Clinical Spectrum of Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with COVID-19 Infection

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To the Editor: Multisystem inflammatory syndrome in children (MIS-C) is a potentially life-threatening complication of COVID-19 that may occur during or after recovery from acute infection [1]. Very limited clinical data are available on MIS-C from India till date [2, 3]. This prospective observational study was conducted in a tertiary care pediatric hospital of South India to describe the clinical presentation of children with MIS-C. Seventy-four children below 12 y of age who satisfied the World Health Organization's diagnostic criteria for MIS-C were included in the study [4]. Clinical parameters were recorded during hospital course. Forty-two children (56.8%) were under 5 y and 32 children (43.2%) belonged to 6–12 y age group. The male:female ratio was 1:1.9. COVID RT-PCR was negative in all patients. Positive COVID antibodies and history of contact with COVID positive case were seen in 93% and 73% of cases, respectively. Dull activity (67.6%), poor feeding (59.5%), vomiting (41.9%), abdominal pain (31.1%), loose stools (23.0%), cough (16.2%), and cold (16.2%) are common symptoms of MIS-C, and the common signs were rash (51.4%), conjunctival congestion (41.9%), hypotension (35.1%), tachycardia (33.8%), hypoxemia (16.3%), and tachypnea (13.5%). Among systems, gastrointestinal system was the commonly affected (62%) followed by hepatic (54%), cardiovascular (35%), and

renal (26%) systems. Common laboratory abnormalities seen in the study population includes elevated C-reactive protein (CRP) (82%), elevated erythrocyte sedimentation rate (ESR) (75%), leukocytosis (47%), high N/L ratio (22%), thrombocytopenia (39%), elevated serum ferritin (44%), elevated D-dimer (77%), and elevated LDH (33%). To the best of our knowledge, our study is reporting the largest case series of MIS-C published yet from India, with a total of 74 cases. However, large-scale descriptive studies from other parts of India are needed to confirm these preliminary findings.

Declarations

Consent to Participate Written informed consent was obtained from the parents/legal guardians.

Consent to Publish Parents/legal guardians signed informed consent regarding publishing their child's data.

Conflict of Interest None.

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