Takotsubo Cardiomyopathy Complicating PM Implantation

Greenberg, G; Haim, M; Strasberg, B
Rabin Medical Center, Petah-Tikva, Israel

Takotsubo Cardiomyopathy (TC) is a rare and reversible condition that was seldom described as a complication of pacemaker (PM) implantation (4 cases in Medline).— and always in pts with ventricular pacing.

Objectives: To describe a case of TC complicating PM implantation in a pt with sinus node disease and only atrial pacing.

Methods and Results: A 74 year old woman was admitted for PM implantation to allow medical rate control of her paroxysmal atrial fibrillation. Twelve hours after having a dual chamber PM implantation which was uneventful she complained of chest pain, shortness of breath and the ECG showed ST elevation and giant T wave inversion in the precordial leads. An urgent echocardiogram revealed apical dyskynesis and apical ballooning. An urgent coronary angiography was normal, but left ventriculography revealed findings similar to those seen in the echocardiogram. She was treated with beta-blockers, angiotensin converting enzyme inhibitors and fluids. within several hours her symptoms subsided and several days later the ECG normalized to baseline and so was her echocardiogram. Of interest previous cases of acute TC after PM implantation involved PM dependent pts with continuous right ventricular pacing. In contrast — in the present case only—the patient was exclusively paced in the right atrium.

Conclusions: TC is a very uncommon complication of PM implantation. However in pts presenting with the appropriate symptoms and electrocardiographic features it should be considered and followed by appropriate imaging and medical therapy. This case demonstrates that TC can occur even with PM with only atrial pacing.