise nature of the reaction, hence we are unable to appreciate its exact significance. It may on the one hand be a phenomenon of infection, or, on the other hand, it may be a manifestation of leucocytic reaction of the development of bactericidal power. When this point has been cleared up the test may not only afford more absolutely trustworthy diagnostic indications, but it may also influence prognosis by enabling us to measure either the intensity of the infection or the energy of the protetive reaction. In the meantime Widal's reaction is a most useful aux-