Multisystem inflammatory syndrome in children in Jerusalem

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Abstract

Objective: We aim to describe the clinical and laboratory features, treatment and outcome of patients diagnosed with multisystem inflammatory syndrome in children (MIS-C) hospitalized at Hadassah Mount Scopus Hospital.

Methods: All children who were admitted to Hadassah Mount Scopus between April 2020 and March 2021 and diagnosed with MIS-C were enrolled the study.

Results: A total of 15 children (9.7 +4.6 years) diagnosed with MIS-C were included in the study. All presented with a history of high fever and most of them with gastrointestinal symptoms (85%). On admission all were febrile and ill appearing. Most were hypotensive (86%), had abdominal pain, tenderness, and peritoneal signs (93%). Mucocutaneus and conjunctival involvement were seen in 50%. Musculoskeletal pain was reported in 25% of patients. Three (20%) had severe neck or throat pain. No children had respiratory or neurological involvement. Laboratory results showed a unique pattern: absolute lymphopenia (86%), and all had extremely elevated CRP and D-Dimer levels with only moderately elevated ESR and ferritin levels. Cardiac involvement was observed in 80%. Intensive care treatment was required for 80%, 50% needed inotropic support. 80% received steroid treatment, 73% IVIG and 50% received antithrombotic treatment. Response to the treatment was impressive and rapid, seen within 12-24 hours of initiation of treatment. There were no deaths and the average hospital stay was 6 days. Short follow-up revealed no complications to date.

Conclusion: Febrile, ill-appearing children in areas endemic for COVID-19 presenting with gastrointestinal symptoms and absolute lymphopenia, elevated levels of CRP and D-Dimer are highly suggestive of MIS-C. Prompt treatment is recommended in these children.