

THE AGE OF DANGER FOR LEPROSY

BY S. N. CHATTERJI, M.B., D.T.M. (CAL.)

School of Tropical Medicine, Calcutta.

At present the concensus of opinion is that leprous infection takes place in childhood and the manifestation of the disease takes place long after the infection. The type of disease (neural or cutaneous) which will develop depends approximately upon the general health of the one infected and also on the number of bacilli which entered the body. The following two cases illustrate these points.

CASE 1.—Kartar Singh, aged 22 years, a Punjabi Hindu of medium build, came to our laboratory complaining of anesthesia of his right hand which had lasted for six years. There was wasting of that hand, and the ulnar nerve was thickened.

As the incidence of leprosy is very low in the Punjab we took special pains to find out how the boy was infected. No one in the family had ever suffered from leprosy. It was found that the father was a signal inspector at Asansol (Bengal), which is a highly endemic area for leprosy. The boy was born at that place and remained there for ten years. There was no cook or servant in their house, but the coolies and mechanics working under the father used to come to the house to help in household affairs. A woman of the locality, aged about 35 years, who often came to the house took much interest in the boy. She used to bathe him, feed him and occasionally took him to her own house. As far as he remembered he had not noticed anything wrong in that woman, and when on advice he wrote to his parents to inquire whether or not she was

suffering from leprosy they replied that she had no sign of it. However, they said that people with leprosy used to come to their house to beg, and that one of his playmates was suffering from the disease. The boy said that when he was at Asansol, at about 9 years of age, he used to feel a tingling sensation in his right hand and forearm, especially when his right elbow struck against anything hard.

He left Asansol at the age of ten and went to his native place (Patiala) and remained there for four years. Then he went to Ludhiana and studied in Khalsa H. E. School for six years. While a student there he first noticed loss of power in his right hand when attempting to write, especially in winter. The tingling sensation continued and gradually there developed thinning of the right hand. Two years ago he passed the matriculation, since when he has been out of employment. Recently he came down to Calcutta for treatment.

Apparently the boy, though a Punjabi, got the infection at Asansol (Bengal), either from his playmate or from a woman who might have been suffering from leprosy without any prominent skin lesion (i.e., diffuse infiltration). If we calculate from the time when he first noticed the tingling sensation, he had been suffering for 13 years instead of six. Nevertheless, the disease was limited to one part. Probably the boy had acquired only a slight infection; moreover, the diet of a Punjabi is good, and the boy was active and hard working, so his tissues formed a bad soil for the growth of the bacilli.

CASE 2.—The reverse picture may be seen in this case, that of a Bengali boy of poor health. Anil Kumar Paul, twelve years of age, has been suffering from leprosy for four years and at present is a C3 case. Large numbers of acid-fast bacilli have been found in smears from the nose and left ear. He is in a bad state of health, being debilitated with malaria and scabies. His father, aged 35 years, has been suffering from leprosy for eight years, and is now a N2-C1 case. A smear from his right ear shows four or five bacilli in every field.

In this case there are two possibilities. It may be that father and son were infected from a common source. The father was resistant, owing to his better health and more advanced age (35 years), and therefore has developed a less severe form of the disease, although he has suffered for eight years. On the other hand his son, being a young boy and in a bad state of health, had practically no resistance to the disease and became a C3 case within the short period of four years. The other possibility is that the father, after suffering from leprosy for some years, became slightly infectious and infected his son about four years ago; the son may have developed the disease rapidly even though the original infection was slight.