Early Recognition of Malaria or Dengue in Thrombocytopenic Febrile Illness

MK Bhatnagar¹, Rakesh Kumar Jagdish², Satender Kumar Yadav³, Ritika Sud⁴

¹Director Professor of Medicine, Santosh Medical College and Hospital, Ghaziabad; Ex-Director Professor of Medicine, Lady Hardinge Medical College, New Delhi; ²Assistant Professor of Medicine, Santosh Medical College and Hospital, Ghaziabad; ³Senior Resident, Medicine, ⁴Associate Professor of Medicine, Lady Hardinge Medical College, New Delhi

Sir,

We read with interest the original article entitled “Catching Dengue Early: Clinical Features and Laboratory markers of Dengue Virus Infection” in Journal of the Association of Physicians of India, by Darshan Doshi and Prakash Babaliche in Volume 63, issue number 5. May-2015. We have done a similar study in which clinical, haematological and biochemical parameters of thrombocytopenic malaria and dengue patients were compared. These patients were followed up for ten days for changes in these parameters.

Aim of our study was to plan initial treatment of thrombocytopenic dengue and malaria cases on the basis of clinical examination and basic investigations, before specific diagnosis is made, as the serological test for dengue and malaria are expensive and not available freely, particularly in remote areas and during epidemics.

Method

This was an observational study conducted at Lady Harding Medical College, New Delhi, November 2013 to March 2015. Total of 134 patient of thrombocytopenia were included after excluding other causes of thrombocytopenia of which 44 cases were of acute malaria and 90 cases were of dengue. They were followed for ten days, clinical, biochemical and haematological parameters were recorded on 2nd, 4th, 6th, 8th and 10th day.

Results

Most common clinical symptom among the patients included in our study was generalized weakness (78%) followed by nausea-vomiting (63.5%), body-ache (51.5%), headache (49%), rash (42%) and abdominal pain (40%) apart from others. This finding correlated with the Malaysian study by Tong et al while contradicts the study by Kumar and Chandra in Uttar Pardesh. The patients of dengue presented earlier (4.11±1.42) around 4th day as compared to malaria. The skin rash, bleeding tendency, tourniquet test positivity and respiratory abnormalities were seen in dengue patients (p<0.05), while abdominal pain, diarrhoea, anaemia, jaundice, hepatomegaly and splenomegaly were more frequent in malaria patients (p<0.05).

In dengue patients decreases in WBC count was noticed around 6th day of fever which gradually recovered while in malaria there was increases in WBC count noted around 2nd day of fever which gradually recovered by 10th day and Fall in haemoglobin was noticed in malaria cases. There was continuous fall in platelet count till 6th day of illness in dengue patient while in malaria patient fall was noticed early from 2nd day of fever which gradually recovered. Kidney Function Test (KFT) was more frequently deranged in dengue while Liver function test (LFT) was more frequently deranged in malaria. The duration of stay in hospital was higher in malaria as compared to dengue.

In dengue patients of our study, kidney function derangement was more frequent finding than liver function derangement and this contradict the findings of Darshan Doshi and Prakash Babaliche. We suggest that there is a need to study and follow the derangement of kidney functions more frequently in dengue patients, along with liver functions.

References