Characteristics and management patterns of patients admitted with fever and thrombocytopaenia to an acute general medical unit in Sri Lanka - a retrospective analysis

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Introduction

Dengue is one of the major health problems in Sri Lanka with the worst out break occurred in 2009/2010.

Objective

To study the characteristics of patients with fever and thrombocytopaenia as the reason for admission to a medical unit of a teaching hospital in Sri Lanka.

Methods

Medical records of all patients admitted to the University Medical unit, NHSL with fever and thrombocytopenia (platelet count $\leq 150 \times 10^9 / L$) between the 01^{st} of May and the 30^{th} of June 2009 were analyzed. Patients with a clear bacterial focus of infection were excluded.

Results

94 patients were admitted fulfilling the above criteria. Patients were categorized into three groups based on platelet count of <50×10⁹/L (group 1, n=25),51-100×10⁹/L(group 2, n=31),101-150×10⁹/L (group 3, n=38). The mean age of patients was 31.39 years whilst the mean duration of inpatient care for each group was approximately 4-5 days. The most frequent symptoms were myalgia (67%), arthralgia (60.6%) and headache (58.5%). Seventeen patients had bleeding manifestations mainly gastrointestinal bleeding (12.9%). Postural hypotension and hepatomegaly were detected in 16% and 13.8% respectively. Only 6 patients had dengue antibody levels checked. Intravenous fluids used in 91.5%. Bleeding manifestations (p=0.008) and the need for platelet transfusion (p=0.011) was more likely in patients admitted with a platelet count below 50x10⁹/L. No significant difference was seen in the 3 groups with regards to age, the need for intravenous fluids, or duration of hospital stay.

Conclusions

Fever with thrombocytopenia is initially managed as dengue, based on clinical diagnosis. Bleeding manifestations and platelet transfusion correlated positively with lower admission platelet counts.