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Unmasking Cardiac Sarcoidosis: A Clinical Conundrum

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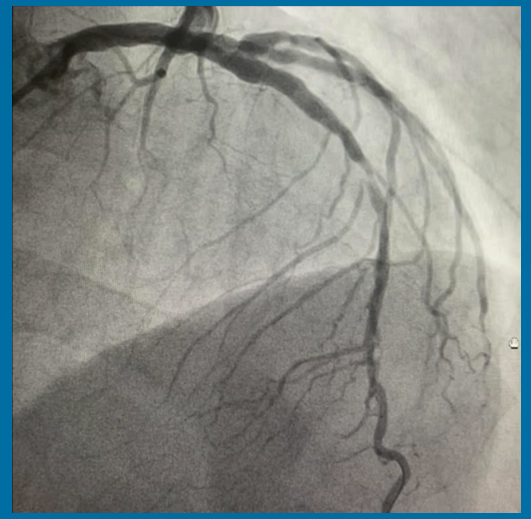
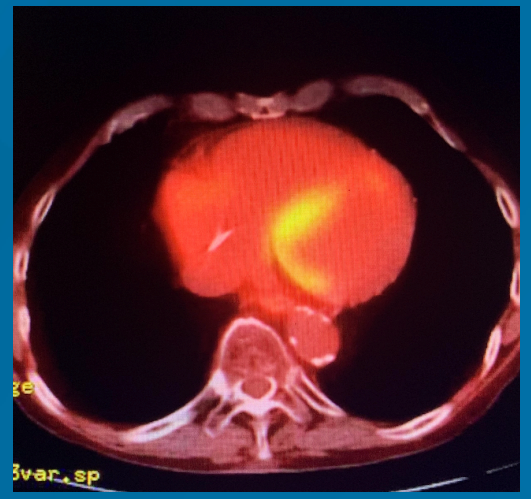
Background

Sarcoidosis is a rare disease of uncertain etiology that manifests as granulomatous inflammation of various organs. Cardiac sarcoidosis (CS) is challenging to diagnose due to variable presentations including absence of symptoms, heart failure, and brady- or tachy-arrythmia. Diagnosis is further complicated by the presence of comorbidities including ischemic heart disease (IHD).

Case presentation

A 70-year-old man with history of rectal cancer, recent myocardial infarction requiring percutaneous intervention of the left anterior descending artery (LAD) is admitted with PMVT. Left heart catheterization (LHC) revealed patent LAD stent, and a primary prevention cardiac defibrillator was placed. Echocardiogram showed multiple wall motion abnormalities and left ventricular ejection fraction of 25-30%. He was readmitted 8 months later for recurrent PMVT. LHC showed novel ramus stenosis prompting stent placement. Dual anti-arrhythmic therapy with amiodarone and mexiletine was started. Cardiac MRI showed mixed ischemic and non-ischemic cardiomyopathy with asymmetric thickening of the myocardium and





late gadolinium enhancement (LGE) suggestive of CS. Cardiac PET showed patchy hypermetabolic activity of the left ventricular wall confirming CS. High dose prednisone was started with resolution of PMVT.

Discussion

Despite adequate treatment of ischemia, the patient continued to experience refractory PMVT prompting consideration of contributing etiologies and optimization of medical management. CS was diagnosed by Cardiac multimodality imaging using MRI and PET. This case emphasizes the importance of maintaining a high level of clinical suspicion for CS when evaluating patients with PMVT and severe cardiomyopathy; particularly if PMVT is persistent after management of comorbidities, such as IHD.

Conclusion

We describe a case of recurrent, sustained PMVT ultimately found to be due to the presence of ischemic cardiomyopathy and concomitant CS. Multi-cardiac subspecialty evaluation and the use of multimodality imaging can help ensure early diagnosis and treatment of these patients.