

ABSTRACT HF-564:
Cardiomyopathy Update: Sarcoid, HCM And Pacing Induced Cardiomyopathy

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 10:30 AM - 11:30 AM

HF-564-01

READMISSION OUTCOMES IN PATIENTS WITH CARDIAC SARCOIDOSIS

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Background: Sarcoidosis is a multi-system disorder which can affect the lungs, lymph nodes, liver, spleen, skin, nervous system and the heart. Cardiac sarcoidosis (CS) has historically been under-diagnosed but continues to be associated with significant morbidity and mortality. The most common presenting symptoms include advanced atrioventricular block, ventricular tachycardia (VT) and heart failure (HF).

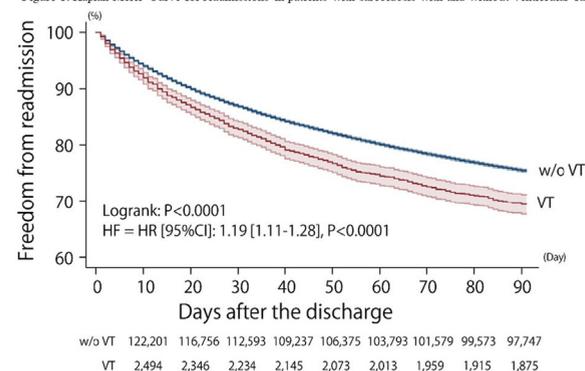
Objective: To evaluate the incidence and impact of VT and HF on the rates of readmissions in patients with a known diagnosis of sarcoidosis using a real-world database.

Methods: Patients with a diagnosis of sarcoidosis with and without admitting symptoms of ventricular tachycardia and/or heart failure from 2010-2017 were abstracted using International Classification of Diseases-9th and 10th Revision-Clinical Modification from the Nationwide Readmissions Database (NRD). All patients > 18 years of age with sarcoidosis were included. We excluded patients who were transferred/died at first admission. Patient demographics, presence of comorbidities and time from discharge to readmission were also evaluated.

Results: During 2010-2017, 124,695 patients with sarcoidosis were included. Ventricular tachycardia (VT) was the presenting complaint in 2,494 (2.0%) patients whilst heart failure was present in 24,794 (19.9%) patients respectively. Readmission was 4.8% higher (24.8% vs 20.0%, $p < 0.0001$) at 90-days follow-up in patients who had initially presented with VT as compared to those who did not initially present with a VT. Similarly, patients with a diagnosis of heart failure and sarcoidosis were more likely to be readmitted within 90-days follow-up as compared to patients with sarcoidosis without heart failure (29.8% vs 17.7%, $p < 0.0001$).

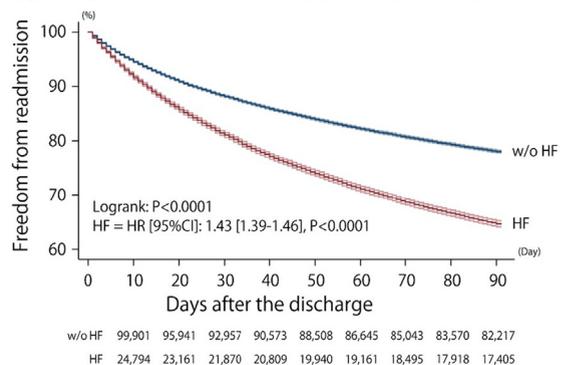
Conclusion: According to this real-world study, sarcoidosis patients initially admitted with HF and/or VT had higher rates of readmissions compared to those without those diagnosis. These data may be an underestimate of consequences of VT and/or HF

Figure 1: Kaplan-Meier Curve for readmissions in patients with sarcoidosis with and without Ventricular Tachycardia



in sarcoid since they reflect a survivor bias. This study highlights the prevalence of cardiac involvement in patients with sarcoidosis requiring admission. Factors accounting for increased readmission should be explored with the aim of improving patient outcomes.

Figure 2: Kaplan-Meier Curve for readmissions in patients with sarcoidosis with and without Heart Failure



HF-564-02

LONG-TERM OUTCOMES OF TACHYCARDIA INDUCED CARDIOMYOPATHY COMPARED WITH IDIOPATHIC DILATED CARDIOMYOPATHY

Moshe Katz MD

Background: Tachycardia induced cardiomyopathy (TIC) is a reversible dilated cardiomyopathy (DCM). Data on natural course and prognosis of TIC and comparison with other dilated cardiomyopathies is scarce.

Objective: To compare the clinical presentation, comorbidities and long-term outcome of TIC patients with idiopathic DCM patients.

Methods: A single center, retrospective cohort study of patients hospitalized with new onset TIC or IDCM between 2007-2017. The primary end point was composite of death, myocardial infarction, thromboembolic events, assist device or heart transplantation and malignant arrhythmia. The secondary end point was recurrent hospitalization due to worsening heart failure (HF) during follow up. Study end points were evaluated for 5 years and for the whole length of follow up.

Results: 64 TIC and 66 idiopathic DCM (IDCM) patients were enrolled. The primary composite endpoint and all-cause mortality were similar between TIC and IDCM during median follow-up time of ~6 years (36% vs 29% and 22% vs 15%, respectively). A Kaplan-Meier survival analysis showed no significant difference between TIC and IDCM groups for event-free survival of the composite endpoint (Log Rank, $p = 0.328$) and for all-cause mortality (Log Rank, $p = 0.139$). Recurrent admission occurred earlier in TIC patients compared with IDCM patients (Log Rank, $p = 0.035$) and the risk for HF readmission was significantly higher in TIC (HR: 1.81; 95% CI 1.03-3.18). This risk became insignificant after adjustment to comorbidities (HR: 1.55; 95% CI 0.85-2.8). Nonetheless, the incidence of recurrent hospitalization during the follow-up period was significantly higher in TIC patients (incidence rate ratio 1.59, 95% CI 1.12-2.24; $p = 0.009$).

Conclusion: Patients with TIC have similar long-term outcomes as those with IDCM. However, it portends higher rate of HF readmissions, mostly due to arrhythmia recurrences. Further studies are needed to test if early catheter-ablation intervention in TIC can minimize these repeated hospitalizations.