



TO STUDY CLINICAL PROFILE OF FEBRILE THROMBOCYTOPENIA.

General Medicine

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ABSTRACT

Introduction: Thrombocytopenia is characterized as platelet less than 1,50,000/ μ L. This is because of diminished creation, expanded obliteration, and expanded sequestration in spleen. Hence, we planned the present study to analyze the clinical profile of febrile thrombocytopenia.

Methods: The present study included assessment of clinical profile of febrile thrombocytopenia. A total of 200 subjects were included in the present study. At the time of diagnosis, complete detailed history of all the patients was taken along with thorough clinical examination. Etiologic and clinical data of all the patients was recorded and compiled.

Results: Out of total 200 cases included in the present study, fifty-two cases were due to viral fever while fifty-seven cases were due to malaria. Jaundice and cough was present in 52 and 58 cases respectively. In fifty five percent of the cases, platelet count was between 50000 to 10000 per cubic mm.

Conclusions: Infectious diseases accounts for most of the cases of febrile thrombocytopenia.

KEYWORDS

Myalgia, Fever, Thrombocytopenia

INTRODUCTION

Fever is such a typical sign of disease that it is not astonishing to discover precise depictions of the febrile patients in early-written history. Most instances of delayed fevers are examples of surely understood ailments showing them atypically.^{1,3}

The real example of realistic recording of fever is variable that it is not useful in indicating particular analysis constantly a forceful symptomatic exertion is generally legitimized in light of the fact that remedial or palliative measures would so be able to frequently bring into utilization once the finding has been accomplished.

Literature Survey

Fever is characterized as a rise of the body temperature over the ordinary circadian range as the consequence of an adjustment in the thermoregulatory focus situated in the front hypothalamus. Despite the fact that thrombocytopenia is experienced in different illnesses, it is for certain that possibly lethal seeping because of thrombocytopenia is rare.^{4,6} Thrombocytopenia is characterized as platelet tally less than 1,50,000/ μ L. This is because of diminished creation, expanded obliteration, and expanded sequestration in spleen.⁴ Hence, we planned the present study to analyse the clinical profile of febrile thrombocytopenia.

Methods

The present study was conducted in the department of general medicine of the tertiary medical care and included assessment of clinical profile of febrile thrombocytopenia. A total of 200 subjects were included in the present study. Ethical approval was taken from institutional ethical committee and written consent was obtained from all the patients after explaining in detail the entire research protocol.

Inclusion criteria

All the patients more than 12 years of age, All the patients presenting with the complaints of fever (>99.9degree F) with thrombocytopenia (less than 1,50,000/ μ L).

Exclusion criteria

Patients less than 12 years of age,
Patients having afebrile thrombocytopenia,
Congenital thrombocytopenia.

At the time of diagnosis, complete detailed history of all the patients was taken along with thorough clinical examination. Recording of all the laboratory and technical investigation reports of all the subjects was done. After confirmation of the diagnosis, treatment of the patients was done specifically and symptomatically.

In subjects with bleeding complications, platelet transfusions were

done if platelet count was <20,000/ μ L. Etiologic and clinical data of all the patients was recorded and compiled. All the results will be analysed by SPSS software 16.0. Chi-square test and student t test will be used for the assessment of level of significance.

RESULTS

Out of total 200 cases included in the present study, fifty-two cases were due to viral fever while fifty-seven cases were due to malaria. In 54 cases, Dengue fever was responsible for febrile thrombocytopenia. Chills and rigors are seen in 110 cases of febrile thrombocytopenia. Jaundice and cough was present in 52 and 58 cases respectively. Myalgia was seen in 62.5 percent of the cases while bleeding was observed in sixty-one cases respectively. In fifty five percent of the cases, platelet count was between 50000 to 10000 per cubic mm.

DISCUSSION

Fall in the levels of platelets in the circulatory blood below 1.5 lacs per cubic mm is categorized as thrombocytopenia. These cases are often asymptomatic and are discovered under routine haematological investigations.^{7,8} Hence, we planned the present study to analyse the clinical profile of febrile thrombocytopenia. In the present study, we observed that malaria was the most common cause of febrile thrombocytopenia. Gondhali MP et al⁹ evaluated 100 subjects of ages more than 12 years with fever and thrombocytopenia. The most common cause of thrombocytopenia was infection, with Dengue being the most common infectious agent observed. Fifteen percent of subjects showed bleeding as a clinical sign, 14% of patients had Petechiae/purpura as the commonest draining indication took after by spontaneous bleeding in 10%. Great recuperation was noted in 94% while 6% had mortality.

Septicaemia represented 5% of deaths, trailed by dengue 1%. Diseases, especially Dengue were the commonest reason for fever with thrombocytopenia. In the larger part of patient's thrombocytopenia was transient and asymptomatic however in a critical number there were draining indications.⁵ Raikar et al¹⁰ assessed the clinical profile associated with fever and thrombocytopenia. A total of 100 subjects were analysed by them who were suffering from fever and thrombocytopenia. In their study, male outnumbered female. Bleeding manifestations was observed in 4 patients only. They didn't observe any correlation between platelet count and bleeding. Dengue, in their study, accounted for majority of the infectious cases. In their study malaria caused mild-to-moderate thrombocytopenia with counts remaining between 50,000 to 1 lacs in most cases. In their study, out of 100 patients only four patients presented with bleeding manifestations. Three patients of mixed Plasmodium vivax with Plasmodium falciparum malaria presented with petechie, purpura and hematuria. One patient of dengue presented

with gum bleeding. Platelet count started increasing from 2nd day of admission to 8th day of admission with relative treatment. In their study out of 100 patients three had fever with thrombocytopenia without any bleeding manifestations.¹⁰

Also, in the present study, headache, fever and chills were the common signs and symptoms observed. Fah et al comparatively evaluated the clinical profile of acute febrile subjects with thrombocytopenia and acute febrile patients without thrombocytopenia. In the primary health care centre, they selected consecutive patients presenting with undifferentiated fever of less than two weeks. They recorded all the clinical features of the subjects and did Full blood count (FBC) examination.

They calculated the odds ratio of thrombocytopenia for each presenting symptom. Seventy-three patients participated in this study. Among them, 45.2% had thrombocytopenia. Myalgia and headache were common among all patients. However, nausea and vomiting occurred significantly more often among patients with thrombocytopenia than in patients with normal platelet count. Acute non-specific febrile patients presenting with symptoms of nausea and vomiting may have higher risk of thrombocytopenia and should be seriously considered for FBC.¹⁰ The significance of thrombocytopenia in diagnosing etiologies of acute nonspecific febrile illness. They evaluated about 130 Patients presenting with acute febrile illness without any obvious etiology of less than two-three weeks. Clinical details were noted and then subjected for routine blood counts, Malaria, Widal and Dengue card test. Card test for Chikungunya and Liver function test was done in selected patients. Of the 130 patients 33% of patients had Thrombocytopenia. In thrombocytopenia cases 41.86% patients were positive for Malaria, 32.55% of patients were reactive for dengue, 4.65% were reactive for chikungunya, no etiology was found in 20.94% cases. On statistical analysis there was a significant association of thrombocytopenia with Dengue and Malaria cases. No significant association was found with Widal and Chikungunya cases. Finding of thrombocytopenia in patients with acute febrile illness raises the suspicion of Dengue and malaria infection.

CONCLUSION

From the above results, the authors conclude that infectious diseases accounts for most of the cases of febrile thrombocytopenia. Also, falling of platelet count below 20000 per cubic mm increases the risk of bleeding manifestation.

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