

Puncture of the Lymphatic Glands for the Diagnosis of Leprosy.

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AS far as I know, the question of the method of early diagnosis of leprosy and initial manifestations has not as yet been fully decided, and it is necessary to pay attention to the investigation of the lymphatic glands of persons who have been in long contact with lepers.

Being of the same opinion as Marchoux of the importance of the puncture of the lymphatic glands of people suspected of leprosy, I have, since 1923, made punctures in persons suffering from leprosy, and out of 98 cases 3 per cent. of tubercular and mixed leprosy, leper bacilli were discovered.

At the same time I also investigated secretion of the lymphatic glands of apparently healthy children (20 cases), who were born of leper parents, and who had lived with them for a number of years. Negative results were obtained.

In one case I found leper bacilli in an apparently healthy woman, the wife of a leper. The history of this case is as follows :

The woman's husband had suffered from tubercular leprosy from the age of 13. His mother had leprosy, but his father, three brothers and two sisters were healthy. The patient, in his opinion, was infected with leprosy by his mother, who nursed him. Leprosy first showed itself after catarrh. A sore appeared on the left leg, which remained uncured after more than a year's treatment. At the end of the year the eyebrows fell off, and nodules appeared on the face, and then on the wrists and elbows, horny growths. The patient voluntarily came to the colony, and was treated for three years with Gynocardate oil by the mouth. Leprosy manifestations disappeared, and the patient was discharged as cured.

The illness re-appeared after eleven years following a serious accident. Two years after, the patient was apparently cured, and he got married (1913). Three children were born, the last one being born after some spots had already appeared in the abdomen of the father, and after the eyes were affected.

In 1923 the patient, now with mixed leprosy, once more joined the Leper Colony, and all his family came with him, in spite of the advice of the medical personnel that they should remain at home.

The investigation of the skin, sensitiveness, destruction

of the nerves, and changes in the mucous membrane of the nose and mouth of the children, gave negative results. The puncture of lymphatic glands, which were slightly enlarged on the groin, neck and arm-pit of the 10-year and 7-year-old children, was negative. No abnormalities were observed in the 5-year-old child. As regards the wife, on the investigation of the outside surface of the skin in 1925, no symptoms were observed. On the investigation of the sensitiveness of the skin, no abnormalities were found. The mucous membrane of the mouth was normal, but the mucous membrane of the nose, on the left, was slightly swollen. No leper bacilli were found in the mucous membrane of the nose. The lymphatic glands by touch were found to be slightly enlarged in the left arm-pit and the right groin. A very small quantity of leper bacilli were found on the puncture of the right groin gland, and, besides, the bacilli were sharply granular, and many of them were similar to diphtheroid forms. They took the staining very well.

On account of the discovery of leper bacilli by puncture, I considered this case as one of latent leprosy, and as the woman continued to live among lepers, and would not agree to undergo treatment, she was put under medical observation.

After six and a half months a red spot appeared on the lower part of the leg. On investigation of the sensitiveness it was shown that temperature, pain and tactile sensation were absent, and as leper bacilli had already been found in the patient, the case was diagnosed as one of maculo-anæsthetic leprosy. This diagnosis was confirmed by histological examination of a piece of the skin.

Thus we may meet with cases without any changes of the skin, when the examination by puncturing the lymphatic glands gives positive results and shows the presence of a latent infection. This fact is very important for the early diagnosis and the successful treatment of the initial forms of leprosy.

In our case no treatment was commenced until the appearance of the spot. With more developed methods of examination and morphological differentiation of the acid-fast bacilli, the question arises should treatment be commenced if mycobacteria lepræ are found in the lymphatic glands, even though there are no other clinical manifestations of the disease.

Professor V. Kedroffsky advises, in order to establish the diagnosis in such cases, that a histological examination of the lymphatic gland should be made. In my further work I did not meet with any case similar to that described in the article.