

Cardiac Sarcoidosis: A Resonating Diagnosis. SD Claflin (MD, SOM), EJ Gillespie, Department of Medicine-Hospital Medicine, University of Colorado, Denver, CO.

#### OBJECTIVES:

1. Develop a high index of suspicion for cardiac sarcoidosis and be able to name common presentations.
2. Describe diagnostic criteria for cardiac sarcoidosis.

#### BACKGROUND:

Sarcoidosis is a granulomatous disease of unknown etiology that has various clinical presentations dependent upon the extent of systemic involvement. Approximately 5% of patients diagnosed with sarcoidosis also meet clinical criteria for cardiac sarcoidosis (CS), whereas subclinical cardiac involvement is observed in 20-50% of cases. Commonly, workup for presenting signs of syncope, near-syncope, or chest pain reveals heart failure with preserved ejection fraction or a new arrhythmia – Mobitz I or II, or even third-degree heart block. CS often has non-specific findings on ECG and echocardiogram; cardiac magnetic resonance imaging (CMR) and 18F-fluorodeoxyglucose positron emission tomography (FDG-PET) are more specific. Although the gold standard finding of CS is non-caseating granulomas on endomyocardial biopsy, routine biopsies are not recommended as standard of care due to their low sensitivity and high risk for complications. Thus, CS can be challenging to diagnose, so a high index of clinical suspicion is of utmost importance.

#### CASE DESCRIPTION:

We report the case of a 46-yo male with a longstanding history of unexplained arrhythmias who presented with atrioventricular block and recurrent syncope. He was ultimately diagnosed with cardiac sarcoidosis and treated with an implantable ICD.

#### CONCLUSION:

In the setting of cardiac abnormalities such as new second or third degree AV block or restrictive heart failure, and when other diagnoses have been ruled out, there should be a high index of suspicion for cardiac sarcoidosis. Though endomyocardial biopsy is considered gold standard for histological diagnosis, a clinical diagnosis can be made in the setting of extracardiac sarcoidosis with the presence of characteristic findings on other studies including ECG, echocardiogram, CMR, and FDG-PET.