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## **CLINICAL DIAGNOSES OF CARDIAC SARCOIDOSIS**

Poster Contributions Poster Hall B1 Saturday, March 14, 2015, 10:00 a.m.-10:45 a.m.

Session Title: FIT Clinical Decision Making: Heart Failure and Cardiomyopathies Abstract Category: Heart Failure and Cardiomyopathies Presentation Number: 1109-162

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**Background:** Cardiac manifestations of systemic sarcoidosis occur in as many as 25% of patients and include: atrioventricular or bundle branch block, ventricular premature contraction or tachycardia, systolic heart failure and sudden cardiac death.

**Case:** A 50 year-old Caucasian man was referred after 6 months of progressive deterioration of cardiac function and congestive heart failure despite optimal medical therapy with ACE inhibitor and beta blocker. On further questioning, he states he was treated with 9 months of prednisone for biopsy-proven mediastinal sacrocidosis at age 35. Physical examination was significant for elevated central venous pressure, third heart sound and peripheral edema. EKG showed sinus rhythm with low voltage. Echocardiography showed internal dimension of 5.4 cm and left ventricular ejection fraction (LVEF) = 35%.

**Decision Making:** A 48-hour Holter monitor showed sinus rhythm with 547 episodes of premature ventricular contraction and 462 supraventricular tachycardia. Laboratories showed borderline anemia, normal calcium level and elevated brain natriuretic peptide of 1450. Cardiac magnetic resonance imaging revealed several small foci of delayed enhancement within the left ventricle but not definitive for infiltrative cardiomyopathy. Given the high index of suspicion, prednisone treatment was initiated for cardiac sarcoidosis. Marked clinical improvement occurred in 4 weeks and LVEF normalized by 2 months. Prednisone was tapered over 6 months. After counseling patient endomyocardial biopsy was not performed due to low sensitivity and clinical response to steroid.

**Conclusion:** Cardiac sarcoidosis should be considered in a patient with known extra-cardiac sarcoidosis and new onset of cardiomyopathy with arrhythmia.