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Case Report

Isolated thrombocytopenia a rare presenting feature of enteric fever

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ABSTRACT

Leucopenia and anemia are generally seen as a presenting hematological feature in typhoid fever. However, our case presented with thrombocytopenia as a presenting sign on admission. A 50-year-old female with complaint of bleeding from gums four day prior to admission. There was no complaints of diarrhoea, rash on any part of the body. Isolated thrombocytopenia encountered on routine complete blood count examination. The diagnosis of typhoid fever was established when *Salmonella typhi* was isolated from the blood cultures. The platelet count returned to normal level within the first week of ceftriaxone therapy. We report this case of enteric fever with atypical presentation of fever, bleeding gums and thrombocytopenia.

Keywords: Enteric fever, Thrombocytopenia, Leucopenia, Anemia

INTRODUCTION

Enteric fever is a major health problem in developing countries. Signs and symptoms associated with enteric fever include fever, chills, rose spot, abdominal pain, cough and sore throat (shree et al 1998).[1] Hematological manifestations associated with enteric fever are leucopenia and anemia (Miller & Pegeus 2000).[2] We reported this case of enteric fever presenting with unusual hematological presentation of thrombocytopenia with bleeding gums.

CASE REPORT

50 year old female presented with bleeding gums & fever of 4 days duration. Fever was accompanied by chills and persisted throughout the day. At the time of admission her clinical examination revealed her to be febrile with bleeding from gums, normal vitals and isolated hepatomegaly, which was confirmed with ultrasound abdomen. Investigations showed Hb 10.5 gm%, Hct 29.0, WBC 6600/ul, DLC N=65%, L=29%, M=05%, E=01%, B=00, Platelet count 10,000/cmm. PBF showed thrombocytopenia without any immature cells & no haemoparasite. Dengue serology, HIV, HBV, HCV, were non-reactive. Typhi Dot IgM was positive. Blood culture grew *S. Typhi* which was sensitive to ceftriaxone and ciprofloxacin. Bone marrow examination was normal. Biochemical examination of bilirubin, SGOT, SGPT & ALP within normal range. Prothrombin time & partial thromboplastin time was normal.

Patient treated with I/V ceftriaxone 2gm bid. Patient became afebrile within 3 days. Platelet count increased to 82,000/cmm & 1, 12,000/cmm at day 3 and 7 after admission. Bleeding gum stopped. On follow up at 4 weeks patient's platelet count was within normal range (2, 25000).

DISCUSSION

Enteric fever is endemic in many developing countries particularly Indian subcontinent. Bicytopenia may occur as complication during the course of enteric fever.[3-4] *Salmonella typhi* enter lymphatic's after ingestion and then survive & replicate within macrophages, later on

disseminating into reticuloendothelial organs. Thrombocytopenia in enteric fever may be associated with haemophagocytic histiocytes in bone marrow.[4] Study conducted by James et al, in 1997 a series of 36 adult patients with enteric fever, 28 (77.8%) had either isolated anaemia or mixed cytopenia and 3 (8.3%) had pancytopenia. However isolated thrombocytopenia was not encountered in those adult patients.[2] Study done by Butler et al, in 1978 on 28 enteric fever cases, thrombocytopenia was detected in 17 patients, associated with subclinical disseminated intravascular coagulation seen in the course of disease.[5] Although certain viral infections cytomegalovirus, H5N1, HIV and recently Hantavirus have been seen to be associated with thrombocytopenia and fever as co morbid conditions.[6-11] But our case of enteric fever presented with isolated thrombocytopenia which is a rare presentation. Enteric fever should be considered as a possibility in work up for a case of fever with isolated thrombocytopenia which is a rare presentation.

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