

## Original Research Article

# Clinical and biochemical profile of malaria: retrospective observational study from a tertiary centre

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### ABSTRACT

**Background:** Malaria is one of the common causes of acute febrile illness in tropical countries. Malaria presents with varied manifestations. This retrospective study carried to know the clinical profile and laboratory abnormalities seen in malaria patients.

**Methods:** The data was collected retrospectively from 1<sup>st</sup> January to 31<sup>st</sup> December 2017. Inclusion criteria: all fever cases above 15 years of age of both the sexes diagnosed as malaria by peripheral smear examination and malaria card test. Exclusion criteria: combined malaria with other fevers such as dengue, chikangunya. Fever cases negative for malaria tests. Malaria cases with history of chronic kidney disease, chronic liver disease such as cirrhosis of liver, chronic viral hepatitis, liver abscess, and chronic illness such as rheumatoid arthritis, diabetes, and hypertension. The data regarding the clinical presentation of patients and laboratory values such as hemoglobin, total leukocyte count, platelet count, total bilirubin, SGOT, SGPT, albumin values collected and analyzed with tables and percentage.

**Results:** A total of 57 malaria cases were analyzed, 71.9 % males, 28.1% were females. The commonest age group was between 15- 30 years (61.4%). 29 patients (50.9%) had *P. vivax*, 20 patients (35.1%) *P. falciparum* and 8 patients (14%) mixed infection. The most common clinical presentation was fever with chills (100%) followed by vomiting (68.4%), splenomegaly (56.1%), headache (45.6%), pain abdomen (43.9%). 19 cases (33.3%) had hemoglobin less than 10gm/dl; 42 cases (73.6%) had thrombocytopenia; 46 cases (80.7%) had urea  $\geq$ 30mg/dl; 14 cases (24.6%) had creatinine  $\geq$ 1.4; 26 cases (45.6%) had total bilirubin  $>$ 1.2mg/dl ; 17 cases (29.8%) had SGOT  $>$ 45 IU; 33 cases (57.9%) had SGPT  $>$  45 IU and 32 cases (56.1%) had albumin level  $\leq$ 3.5gm/dl.

**Conclusions:** In the study malaria due to *P. vivax* was more common than *P. falciparum*, malaria affected young adults, males more than females. Reduced hemoglobin and platelet count, deranged liver and renal function and reduced serum albumin seen commonly in malaria.

**Keywords:** Malaria, Platelet count, SGOT, SGPT