

## MALTA FEVER IN THE SWAT VALLEY.

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WITH a view to contributing to our knowledge of the distribution and prevalence of this disease in India, I think it may not be without interest to record the observations on three cases which came under my notice. In each case the diagnosis was made by means of the serum sedimentation test. Two of the cases have been under my observation in hospital, the third had been in hospital last summer suffering from fever, which was then diagnosed as remittent. I have lately been examining a number of such cases amongst the native troops in the Swat Valley to determine whether their blood reacted with an emulsion of the dead organisms of one of the following:—*Micrococcus Melitensis*, *Bacillus Typhorus*, *Bacillus coli communis* (two varieties) and *Bacillus giurtneri*, it was found that this case alone reacted to the *Micrococcus Melitensis* the other cases, about twenty-five, acting as excellent control experiments of the emulsion.

The cases occurred amongst the sepoy of the 29th Bombay Infantry. This regiment has been about two years in the Valley, and arrived from Hyderabad, Sind. The two cases in hospital differed somewhat as regards the clinical picture presented. At first sight they might have been regarded as fevers due to a malarial infection, but a careful examination of the blood was made on several occasions and failed to reveal the presence of the malarial plasmodium, and further the administration of quinine had absolutely no effect on the course of the disease. The first case, admitted on November 20th, 1900, was nearly two months in hospital, and was finally sent on sick leave. In addition to the fever the patient complained of severe neuralgic pains in the head, over the ribs and back, and profuse sweating at night, although the atmospheric temperature was low. He had no enlargement of the spleen or liver, and his lungs were normal. He looked distinctly ill even during the remissions. The fever, as depicted in the temperature chart, shows a distinct tendency to "undulation," at one point going remarkably low 95°. The blood was examined, at intervals, on four occasions and during that time the reaction gradually increased, and the last time it was taken was complete in 90 dilutions. It was interesting to note, that as the agglutinin rose the patients condition improved. The second case occurred in December 1900. He is still in hospital, when he came in he chiefly complained of severe pains in his joints, and it was found, that both knee-joints and the right wrist-joint were swollen.

red and tender to the touch. His spleen and liver were not enlarged and his lungs normal. His fever, as seen in his chart, shows periods of pyrexia and apyrexia alternating, the second attack of fever shows a gradual rise and fall. His blood was also examined and gave the reaction to Malta Fever. There was in this case also a distinct use in the agglutinating power of the serum, the last time it occurred in 120 dilutions.

The third case who was not under my observation during the fever gave a reaction in about 40 dilutions of the serum, but it is now some months since the attack so that probably the agglutinating power has in the interval fallen, as is not uncommon. The temperature chart shows the character of the fever. Quinine was administered in this case with negative results. Sweating was noted as a prominent symptom.

The method of sedimentation, which was adopted in all cases, was that devised by Wright of Neltey. It was found that the extreme cold of thin tents at night retarded the reaction, and it was necessary to construct a small incubating chamber, with a temperature approximately at blood heat, in order to get more rapid and constant results.

It was instructive to note that as the agglutinating power of the blood rose the patient's symptoms improved, tending to support the view, which has not yet been definitely proved by experimental investigation, that the agglutins are an index of the amount of immunity. The agglutinating power of the blood has been graphically recorded in the first case to illustrate this fact.

In this disease owing to the clinical phenomena being often very variable the serum sedimentation test forms an excellent, in fact the only final means of diagnosis, and enables one to separate a fever which otherwise would probably have to be returned as "remittent."

In conclusion I desire to express my thanks to Major M. A. Ker, I.M.S., Medical Officer in charge of No. 50, Native Field Hospital, for permission to publish the cases, and to Captain George Lamb, I.M.S., Parel Research Laboratory, Bombay, for sending me the emulsions.

PROPHYLAXIS AND TREATMENT OF PUERPERAL SEPSIS.—G. E. Shoemaker ("Therap. Gaz.," Dec. 15, 1898) concisely summarises the matter when he remarks that four simple things, if universally and carefully used to-day, would very nearly banish puerperal sepsis: (1) The hand scrubbing-brush; (2) the mercuric chloride, or equivalent, solution for hands and external genitals; (3) the baked napkins; (4) the clean suit.

H. C. Coe ("Med. Rec.," April 8, 1899) adds that prophylaxis in obstetrics is nothing more than surgical asepsis. Every obstetric case should be an aseptic operation. This, however, is often very difficult to carry out in private practice.—*Practitioner*.