

Correlation of Bilirubin with Liver Enzymes in Patients of Falciparum Malaria

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Introduction: Falciparum malaria is responsible for 1-3 million deaths annually worldwide. Liver involvement is common and may manifest as raised serum bilirubin, hepatomegaly and elevated liver enzymes. Unconjugated hyperbilirubinemia is usually seen leading to increased mortality. Alanine aminotransferase (SGPT) is a marker of liver damage. The present study was conducted on Plasmodium falciparum malarial patients to observe the correlation between liver enzymes and bilirubin.

Objective: To observe the correlation coefficient of bilirubin with liver enzymes (SGPT, SGOT and Alkaline Phosphatase) in patients of falciparum malaria

Design: A Descriptive study

Place and duration of study: Department of Biochemistry, Basic Medical Sciences Institute, JPMC, Karachi from August 2005 to July 2006.

Material and method: Total 81 patients of different ages and both sexes suffering from acute malaria, were selected by convenient sampling. Nine patients, infected by Hepatitis B and C infections were excluded from the study. Among remaining 72 cases, 48 (70%) were suffering from infection by Plasmodium falciparum and 24 (30%) from infection by Plasmodium vivax infection. The Falciparum infected patients were equally divided into two groups on the basis of duration of illness. Group I had duration of 1- 7days illness and Group II had duration of 8-20 days. Patients suffering from plasmodium vivax infection had illness of 1 ? 20 days duration were placed in Group III.

Results: In the group I, SGPT and Alkaline phosphatase showed a statistically significant positive correlation ($r=0.50$ and $r=0.054$, respectively with bilirubin (P