

THE WASSERMANN REACTION

ITS CORRECT INTERPRETATION

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The general public and even professional people have been lead to believe that the Wassermann Reaction is conclusive in the diagnosis of Syphilis. This belief has become so general in Porto Rico that some physicians rely solely upon the Wassermann test in the diagnosis and treatment of this disease.

The history of the patient and the clinical signs and symptoms are forgotten and the individual is treated as a syphilitic because a positive Wassermann Reaction is given or because one of its modifications is positive. This error gives the individual an unwarranted sense of security and also tends to commercialize the treatment of the disease.

It should be remembered that there are a number of negative Wassermann Reactions even in the presence of active clinical manifestations and that there is a variation in the degree of this test in different individuals and a temporary disappearance of external manifestations in some, without treatment; therefore it is wholly illogical to base either a negative or a positive diagnosis of Syphilis simply on a laboratory report and what is worse, to use the test as the only indication for, guide to and control of treatment.

Today, as Graves says in the *American Journal of Syphilis*, 1924, "they treat the Wassermann Reaction rather than the syphilitic or the disease itself." Many people are taught to believe that the strength of a positive reaction is an indication for the intensity of the treatment and that a negative reaction on the absence of gross signs is a contra-indication for any treatment whatever. This error brings serious results to the patient. Cases like the following occur frequently. A patient with a weak Wassermann Reaction positive (+ +) is given a very poor treatment consisting of six intravenous injections of Neorsphenamine, for instance, and if a negative reaction is obtained three months later this patient is reported as cured;

the same patient returns after two years, suffering from *Tabes Dorsalis*, with a negative Wassermann in the blood and with a positive (+ + + +) in the spinal fluid.

Another case giving a positive Wassermann Reaction (+ +) treated intensely with Salvarsan, Mercury and Iodides died of Pulmonary Tuberculosis shortly after treatment.

A patient with a positive (+ + + +) is treated intensively, the Wassermann Reaction remaining positive regardless of all treatment. Several years later, skin lesions appear which lead to a diagnosis of tertiary syphilis; another Wassermann Reaction is then made giving positive (+ + + +). On examination of the nasopharyngeal exudate the patient is found to be a leper.

Hundreds of cases like this could be cited throughout the Island, in which the mistake was made by depending solely on the Wassermann Reaction for the diagnosis of Syphilis. Other cases have been discovered in which a negative reaction has been considered as sufficient evidence for considering the patient cured and later neurosyphilis has developed.

The instances are numerous in which a person has a negative Wassermann Reaction in the blood for a continued period, shows an increase cell count, a positive globuline and a positive Wassermann Reaction in the spinal fluid. This fact lead Dr. Baketel to say in the *American Journal of Syphilis*: "The undertreated Syphilitic of to-day is the tabetic or paretic of to-morrow."

The inquiry, "When is the syphilitic cured?" naturally arises and this is very hard to answer. Vecki (*Archives of Dermatology and Syphilis*, 1922, Vol. 328) answers the question by saying: "A persistent negative Wassermann Reaction of the blood and the spinal fluid, other negative findings in the latter, chiefly a normal cell count and an absence of all CLINICAL SYMPTOMS AND ADENOPATHY are considered as proofs of a cure," and he goes on to observe "there is a great diversity of opinions as to how long the all-around negative findings must be established before the patient can be cured."

A. R. Fraser, in the *American Journal of Syphilis*, Vol. 633, believes that slow and progressive sterilization should be employed. "Drugs should be employed in such a manner that their faculty of stimulating tissue defensive activity be utilized in addition to their parasiticidal action. Such treatment should be continued for two or three years, IRRESPECTIVE OF WASSERMANN READING." He further recommends that the patient be subjected to a "PERIODIC CLINICAL OVERHAUL FOR THE REST OF HIS LIFE."

As it is shown by the above statements, the physician who asserts that a given case of Syphilis is positively cured, imparts an assurance to his patient that may be altogether unjustified.

The consensus of opinion is that the patient should be treated until free from objective and subjective evidence of infection for at least one year, regardless of what the result of the Wassermann Reaction may be. Continuous observation should be made during the treatment, the patient should be watched, regular habits should be observed and the natural resistance should be increased in every possible way.

Repeated serological examinations of the blood and spinal fluid should be made every six months for at least three years and the patient instructed to see a physician on the appearance of any suspicious symptoms and signs.

CONCLUSIONS

(1) Neither the Wassermann Reaction nor any of its new modifications is absolutely conclusive in the diagnosis of Syphilis. Therefore, it is illogical to base a diagnosis entirely on a negative or positive finding.

(2) The result of a Complement Fixation Test for Syphilis is not sufficient to guide and control treatment.

(3) The diagnosis of Syphilis is based on four cardinal points:

1. Family History.
2. Personal History.
3. Clinical Signs and Symptoms.
4. Wassermann Reaction.

(4) Once the diagnosis has been established, the patient should be treated until free from objective and subjective symptoms for at least one year.

(5) The spinal fluid should be examined in every case before considering the patient cured.

