



Lancet Rheumatol 2020

Published Online

July 10, 2020

[https://doi.org/10.1016/](https://doi.org/10.1016/S2665-9913(20)30234-4)[S2665-9913\(20\)30234-4](https://doi.org/10.1016/S2665-9913(20)30234-4)

See Online for appendix

## An adult presentation consistent with PIMS-TS

Following reports of paediatric inflammatory multisystem syndrome temporally associated with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection (PIMS-TS),<sup>1,2</sup> a UK-born man of Somali origin, aged 21 years, was admitted to University College London Hospitals (UK) with 6 days of fever and abdominal pain associated with constipation, anorexia, and headache. He described a transient maculopapular palmar rash 4 days into illness (appendix pp 3–4). He had non-exudative conjunctivitis, cervical lymphadenopathy, cracked lips, and prominent lingual papillae (appendix pp 3–4). A CT scan showed mesenteric adenopathy and terminal ileitis. The patient had neutrophilia, eosinophilia, lymphopenia, elevated inflammatory markers, and elevated troponin T with normal electrocardiogram, transthoracic echocardiogram, and CT coronary angiogram (appendix pp 2–3).

The patient had no previous history of COVID-19 symptoms or contact with known COVID-19 cases. Nasopharyngeal and stool samples were negative for SARS-CoV-2 by PCR. Other infective and inflammatory conditions were excluded (appendix p 2). Adult and paediatric specialists conferred and concluded that the most likely diagnosis was Kawasaki-like disease on the PIMS-TS spectrum. The patient was treated with intravenous immunoglobulin and methylprednisolone, which resulted in rapid resolution of symptoms and normalisation of blood parameters (appendix p 3); he was discharged on low-dose aspirin 8 days after admission to hospital.

SARS-CoV-2 serology<sup>3</sup> (checked before treatment with intravenous immunoglobulin) was strongly positive, suggesting recent exposure to SARS-CoV-2 (appendix p 2). Kawasaki disease has been described in adults in association with viral infection.<sup>4,5</sup> To the best of our knowledge, this is the

first reported case of adult Kawasaki-like disease related to SARS-CoV-2 infection. There is an urgent need to recognise and fully characterise PIMS-TS in young adults to improve our understanding of pathogenesis, guide treatment decisions, and prevent sequelae in these patients.

We declare no competing interests. We acknowledge support from colleagues at Great Ormond Street Hospitals, London, including Louis Grandjean and Charalampia Papadopoulou. Members of the UCLH COVID Response Team include Mike Brown, Tom Parks, Alice Armitage, Li-An Brown, Manik Kohli, Corinne Fisher, Catherine Houlihan, Hannah Rickman, and Tommy Rampling.

*Imogen Jones, \*Lucy C K Bell, Jessica J Manson, Anna Last, on behalf of the UCLH COVID Response Team*  
lucy.bell7@nhs.net

Hospital for Tropical Diseases, University College London Hospitals, London W1T 7DN, UK (IJ, LCKB, AL); and Department of Rheumatology, University College London Hospitals, London, UK (JJM)

- 1 Riphagen S, Gomez X, Gonzalez-Martinez C, Wilkinson N, Theocharis P. Hyperinflammatory shock in children during COVID-19 pandemic. *Lancet* 2020; **395**: 1607–08.
- 2 Verdoni L, Mazza A, Gervasoni A, et al. An outbreak of severe Kawasaki-like disease at the Italian epicentre of SARS-CoV-2 epidemic: an observational cohort study. *Lancet* 2020; **395**: 1771–78.
- 3 Ng K, Faulkner N, Cornish G, et al. Pre-existing and de novo humoral immunity to SARS-CoV-2 in humans. *bioRxiv* 2020; published online May 15. <https://doi.org/10.1101/2020.05.14.095414> (preprint).
- 4 Drago F, Javor S, Ciccarese G, Cozzani E, Parodi A. A case of complete adult-onset Kawasaki disease: a review of pathogenesis and classification. *Dermatology* 2015; **231**: 5–8.
- 5 Stankovic K, Miallhes P, Bessis D, Ferry T, Broussolle C, Sève P. Kawasaki-like syndromes in HIV-infected adults. *J Infect* 2007; **55**: 488–94.