

subsequently added, in spite of the presence of the specific anti-body for these corpuscles. The test is carried out as follows: An emulsion of the syphilitic liver of a foetus is made, and a fifth of a c.c. is added to an equal quantity of the fluid to be tested, together with a tenth of a c.c. of the complement-containing blood-serum of a normal guinea pig. The mixture is incubated for an hour or two, and is then added to a c.c. of a 5 per cent. saline emulsion of sheep's red blood corpuscles and to twice the amount of anti-body necessary to dissolve these corpuscles; this anti-body is obtained by taking the serum of a rabbit which has some time previously been twice injected with sheep's corpuscles. If the reaction is negative then the guinea pig complement, not being bound, is free to dissolve the red corpuscles; if the reaction is positive it cannot. A positive reaction, therefore, indicates that some substance, which we may provisionally term a syphilitic anti-body, was present in the fluid that was being tested, and bound the complement to the syphilitic antigen. Each of the five constituents of the reaction has independently to be tested by control reactions, and there are a large number of possible fallacies that I need not here enumerate. It will at once be evident that only a highly skilled expert can perform the test with any hope of securing adequate accuracy of results, and although several simplifications have recently been suggested it is very doubtful whether any modification of the original technique is satisfactory.

The clinical results are very striking and have been so widely confirmed as to be no longer open to doubt. They may summarily be stated in a sentence. The reaction is invariably positive with the blood-serum of patients suffering from general paralysis, and almost always with the cerebro-spinal fluid; it is commonly positive with the blood-serum of patients suffering from syphilis only, but only rarely with the cerebro-spinal fluid, even if the nervous system is implicated in the disease.