

Abstract

Background

Multisystem inflammatory syndrome (MIS) is a rare grave complication of Covid-19 due to immune dysregulation. Initially MIS was described in children from the UK, then later described in adults as well, worldwide. It is a multisystem disease which can involve the heart, gastrointestinal tract, skin or brain due to a surge of proinflammatory cytokines. MIS in adults is a rarer entity and here we present a young adult with COVID-19 MIS-A.

Presentation

Our patient is a 23-year-old man who had undergone a laparoscopic cholecystectomy for cholelithiasis and discharged the following day. Three days later he develops shortness of breath, pleuritic type of chest pain and abdominal pain and presented to us one week after the onset of symptoms. He was tachycardic on admission with few lung crepitation and his PCR became positive for SARS Covid-19. On the second day of admission he was sent to the Intensive Care Unit due to desaturation and metabolic acidosis. He went on to develop Acute Kidney Injury (AKI), Transaminitis, high Prothrombin time and low ejection fraction with dilated chambers on echocardiogram with overall poor response to broad spectrum antibiotics. He was suspected of MIS and was given IV Methyl Prednisolone and later IV Immunoglobulin following which there was mild improvement in the AKI and transaminitis yet the heart failure did not respond and the patient succumbed due to heart failure later on.

Conclusion

MIS-A should be considered in adults presenting with multiple symptoms and diagnosed with Covid-19 with multi organ damage including Dilated cardiomyopathy. Further research is needed regarding treatment of MIS in adults.