

Case of the Week

CARDIAC RESYNCHRONISATION THERAPY FOR THE MANAGEMENT OF RECURRENT HEART FAILURE IN A 90-YEAR-OLD PATIENT

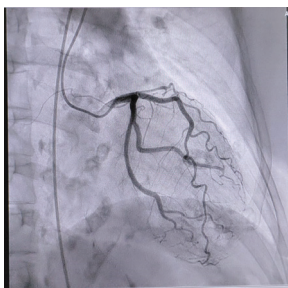
A 90-year-old frail lady, a K/C/O diabetes and hypertension presented to the hospital with complaints of breathlessness and chest discomfort. The patient also gives the history of frequent admissions for the heart failure (HF) in the past one year.

A chest X-ray revealed pulmonary edema. An electrocardiogram (ECG) demonstrated left bundle branch block (LBBB) and 2D echocardiogram showed global hypokinesia with left ventricular ejection fraction (LVEF) of 10 to 15%. Liver function tests showed deranged liver enzymes (congestive hepatopathy) and renal function tests showed creatinine of 1.8 mg/dL. Patient was treated with dobutamine and lasix infusion to control HF symptoms. In view of the paroxysmal atrial fibrillation, electrical cardioversion was performed.

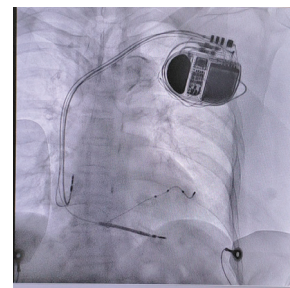
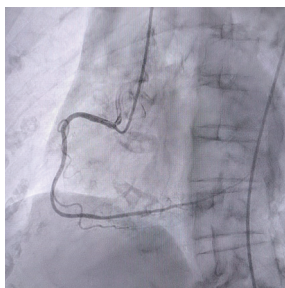
The case was discussed in the cardiac team. After stabilisation of kidney and liver function, it

was decided to perform Cardiac Resynchronization Therapy with Defibrillator (CRT-D). Coronary angiography (CAG) showed normal coronary arteries. CRT-D was performed and post-procedure, the patient was hemodynamically stable. The repeat investigations showed improved cardiac, pulmonary, renal, and liver functions. Left ventricular ejection fraction (LVEF) improved to 45 to 50 % within 3 weeks (super responder) after CRT-D implantation.

Conclusion: This case is a rare and one of a kind, given the challenges like age, frailty, recurrent HF symptoms, and deranged liver, kidney, and lung function. To the best of our knowledge, it is also the first case of CRT-D performed as a rescue therapy in a nonagenarian (90-year-old) with symptoms of recurrent HF, reported in Navi Mumbai.



CAG showing normal coronary arteries



Post CRT-D Implantation

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