Clinical and other Notes


INAGGLUTINABLE PARATYPHOID BACILLI (? PARATYPHOID C) IN INDIA.

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In my Report on the Enteric Convalescent Depot, Naini Tal, for 1914 (Indian Government Reports), I made the following note on the identification of cultures received in the laboratory during the year. "One of these was a paratyphoid but could not be classified as either 'A' or 'B' and the opinion was expressed at the time that it was Bacillus swipester aertrycke. This opinion was expressed by my predecessor in Naini Tal (Lieutenant-Colonel Grattan) into whose hands this organism came."

Again in the Report for the same laboratory for the year 1917, I made the following statement under the heading "Notes on Organisms": "Five strains are included in the above figures (one from an Indian) all isolated in blood culture, which do not conform absolutely to either 'A' or 'B.' They are definitely of a specific nature but do not give the typical serum reactions of either 'A' or 'B.' One, at least, is apparently closely allied to B. Gaertner. These are at present under investigation."

During 1918 I was investigating a series of these strains, hoping to make a definite statement in my Report for 1918, but in the middle of the year I was transferred to Mesopotamia and the investigation was still incomplete. Though I had tried all the likely laboratories in India I was unable to obtain a culture of B. aertrycke.

On arriving in Mesopotamia I found that bacteriologists were noting the occurrence of "inagglutinable" paratyphoids and I understand that quite recently Lieutenant-Colonel Ledingham, Consultant Bacteriologist, and Major Mackie, I.M.S., have come to the conclusion that certain of these should be classified as a species of paratyphosus distinct from paratyphosus A or B, but were unable like myself to make a complete serological scrutiny.

Finally, in the Lancet of February 22, 1919, Dr. Hirschfeld published a paper on "A new Germ of Paratyphoid" which he called "Paratyphoid C." It is very probable that this is the same organism as I have noted in India and as has been noted here in Mesopotamia.
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The notes I have with me are incomplete and sketchy but even so I think they should be put on record so that the attention of workers in India may be drawn to the matter with a view to elucidation.

These notes deal with five strains and may be summarized as follows:

1. These strains were all isolated in blood culture, viz.:
   - No. 1,021. from Pte. S—, 1/5 Buffs, Mhow, July, 1916.
   - No. 1,315. Cpl. O—, 1/1 Kents, Dalhousie, October, 1917.

2. In general, their characteristics were those of the paratyphoid group, and their sugar reactions were typical (litmus milk variable, in neutral red fluorescence generally).

   They were not agglutinated by high-titre paratyphosus A or B serum in low dilutions.

   They did not absorb the agglutinins for these two organisms from specific sera.

3. The agglutination titre of the patients' sera affords evidence of their specific nature (presumably all had been inoculated with T.A.B. with the possible exception of Drvr. R—.)

4. They were pathogenic for rabbits. Intraperitoneal inoculation produced enlarged spleen and peritonitis and death ensued in from three to fifty days.

5. The agglutination titre of three of the rabbits' sera were:

6. Of the above rabbits' sera two were absorbed with B. Gaertner and the subsequent agglutination titre read thus:

7. Strains 1,172, 1,192, and 1,204 respectively, absorbed all the agglutinins for strain 1,315 from 1315 serum.