

## NOTES AND COMMENTS.

### BLACKWATER FEVER IN AFRICANS.

BY DR. J. H. HERVEY PIRIE, *Bacteriological Laboratory, Nairobi.*

In the January number of the *TRANSACTIONS* (Vol. xi., No. 3, p. 123), in discussing the paper by Lieut.-Col. WALSH on "Geographical Distribution of Disease," I note that Major CHARLESWORTH states that he had not heard of a single authenticated case of blackwater fever in an African in East Africa. Whilst quite agreeing with him that it is rare, and that the occurrence of a few cases does not invalidate the general postulate of acquired immunity on the part of the native inhabitants, still it does occur, and the following note of one case which I observed may be of interest:—

Boy, *æt.* 5½ years, son of a Coast Arab father and a Swahili mother, born in Nairobi, where he lived the first five years of his life. During at least part of this time, according to the father, he had "fever" and had been given quinine. He then went to Zanzibar, and after having been about four months there was admitted to hospital with an attack of blackwater fever. He was attended while there by Dr. CURWEN, to whom I am indebted for the information about that attack. He was not very ill but had fever, and passed typical porter-like urine. Examination of blood-films shewed no malarial parasites. The spleen was slightly enlarged. He was discharged from hospital after seven days.

He then came to Machakos (near Nairobi), and after being there three weeks had a second similar, but also not very severe, attack.

A month later he had a third, and fatal, attack in Nairobi, in which I saw him about half an hour before death. A specimen of urine which had just been passed was almost black in colour. Spectroscopically it shewed both met- and oxy-hæmoglobin. There was a dense deposit in which partially disintegrated red-blood cells could still be recognised, and in some of which I thought I could see malarial parasites, but could not be certain. Blood films shewed a heavy infection with benign tertian parasites.

The case is of interest, not only from the unusualness of blackwater fever in African children, but because it is the only case I have yet come across here of blackwater fever associated with benign tertian malaria definitely.

Without going into the vexed question of the etiology of blackwater fever, I might just say that in my experience of a good many cases I have yet to come across one without a history of fever, which has probably always been malaria. Parasites are not always to be found in the circulating blood during an attack of blackwater, more frequently they are to be found when the acute symptoms have subsided. In every other case I have had to do with, in which parasites have definitely been found, either during or after an attack, they have been of the subtertian variety.

Records of a very few cases of blackwater fever in Africans will be found in the *Blackwater Fever in the Tropical African Dependencies Reports* for 1911, 1912 and 1913, and also in the *East Africa Protectorate Annual Medical Reports* for 1914 and 1915.

A further remark by Major CHARLESWORTH: "Although quinine can never cause blackwater fever in a person not already infected, it can precipitate attacks in infected persons, and not necessarily by large doses either," I can corroborate.

I have seen in a European child who had had blackwater, and in whom after the attack there were still numerous subtertian parasites in the circulation blood, as little as half a grain of the bilydrochloride bring on hæmoglobinuria within an hour.