

Abstract

Haemophagocytic Lymphohistiocytosis (HLH) is a rare immune mediated potentially life threatening condition with overactive lymphocytes and histiocytes which cause haemophagocytosis. Primary HLH is a hereditary condition and secondary HLH is mainly due to infections like Epstein bar virus, Cytomegalo virus, HIV, HHV-8, Mycobacteria, Mycoplasma, haematological and solid organ malignancies and immunosuppressive therapy.

There are very few cases reported as HLH due to dengue fever and majority of them are due to dengue haemorrhagic fever. HLH due to uncomplicated dengue fever is very rare. However, accurate and timely diagnosis of HLH, though rare, is lifesaving. In Asia where dengue fever is at times a cyclic endemic especially during the rainy season, our case report is a timely need, highlighting that HLH associated with even minor disease is possible and may not be uncommon, perhaps even undiagnosed.

A 21 year old female presented with fever and thrombocytopaenia on 3rd day of illness. Her condition was managed as dengue fever from the beginning due to high prevalence of dengue both in Srilanka and Batticaloa district. It was confirmed on 6th day of illness by positive Dengue IgM antibodies. After 30 hours of fever free interval, she developed fever spikes again on 6th and 7th days. She had severe thrombocytopaenia and neutropaenia which made us suspect HLH. Repeated ultra sound scan of abdomen and right lateral decubitus chest x-rays did not reveal any plasma leakage right throughout the disease. Serum triglyceride level and ferritin level were also elevated. Bone marrow aspiration showed features of increased histiocytic activity which confirmed the diagnosis.

She was treated with intravenous (IV) methyl prednisolone 500mg daily for 3 days for which she responded significantly. It was converted to oral prednisolone after 3 days. Her blood counts also improved drastically and she was discharged on 10th day of illness with tailing off dose of prednisolone. She recovered fully after four weeks.

We would like to highlight the importance of awareness in HLH even in simple dengue fever as early diagnosis and treatment will ensure less mortality rate and a short hospital stay.