

Epstein Barr Virus In The Heart: A Case Of Infectious Mononucleosis Causing Myopericarditis

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Introduction: The most common causes of myopericarditis are Coxsackie B followed by Coxsackie A, Echovirus, and Poliovirus. However, Epstein Barr Virus (EBV) may uncommonly cause myopericarditis and can mimic acute coronary syndrome (ACS).

Case: A 19-year-old healthy non-smoker male presented with acute onset of central, positional chest pain preceded by a 5 day-long course of viral prodromal symptoms including sore throat. EKG showed inferolateral ST segment elevations. HS-Troponin T was markedly elevated (initial; 988, 1 hour; 1171). He was started on ibuprofen and colchicine for suspected myopericarditis. TTE showed LVEF 50% with borderline mild posterior and lateral wall hypokinesis with no pericardial effusion. Although, the presentation and PR depression were consistent with pericarditis, focal wall motion abnormality led to consideration of right or circumflex CAD such as coronary dissection. This was ruled out by coronary angiogram. Cardiac MRI demonstrated the epicardial pattern of gadolinium enhancement consistent with myopericarditis. Subsequently, patient tested positive for IgG (6.4) and IgM (3.2) [normal range 0.8 to 1.1] against EBV Capsid Antigens with unremarkable remaining viral panel results. His symptoms improved significantly with ibuprofen and colchicine. He was also treated with metoprolol succinate and lisinopril due to reduced ejection fraction.

Conclusions: Cardiac complications from EBV infection are uncommon. Sometimes, the EKG with pericarditis can mimic ACS warranting an invasive test. Therefore, clinicians must maintain a high level of suspicion for myopericarditis resulting from EBV.