Pediatric Inflammatory Multisystem Syndrome Temporally Associated With COVID-19

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We read with interest the recent systematic review written by Meena*, et al*. [1], wherein the authors have highlighted the clinical features and outcome of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in children. The review covers several aspects related to SARS-CoV-2 infection in children. However, recent emergence of a new clinical syndrome in children in association with SARS-CoV-2 infection also needs a special mention. This pediatric inflammatory multisystem syndrome (PIMS) is characterized by an unusual febrile illness with associated features suggestive of Kawasaki disease, toxic shock syndrome, myocardial dysfunction, or multi-organ failure [2-4]. The diagnostic criteria proposed by the Centre for Disease Control (CDC); World Health Organization (WHO) and Royal College of Paediatrics and Child Health are also not uniform [2-4], signifying a possible geographical difference in the spectrum of clinical manifestations.

A large proportion of children with coronavirus disease 2019 (COVID-19) fall in mild disease category [1]. On the contrary, cases of PIMS-TS reported so far have shown a rather severe course of illness with five deaths out of approximately 300 cases that have been reported [5]. Only up to 70% of PIMS individuals reported so far were either RT-PCR and/or serology positive [6]. This signifies that a positive PCR is not mandatory [3] for diagnosis of PIMS as even contact with a confirmed or suspected case of COVID-19 is enough to make the diagnosis [2,4].

Balasubramanian, *et al*. [7] recently reported one case of PIMS from India, who was successfully managed with intravenous immunoglobulin (IVIg) and additional immuno-suppressants, and also had positive nasopharyngeal RT- PCR.

We wish to highlight that PIMS is a severe spectrum of SARS-CoV-2 infection in children. This syndrome needs early recognition and aggressive management.

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