

## A Systematic Review of Multisystem Inflammatory Syndrome in Children Associated With SARS-CoV-2 Infection

328 articles were identified.  
16 studies with 655 participants  
Age Group: 3 months–20 years

**Common Symptoms:**  
Fever, GI symptoms & Kawasaki  
Disease-like picture

**68% required critical care**  
40% needed inotropes  
34% received anticoagulation  
15% required mechanical ventilation

**> 2/3<sup>rd</sup> received IVIG**  
**49% received corticosteroids.**  
Remdesivir & convalescent plasma were  
the least commonly utilized therapies.

**The majority recovered; 11 (1.7%) children died.**

# ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



## MIS-C: COVID 19 Multisystem Inflammatory syndrome in children

The Pediatric Infectious Disease Journal: September 8, 2020

### Results:

This systematic review delineates and summarizes clinical features, management, and outcomes of MIS-C associated with SARS-CoV-2 infection. Although most children required intensive care and immunomodulatory therapies, favourable outcomes were reported in the majority with low-mortality rates.

## EXPERT COMMENT



"MIS-C is multisystemic disease temporally associated with COVID-19. Any febrile child with multisystemic disease should be investigated for MIS-C in pandemic. With intensive care and immunomodulation, outcome is good"

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### Case Definition of MIS-C : All 5 Criteria are MUST

**1<sup>st</sup> Criteria : Age : 0-19 years + Fever ≥ 3 days**

**2<sup>nd</sup> Criteria : 2 of the 5 systems involvement:**

- Rash, muco-cutaneous sign, non purulent conjunctivitis
- Hypotension or shock
- Myocardial dysfunction (pericarditis, coronary changes, elevated trop I etc)
- Coagulopathy (elevated d dimer, prolonged PT/aPTT)
- GI symptoms (diarrhea, vomiting, abdominal pain)

**3<sup>rd</sup> Criteria : Elevated CRP or ESR or Procalcitonin or Ferritin**

**4<sup>th</sup> Criteria : No other obvious cause of inflammation / infection**

**5<sup>th</sup> Criteria: Evidence of recent COVID 19 infection  
(RT-PCR+ Or Antibody + Or H/O contact with + patient)**

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National President 2020

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### Reference

Kaushik, Ashlesha MD\*; Gupta, Sandeep MD†; Sood, Mangla MD‡; Sharma, Seema MD§; Verma, Shikha MD¶ A Systematic Review of Multisystem Inflammatory Syndrome in Children Associated With SARS-CoV-2 Infection, The Pediatric Infectious Disease Journal: September 8, 2020 - Volume Online First - Issue - doi: 10.1097/INF.0000000000002888