



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



## **ADULT-ONSET STILL'S DISEASE AND CARDIOMYOPATHY FOLLOWING COVID-19 INFECTION**

Moderated Poster Contributions  
Complex Clinical Cases Moderated Poster Theater 3\_Hall C  
Monday, April 4, 2022, 2:00 p.m.-2:10 p.m.

---

Session Title: Inflammation is the Situation: Complex Clinical Cases Moderated Poster Contributions -- FIT  
Abstract Category: FIT: Heart Failure and Cardiomyopathies  
Presentation Number: 1119-17

---

Authors: *Megan Ohlfest, Aparna Sajja, Medstar Washington Hospital Center, Washington, DC, USA*

**Background:** We present the case of a 26-year-old male who presented in fulminant cardiogenic shock requiring extracorporeal membrane oxygenation (ECMO) after a recent Covid-19 infection not requiring oxygen, who was ultimately found to meet Yamaguchi criteria for Adult-Onset Still's Disease.

**Case:** Our patient presented three weeks after his initial Covid-19 diagnosis with sudden onset of fever >39 degrees Celsius, abdominal maculopapular erythematous rash, leukocytosis, transaminitis, lymphadenopathy, elevated ferritin, negative Anti-Nuclear Antibody/Rheumatoid Factor and dermatographism. Initial infectious workup was within normal limits, including Covid-19 and Cytomegalovirus (CMV), and he was initially treated with Doxycycline for suspected seronegative Rocky Mountain Spotted Fever without improvement. By day three he required inotropic support with Dobutamine and Norepinephrine, and by day six required cannulation for ECMO. On day seven he underwent an endomyocardial biopsy revealing acute and chronic inflammation, and he was started on the IL-1 inhibitor Anakinra and pulse-dose steroids. By day twelve, ECMO was discontinued. On day thirteen his treatment was complicated by a spike in his initially normal CMV levels, and Anakinra was held while IV Ganciclovir was given for ten days followed by oral Valganciclovir. On day 22 Anakinra was restarted for significant back and bilateral lower extremity arthralgias. The patient was able to be discharged on day 24 with continued outpatient twice-daily Anakinra and once daily Prednisone.

**Decision-making:** Our patient represented a unique case of Adult-Onset Still's Disease inducing severe acute cardiomyopathy following a relatively mild Covid-19 infection. Treatment was aimed at reducing his systemic inflammation while providing circulatory support, and his treatment was complicated by CMV viremia secondary to receiving immunosuppressant therapy.

**Conclusion:** We report the case of a young male who developed Adult-Onset Still's Disease three weeks after his diagnosis of Covid-19, who developed cardiogenic shock requiring ECMO support and responded to treatment with Anakinra, whose course was complicated by CMV viremia.