

in which a chancre of the lip existed, and Schaudinn has found it once in aspirated splenic juice from a case of recently acquired syphilis.

The circulating blood has been studied by several investigators for the spirochæta pallida, but with few successful results. Reckzet was the first to report the organism in the blood, but the forms which he saw were not typical. Raubitschek reports a positive finding in a woman who dated the infection three months before the examination. Noeggerath and Staehlin report three successful observations. They used centrifugalized blood diluted 1 to 10 with 0.3 per cent. acetic acid, and employed 1 cubic centimeter of blood for the test.

It also appears from tests made by Levaditi and Petresco that vesication is accompanied by the escape of the spirochæta pallida into the vesicular fluid. Cantharides plaster was used, and the vesicant was kept applied for eight hours, after which time many organisms were found. The largest number were found in vesicles directly over papular syphilides, a smaller number in the skin immediately surrounding the lesions, and none in the distant healthy skin.

The spirochæta pallida has also been found in the late secondary lesions. Sobernheim and Tomaszewski report three cases of syphilis in which infection occurred in 1898, 1900 and 1901, respectively, and in which, in 1905, secondary lesions re-appeared, chiefly on the face, nose, lip and eye. In one case an ulcerating condyloma alone was present. In all the cases the spirochæta pallida was found in the ulcers, though not in large numbers.

A small number of gummata and other tertiary syphilides have been studied for the spirochæta pallida, but with almost constant negative results. Schaudinn thinks it probable that the organism may occur in the late lesions in a resting form of different appearance. Finger and Landsteiner report a successful transmission of syphilis to the monkey by means of inoculation with a large amount of gummatus material.

In congenital syphilis, the results of a number of examinations of infants, the subjects of congenital syphilis, show that the spirochæta pallida regularly occurs in the disease. The micro-organism has been detected in the lesions of the skin and internal organs, sometimes in large, sometimes in small numbers. In several cases studied after death, a general infection with the spirochæta pallida could be demonstrated. Babes and Panea were able to demonstrate the organism in the pharyngeal and conjunctival secretions of a congenitally syphilitic child. In a child born prematurely to a mother who showed unmistakable signs of syphilis, Flexner was able to find the spirochæta pallida quite numerous in the skin lesions, in small numbers in the bile, and only after long search in the liver.