

Although we present a small number of patients, there was a clear preponderance for men to develop sHLH in this cohort. This difference might in part reflect the increased proportion of men requiring admission to intensive care secondary for COVID-19 during this time (70% men vs 30% women). No patients had severe adverse effects that were obviously attributable to anakinra.

Successful management of patients with sHLH relies on an experienced multidisciplinary team approach. The UK based group, Hyperinflammation and HLH Across Speciality Collaboration, is one such example and includes specialists in rheumatology, haematology, critical care, infectious diseases, virology, neurology, nephrology, and cardiology.

The complex, dynamic, and non-specific nature of sHLH means that it cannot easily be summarised with numerical parameters, and a binary diagnostic approach is not always possible. It is plausible that a proportion of patients who are critically ill (with COVID-19 or other diseases) and do not respond to conventional treatments have developed undiagnosed sHLH. The important clinical questions in such a scenario might be whether the person is suffering from systemic hyperinflammation and whether the benefits of immunomodulation outweigh the risks. If the answers to both these questions are yes, then early, experienced multidisciplinary consult and treatment initiation should be considered.

The COVID-19 pandemic has taught the medical community many things, not least the fact that multi-centre, randomised controlled trials of immune modulation are feasible in patients who are critically ill. Perhaps this knowledge and infrastructure can be harnessed for patients with sHLH.

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Inflammatory myositis after ChAdOx1 vaccination

Most adverse events after immunisation with adenoviral vector vaccines—such as ChAdOx1 nCoV-19 (Oxford–AstraZeneca) and Ad26.COV2.S (Janssen)—are mild; however, rare life-threatening adverse events such as thrombosis with thrombocytopenia syndrome or Guillain-Barré syndrome have been reported.^{1,2} Over a 6-month period comprising January to June, 2021, we encountered three cases of post-vaccination myositis at our hospital.

A 74-year-old man presented with a 3-week history of intermittent low-grade fever and polyarthralgia. These symptoms started 48 h after his first dose of ChAdOx1 nCoV-19 vaccination. The patient was febrile (38.5°C), tachycardic, and had tenderness in both calf muscles. Elevated inflammatory parameters were noted (appendix). On day 26, ¹⁸F-DG-PET-CT showed a tree-root-like uptake pattern in the lower limbs suggestive of



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See Online for appendix