Original Articles

TYPHUS IN AKOLA (BERAR)

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DURING six and a half years' work at Akola, I have seen not less than fifty cases of typhus. The first case was seen in the year 1937 at one village. A fortnight later I saw a fatal case in Akola. Since then, eight to ten cases have been treated every year in the same season, *i.e.* between August to October. The mortality in these cases was about 10 per cent.

These cases were diagnosed as cases of typhus fever from the following common clinical manifestations :—

(1) A fever of remittent or continuous type of about two weeks' duration, and usually ending by lysis.

(2) The appearance of a rash, macular and hæmorrhagic, on or about the sixth day of fever. In mild cases the rash was papular.

(3) The early toxæmia.

(4) A bronchitis and in some cases broncho-pneumonia.

(5) Albuminuria.

(6) In all cases the temperature came down to normal by lysis except in three in which it had come down by crisis.

All cases were in adults.

The above were the general manifestations in the majority of cases which indicated the diagnosis of typhus. I quote below some details.

(1) *Fever.*—This was as a rule continued or remittent but in one case the temperature was almost intermittent, the morning temperature dropping to 98° daily.

(2) *Rash.*—In the majority of cases the rash appeared on the fifth or sixth day of the fever, in one case on the eighth day and in two cases as early as on the third day. The rash in about 75 per cent of cases was macular and thick, involving the whole of the body excepting the soles and palms. In about 20 per cent of cases the eruptions were discrete, and in all these cases the face, the soles and the feet were free. In both these types of case, the rash persisted for about a week after the temperature had come down to normal. During this period the eruptions went through various colour changes; first pink then dark red, brownish and gradually changing to greenish blue. In 5 per cent of cases the skin lesions were few and limited to the trunk alone, and faded within about four to five days, before the temperature came down to normal.

(3) *Marked toxæmia.*—This was present in all cases with a marked rash (about 75 per cent of cases). It generally appeared on the eighth or ninth day of the disease, and in a few cases as early as the fifth or sixth day, and was always preceded by the red congested appearance of the eyes, and by insomnia. Its manifestations varied from occasional incoherence of speech and slow response to calls, to low muttering delirium. In the 25 per cent of cases with less severe eruptions, the toxæmia was present but was very mild. In these cases the patients appeared to be rather indifferent, and had to be questioned several times to get an answer. In 5 per cent of cases the patients did not complain of anything except sleepiness, and they said they were in bed merely because the doctor said they had fever.

(4) *Respiratory symptoms.*—All cases had bronchitis. The cases with severe rash had severe bronchitis. Some of them had signs of broncho-pneumonia, while others had only troublesome cough with no signs in the lung; in marked cases, lung signs and cough were often absent.

(5) *Albuminuria.*—Except in mild cases, albuminuria was invariably present, and generally appeared on or about the sixth or seventh day of the fever, just a day or two before the appearance of marked toxæmia. In some serious cases, samples of urine were examined for casts, and granular and even blood casts were found. These patients had severe toxæmia and were almost comatose. In these cases the albuminuria was found increasing daily. In mild cases the albumin in the urine disappeared about two to three days before the dropping of the fever. Increasing albuminuria with blood casts in the urine was found to be a bad prognostic sign.

(6) *Temperature.*—Fever lasted for about two weeks in all cases. It was continuous in very severe cases, remittent in less severe cases and intermittent in one case which was very mild. The range of temperature on an average was about 103°F. to 105°F. in severe cases, 100°F. to 102°F. in less severe cases and 98°F. to 100°F. in the very mild case. Temperature records of all the cases are not available.

Two of my own cases were fatal. One had broncho-pneumonia and another died of circulatory failure. In all the cases, splenic enlargement and jaundice were absent.

Unfortunately it was impossible to get serological studies made in these cases. Only one Weil-Felix test was done (at the School of Tropical Medicine, Calcutta) and the result was inconclusive.

The majority of the cases were in poor persons who were found infected with all the three types of lice, but in some cases there was no louse infestation. In some cases, the possibility of tick typhus was considered, since the patients were cultivators. In the year 1937, in a case of a child, the possibility of a jungle tick as a probable insect vector was suggested. It is impossible to say with what type of typhus we are dealing.

I am highly indebted to the Civil Surgeon, Akola, Dr. T. D. Shahani, who took a great interest in these cases and encouraged me to write this note.