

A STUDY TO FIND OUT THE CLINICAL PROFILE OF MALARIA

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Corresponding Author

Dr. Naveen Kushwah,
Assistant Professor, Department
of Surgery,
Gajra Raja Medical College
Gwalior, M.P.
Email- kushwah21@gmail.com
Mobile no- 9406968073

S.N. Shakya MD¹, H.K. Jain MD², A. Bhadkariya³

¹ - PGMO (Md Medicine), District Hospital Datia, Affiliated To Government Medical College, Datia, M.P.

² - Assistant Professor, Department Of Medicine, Government Medical College, Datia, M.P.

³ - Associate Professor, Department Of Pathology, Government Medical College, Datia, M.P.

Abstract:

Objective: to find out the clinical profile of malaria.

Methods: This prospective observational study was undertaken in district hospital, datia. A total of 200 patients were studied. All patients tested positive by peripheral blood smear or rapid diagnostic test were included. Clinical findings, and all lab data was collected.

Results: Of the total 200 patients, 142 had P vivax, 32 had P falciparum and 26 had mixed malaria. 69% patients were male. Maximum patients were in 21-30 age group. The mean duration of symptoms was 2.68 days in vivax to 3.42 days in mixed malaria. Fever was observed in 98% of patients of vivax. Thrombocytopenia was observed in 89% of all patients. Splenomegaly was noticed in 26% patients of vivax and 38% of falciparum malaria. Herpes labialis was observed in 26% patients of vivax.

Conclusion: malaria is a common parasite infection, needs high clinical suspicion.

Introduction

Indian public is majorly affected by malaria in southeast Asian region contribution of malaria is gross. In 2009 about 1100 deaths and about 16 lakh cases were reported by national vector borne disease control program of India, but India have much higher number of cases and mortality due to under reporting of the disease¹. Symptoms of the malaria are nonspecific but mostly are rise of temperature, weakness, body aches, nausea, vomiting, loose stools, dizziness, confusion, disorientation, and coma. Headache, back pain, myalgia, chills and or cough. Malaria should be diagnosis of choice in case of fever of unknown origin²

Also plasmodium vivex is not benign as was considered previously³. This study was done to find out the clinical profile of the malaria in this region.

Material and Methods

A prospective observational study was performed in the 350 bedded district hospital affiliated with government medical college datia between April to may 2018. Total of 200 patients who were positive for the malaria were included in the study with age more than 14 years. Pregnant women were excluded. Detail biodata, history of illness, clinical symptoms, signs, laboratory investigations and sonographic examination

was performed and collected in preformed case sheets and Data was analysed.

Results

Out of the total 200 patients, 142 had P vivax, 32 had P falciparum and 26 had mixed malaria. Male preponderance was there and 69% patients were male. Maximum patients were in 21-30 age group, and average age was 32.5 years, minimum was 14 years and maximum was 88 years. The mean duration of symptoms was 2.68 days in vivax to 3.42 days in mixed malaria. Fever was observed in 98% of patients of vivax. 6 patients presented with pain in abdomen without any history of rise in temperature. While 1 patient presented with urticaria only. Thrombocytopenia was observed in 89% of all patients. Splenomegaly was noticed in 26% patients of vivax and 38% of falciparum malaria. Herpes labialis was observed in 26% patients of vivax patients. Main symptoms and signs of the malaria were fever with chills and rigors, sweating, nausea, vomiting, headache, bodyache, weakness, cough, pain in abdomen, pain in throat, enlargement of liver (hepatomegaly), loose stools, altered sensorium and jaundice. Mean platelet count was 78900/mm³ in vivax malaria while 88435/mm³ in plasmodium falciparum. Reduced platelet count was present in 89% of the patients. Low WBC count (<4000) also known as leucopenia was present in 54.2% patients. range of hemoglobin was 4.4 to 16 gm%. Mean serum bilirubin was 1.39% in plasmodium falciparum and 2.09 mg% in mixed malaria. Mean serum aspartate transaminase values were higher as compared to alanine transaminase levels. Mean blood urea levels was 8-102 mg/dl, while 2.9 mg/dl was the maximum level of the serum creatinine. Minimum blood glucose was 42 mg%. 4 patients have evidence of ARDS. Mortality rate was 1.5% (3/200). Factors which favour mortality appears to be delay hospitalization and multiorgan involvement.

Discussion

Fever with chills and rigors and sweating was found in about 72% vivax and 82% of mixed malarial cases. This finding was similar to previous studies⁴⁻⁶.

In our study 83% and 49% of falciparum malaria patients complained of headache, while other studies have range from 58-99%^{6,7}. Vomiting was more in falciparum malaria.

A study from Pakistan⁶ documented pain in abdomen in 6% of the patients while in our study it was also reported same incidence. In previous studies^{6,9,10} herpes labialis was noted in range of 2.2 to 17%, while in our study it was present in 26% of the cases. In various studies^{4,6,7,8} splenomegaly was present in range of 6.5 to 73.6%, while in our study it was present in 26% patients of vivax and 38% of falciparum malaria positive cases. A Mumbai based study¹¹ indicates thrombocytopenia in range of 79-89% while in our study it was present in 89% of the patients. Mean platelet count was 78900/mm³ in vivax malaria while 88435/mm³ in plasmodium falciparum. In our study mean blood glucose was 88mg% while minimum blood glucose was 42 mg%, 2 patients appeared with hypoglycemic coma, in a previous study¹² 41% patients have history of hypoglycemia that's significantly high in comparison with our study.

Conclusion

malaria is a common parasite infection, needs high clinical suspicion. Thrombocytopenia, splenomegaly and hypoglycemia are common features. Classical triad is not common, and any fever with unknown origin should be considered as malaria.

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