

Correspondence.

A FALLACY IN DYSENTERY STATISTICS FREQUENTLY OVERLOOKED.

TO THE EDITOR OF THE "JOURNAL OF THE ROYAL ARMY MEDICAL CORPS."

SIR,—A paper by Woodcock in the JOURNAL OF THE ROYAL ARMY MEDICAL CORPS for February, 1920, in which he expresses it as his opinion that Manson-Bahr's figures for the incidence of amœbic dysentery in the Egyptian Expeditionary Force are too low, has again called my attention to a factor which is often neglected when an attempt is being made to estimate the relative proportions of the two forms of dysentery—amœbic and bacillary.

A fallacy is constantly arising from the difference between the two types. In bacillary dysentery it is well known that the chances of isolating the organism diminish rapidly after the first two days of the disease, while frequently the blood and mucus disappear also. In amœbic dysentery, though acute symptoms may vanish, the organism still persists, especially after inadequate emetine treatment, even after a full course of the drug.

Now, the custom in an army is to evacuate towards the base hospitals all cases of dysentery, and this process, with the intervening field ambulance and casualty clearing station, takes, as a rule, several days. If 100 cases are thus sent down the line, by the time they have arrived at the base a large proportion of the bacillary cases have ceased to be recognizable as bacillary dysentery, and the chance of isolating the organism is practically *nil*, while the amœbic cases, even if not showing actual blood and mucus dysentery, will still be harbouring recognizable *E. histolytica*. If only clinical appearance or positive isolation of organisms is taken into account, and the history of blood and mucus, often very vague, is neglected at the base, it must happen that the estimate of the amœbic infections will be too high.

Two striking illustrations of this have occurred during the war. The great outbreak of dysentery at Gallipoli was regarded chiefly as amœbic, because amœbæ were said to have been observed in Egypt among the Gallipoli dysenterics more frequently than bacilli were isolated. The reason for this is largely due to the fact that by the time the bacteriological examination was made in Egypt the chances of isolating the organism had greatly diminished.

The second instance occurred when I visited India and Mesopotamia with the Medical Advisory Committee in 1916. The Mesopotamian dysenterics were evacuated to India, and examinations made there naturally resulted, for the reason explained above, in the isolation of bacilli from only a few of the original bacillary dysentery cases and the discovery of *E. histolytica* in a large proportion of those who suffered from this infection in Mesopotamia. The opinion was formed in India that the dysentery of Mesopotamia was chiefly amœbic. On arrival in Mesopotamia, it was soon quite clear, as was expected from the Egyptian experience, that the bulk of the dysentery was bacillary in nature.

It thus appears that with the concentration of dysenterics at the base, there is a tendency to overestimate the amount of amœbic infections and underestimate the bacillary ones.

I think this factor is of sufficient importance to be taken into account by all those who are dealing with the complicated question of the dysenteric statistics of the war.

I am, etc.

C. M. WENYON.

Wellcome Bureau of Scientific Research,
25, 26 and 27, Endsleigh Gardens,
Gordon Square, N.W.

May 6, 1920.