



Cardiovascular Outcome of Multisystem Inflammatory Syndrome in Children (MISC)

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To the Editor: Multisystem inflammatory syndrome in children (MISC) is a rare hyper-inflammatory condition in children that occurs 2–6 wk after a mild acute SARS-CoV-2 infection. A hospital based ambi-directional single cohort study was conducted in Government Medical College, Thrissur to estimate the frequency of adverse cardiovascular events within one year of diagnosis of MISC. A total of 75 children with diagnosis of MISC according to WHO criteria without any chronic diseases, admitted in Pediatric ICU and ward from July 2021 to June 2022 were studied. Baseline demographic data and clinical data were collected in a predesigned proforma. Study participants were kept under follow up & cardiovascular outcome within one year was studied based on clinical features, examination findings, investigations, and echocardiographic findings.

The predominant age group was between 6–10 y with mean age of 8.2 y and 64% were males in our study group. In a study conducted in Kerala by Tiwari et al., mean age involved was 6.2 y [1]. Common symptoms among the study participants were fever (100%) followed by Gastrointestinal symptoms (84%). The main clinical abnormalities detected belonged to cardiovascular system (73.3%) and 49.3% children presented with shock. A study from New Delhi by Bagri et al. reported fever as a universal finding, whereas gastrointestinal symptoms were observed in 71% and 58.06% children presented with shock [2].

The echocardiogram was abnormal in 33 (41.3%) patients. Among them, 24 (60%) children had LV dysfunction, 6 (15%) children had valvular abnormalities, 4 (10%) had coronary abnormalities and 4 (10%) had arrhythmias during acute phase. At 6 mo and 1 y follow-up, only 2 (2.7%) children had valvular dysfunction and no one had LV dysfunction, coronary abnormalities or arrhythmias. In the study by Tiwari et al., echocardiogram was abnormal in 56% patients, and coronary abnormalities were noted in 37% patients [1].

Declarations

Conflict of Interest None.

References

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