

# **A PATIENT OF VWAX MALARIA AND ENTERIC FEVER PRESENTING AS A CASE OF JAUNDICE WITH LEUKAEMOID REACTION**

Pages with reference to book, From 148 To 149

Abdus Salam Gandapur ( Abaseen Poly Test Clinic, Dera Ismail Khan. )  
Siddique Khattak, Hayatullah Khan ( Distt. Headquarter Hospital, Dera Ismail Khan. )

## **A CASE REPORT**

A male child, aged 10 years, was referred to our clinical laboratory by a general practitioner in Tank, for investigations. The patient had fever for the last 9 days and complained of pain in the abdomen. On examination the child was visibly jaundiced. The temperature was 103°F. The child was highly toxic. Abdominal examination revealed splenomegaly and hepatomegaly. The liver was enlarged and tender. The patient was referred to the paediatrician, district headquarter hospital and was admitted. The paediatrician confirmed the above findings and advised widal test which was strongly positive. Haematological findings were Hb 9.5 gm/dl, ESR 45 mm/h, TLC 60,000/cmm and DLC: Neutrophils 75%, Metamyelocytes 05%, Myelocytes 03%, Stab Cells 07% and Lymphocytes 10%. The Neutrophils showed toxic granulation. Film was positive for Malaria. P. Vivax, urine analysis showed a dark coloured urine with protein 50 mg/dl and markedly increased Urobilinogen. Microscopically there were 6-7 Pus cells/HPF and numerous granular casts. Serological tests for Salmonella were positive with 'O' and 'H' antibody titres of 1:320 and 1:160 respectively. Blood chemistry results were Bilirubin 4.3 mg/dl, ALT 80 U/L, AST 68 U/L, AIK, Phosphatase 3OKA units and Urea 38 mg/dl. A diagnosis of enteric fever and malaria was made.

## **DISCUSSION**

The patient came from Tank, in the tribal belt, where malaria is common particularly due to influx of refugees. The patient was put on antimalarial drug amodiaquine and, later on, amoxicillin syrup, in Tank by a general practitioner. According to author's experience as a pathologist, the patients with enteric fever present with leukopaenia and relative lymphocytosis. In children relative lymphocytosis is common. In enteric fever some patients do present with very mild leukocytosis. In this case there was marked leukocytosis with a shift to the left. Furthermore, in haemolytic anaemias due to malaria, the serum bilirubin level may rise above 3 mg/dl giving rise to visible jaundice but the liver function tests are not abnormal. The combined existence of malaria and enteric fever, producing hepatocellular injury has given rise to abnormal liver function tests. It has been reported in literature that severe case of malaria may produce abnormal liver function tests, but the combined toxicity produced by malaria parasite and salmonella typhi explains the development of leukaemoid reaction, toxic granulations and abnormal liver function profile. The patient was put on Amoxicillin injection and Mnoiaquine tablets and the temperature became normal after three days.

## **REFERENCES**

1. Bauer, J.D., Aekermann, P.G. and Toro, G. Clinical laboratory methods. 8th ed. Saint Louis, Mosby, 1974;p. 228.
2. Beeson, P.B. and Mc Dermott, C. çedil-Loeb's text book of medicine. Philadelphia, Saunders, 1971,p. 477.

3. Macleod, J. Davidson's principles and practice of medicine. 14th ed. Edinburgh, Churchill Livingstone, 1984, p. 49!
4. Hart, F.D. French's index of differential diagnosis. 11th ed. Bristol, Wright, 1979, p. 495.
5. Penington, D., Rush, B. and Castaldi, P. Degruchy's clinical haematology in medical practice. 4thed. Oxford Blackwell, 1978, p. 488.