Malaria is one of the commonest infectious diseases now seen in this country. Clinical attacks of malaria are extremely rare in the neonatal period even in the endemic area. We have been observing a large number of cases of malaria in infancy and childhood in the recent past. We are presenting three cases of malaria in the neonatal period, where malaria was not considered in the differential diagnosis until smears were examined for differential count and typing of anemias.

Report of Cases

Case 1. Baby B, 17 days old, presented with fever and progressive pallor since 9 days of age. He was a full term nursing home delivery with a birth weight 2.1 kg. Fever ranged between 101-103°F. There was no history of vomiting, diarrhoea, cough or convulsions. Examination revealed a pale, lethargic baby with no oedema or lymphadenopathy. The liver was enlarged 4 cm below the right costal margin. The spleen was palpable 5 cm below the left costal margin. The chest and cardiovascular system examination did not reveal any abnormality. The rest of the examination was unremarkable.

Haematological examination revealed a total leucocytic count of 8,900/cu mm., differential count was—polymorphs 76%, lymphocytes 18%, eosinophils 2%, and monocytes 4%. Haemoglobin (Cyn meth. method) 5.6g %, peripheral smear—moderate anisocytosis hypochromia ++ and RBC's heavily parasitised by Plasmodium vivax (signet rings and developing schizonts). Serum bilirubin was 4.2 mg%, Van den bergh indirectly positive, urine examination did not reveal any abnormality. No blood transfusion was given to the patient. Therapy with chloroquine was given (37.5 mg) twice daily for two days along with symptomatic treatment. The fever subsided in 4 days. A blood smear examined after 10 days showed no malarial parasites. The patient was asked to report after one month for check up and showed complete regression of the liver and spleen enlargements with haemoglobin level increased to 10.4 g%. Blood smear was again negative for malarial parasites (M.P.).

Case 2. Baby K, a female, was delivered at full term with a birth weight of 2.2 kg. She was very weak and pale. On the 14th day of age she started with pyrexia ranging between 102° to 104°F, which became continuous and was associated with loose motions. She was attended by a private practitioner where she was treated with antipyretics, antibiotics and a blood transfusion. Later the patient was brought to the hospital where she was treated for gastroenteritis. Hydration was carried out but the fever continued. There was hepatosplenomegaly, liver was 5 cm and spleen 4 cm. enlarged. There was no lymphadenopathy. The respiratory and cardiovascular systems did not reveal any abnormality.
Investigations. Haemoglobin 7.2 g%, total leucocytic count 9,400/cmm, differential count—polymorphs 53%, lymphocytes 27%, monocytes 12%, eosinophils 8%. Peripheral smear was normocytic hypochromic. There were no abnormal or immature cells. Ring forms and ameboid forms of trophozoites of Plasmodium vivax were seen in the peripheral smear. The mother's blood smear was negative for M.P.

Therapy with chloroquine was started with ½ tablet (3.75 mg chloroquine base) twice daily for two days. The fever subsided in three days. Iron therapy with Vit. B12 and folic acid were given. The subsequent progress was uneventful and patient reported to the department after one and a half months of an afebrile period. His liver and spleen had receded to bare palpability. Peripheral blood examination showed no M.P.

Discussion

Clinical attacks of malaria are extremely rare in the first month of life (Adami and Macgraith 1966), in particular in the endemic zones (Wilcocks and Bahr 1972; Henderickse et al. 1971). Edington (1967), from his experience in Nigeria, states that congenital malaria does not occur. Henderickse et al. (1971) while studying their series of 500 cases of malaria in early childhood did not record any patient below the age of one month. Neonatal malaria is considered to be either congenital malaria or blood transfusion malaria. Malarial parasites are known to exist in the viable state in donor's blood (Mollison 1967). The fact that the incidence of transfusion malaria has recently been rising in several countries (Bruce-Chwatt 1974) reflects not only better diagnostic methods and better reporting, but also the increase of malaria imported from tropical areas (Bruce-Chwatt 1972). Sinclair et al. (1971) had reported earlier a case of transfusion malaria in a neonate who developed symptoms 18 days after transfusion. Mcquay et al. (1967) stated that malaria can occur...