6-month multidisciplinary follow-up and outcomes of patients with paediatric inflammatory multisystem syndrome (PIMS-TS) at a UK tertiary paediatric hospital: a retrospective cohort study. Lancet Child Adolesc Health. 2021 May 24.

#### **Background and purpose:**

- •PIMS-TS is a new, rare, post-infectious complication of SARS-CoV-2 infection in children.
- To describe the 6-month outcomes of PIMS-TS.

#### Methodology:

- Retrospective cohort study
- Great Ormond Street Hospital (London, UK)
- Children admitted with PIMS-TS between April 4 and Sept 1, 2020
- •Follow-up at 6 weeks and 6 months after admission
- Biochemical and functional outcomes were analysed

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

Pediatric Evidence And Research Learning Snippet



## PIMS-TS / MIS-C Follow-up

#### Results:

- •46 children, 65% (n=30) males
- •Age at presentation: 10 (9-13) years
- •80% (n=37) were from minority ethnic groups
- •17% (n=8) had pre-existing comorbidities
- All had elevated markers of systemic inflammation at baseline
- No death

#### By 6 months

- •Systemic inflammation resolved in all but one.
- Positive SARS-CoV-2 IgG antibodies: 90% (38/42)
- •Normal Echocardiograms: 96% (44/46)
- •Gastrointestinal symptoms: 13% (6/46)
- •Renal, haematological, and otolaryngological findings resolved
- Minor neurological abnormalities 52% at 6 weeks and 39% at 6 months
- •Median manual muscle test-8 scores improved from 53 (43-64) during hospital admission to 80 (68-80) at 6 months
- •6-min walk test: 45% (18/40) had below third centile
- •Severe emotional difficulties:18% by parental, 22% by self report
- Back in full-time education: 98% (45/46) (virtually or face to face)

#### **Conclusion:**

- •Despite severe illness at admission, few organ-specific sequelae were observed at 6 months.
- Ongoing concerns: physical re-conditioning, mental health support, and persisting poor exercise tolerance.

#### **EXPERT COMMENT**



"PIMS-TS has good long-term outcome. Cardiac functions and coronary changes returns to normal in majority. Mild physical limitation and emotional issues persist. Studies are needed to define the longterm natural history of PIMS-TS from India."

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With warm regards,

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### **Reference**

Penner et al. 6-month multidisciplinary followup and outcomes of patients with paediatric inflammatory multisystem syndrome (PIMS-TS) at a UK tertiary paediatric hospital: a retrospective cohort study. Lancet Child Adolesc Health. 2021 May 24. DOI: https://doi.org/10.1016/S2352-4642(21)00138-3

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