



Contents lists available at ScienceDirect

Journal of Indian College of Cardiology

journal homepage: [www.elsevier.com/locate/jicc](http://www.elsevier.com/locate/jicc)



## Case Report

# Revascularization of a post ICD implanted patient – Closing the stable after the horse has bolted

Pankaj Jariwala

Maxcure-Mediciti Hospitals, Opp. Secretariat Road, 500063, Hyderabad, Telangana, India

### ARTICLE INFO

#### Article history:

Received 3 September 2017

Accepted 12 December 2017

Available online xxx

#### Keywords:

Implantable cardioverter-defibrillator

Coronary artery disease

Sudden cardiac death

Ventricular arrhythmia

Percutaneous transluminal coronary angioplasty

### ABSTRACT

Patients with significant coronary artery disease with severe left ventricular dysfunction are at risk of sudden cardiac death secondary to ventricular arrhythmias. Whether complete revascularization or implantation of implantable cardioverter-defibrillator (ICD) first is always clinical dilemma. The revascularization strategy in the presence of multivessel disease is not always without risk and not cost effective. We have discussed one such clinical scenario where patient underwent ICD implantation and later had symptoms of transient heart failure and ventricular arrhythmia secondary to ischemia. His symptoms were relieved after successful percutaneous coronary angioplasty. Revascularization is the appropriate therapy for patients with abnormal left ventricular function and residual ischemia. ICD placement makes most sense for patients who are at risk but who lack the ischemic potential that would send them to revascularization.

© 2017 Indian College of Cardiology. All rights reserved.

## 1. Introduction

Patient with significant coronary artery disease, should implantable cardioverter-defibrillator (ICD) implanted first or revascularization is done first is matter of discussion. Is it appropriate to implant ICD to patient who has critical stenoses of major epicardial vessels without revascularization as a priority and what are the present guidelines? Usually ICD implantation is performed for patients of CAD after ensuring that there is no ischemic substrate. But if patient has severe Left ventricular dysfunction with documented recurrent ventricular arrhythmias, should ICD implantation be considered first? We describe here a patient in whom we performed angioplasty due to symptoms and documented ischemia who had an ICD implanted earlier.

## 2. Case Report

46-Year-old male patient, driver by profession presented with complaints of recurrent palpitations and breathlessness on exertion for 4 weeks. The patient had an anterior wall myocardial infarction in 2005 and coronary angiography done at that time showed double vessel disease [critical LAD & RCA stenoses] with severe LV dysfunction. He underwent ICD implantation in 2008 in

view of severe LV dysfunction. AICD interrogation revealed multiple episodes of short runs of ventricular tachycardia. But he did not receive any antitachycardia pacing (ATP) or defibrillation shocks. The ECG showed frequent ventricular premature complexes and poor progression of R wave suggestive of old AWMI. 2D Echo showed dilated LV with severe LV dysfunction (LVEF- 28%) with global hypokinesia with preserved thickness of myocardium. Viability study using technetium-99m sestamibi with redistribution thallium-201 tomography showed viable myocardium in infero-lateral segments with partial thickness infarct in antero-septal region with partial viable myocardium.

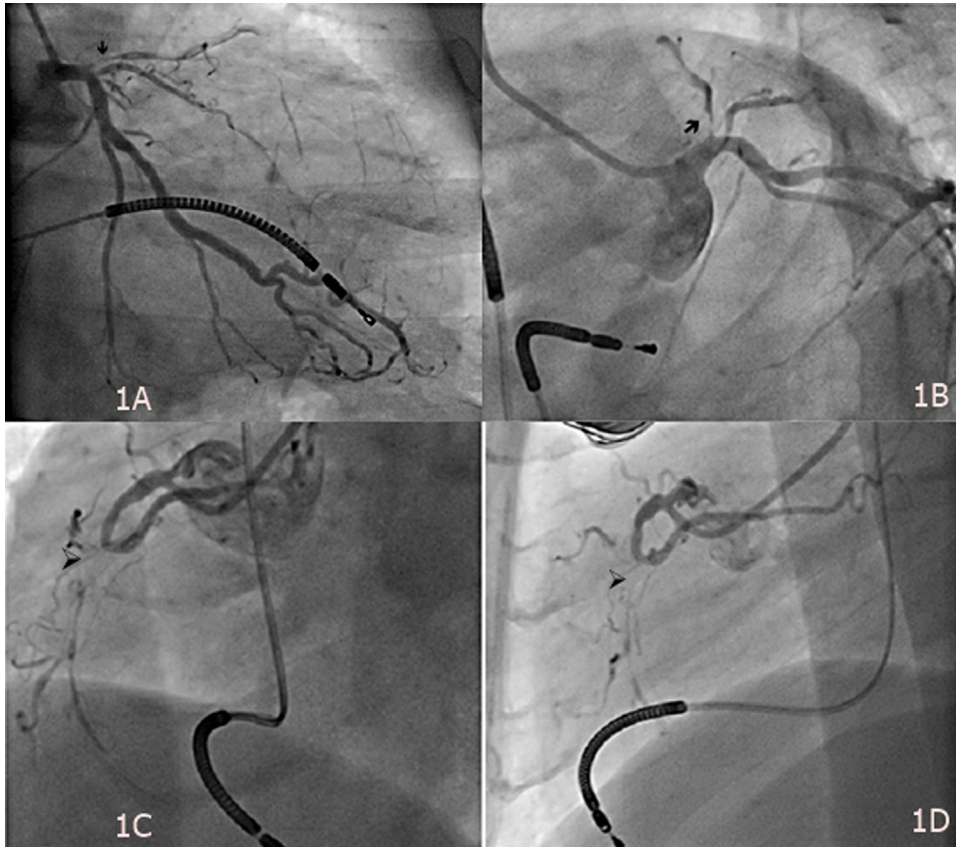
The patient was started on oral amiodarone, diuretic, antiplatelet agents, beta-blocker, ACE inhibitor and statin. The patient had relief of palpitations and breathlessness on exertion. Coronary angiography showed critical 99% stenosis of the ostio-proximal segment of the left anterior descending artery (LAD) with TIMI 2 flow and mid segment of right coronary artery (RCA) showed chronic total occlusion (Fig. 1A–D). We decided for the percutaneous angioplasty as a revascularization strategy in view of the viable myocardium and residual ischemic substrate.

The LAD was cannulated with a 6 Fr. Judkins's Left guide catheter. Our initial wire of choice was WhispeR with balloon support to cross the lesion. After some manipulation wire could cross the lesion, which was predilated with 1.5 × 10 mm semi-compliant balloon and subsequently with 2.0 × 15 mm balloon. Check angiography showed TIMI 3 flow in the LAD; hence, we

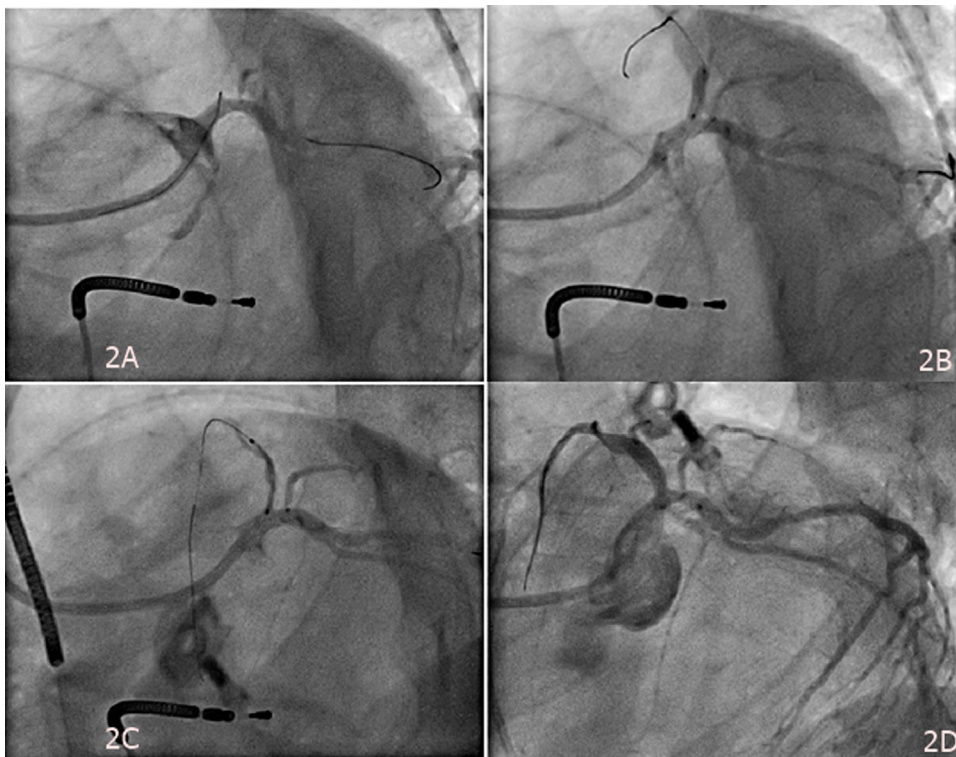
E-mail address: [pankaj\\_jariwala@hotmail.com](mailto:pankaj_jariwala@hotmail.com) (P. Jariwala).

<https://doi.org/10.1016/j.jicc.2017.12.009>

1561-8811/© 2017 Indian College of Cardiology. All rights reserved.



**Fig. 1.** A–D Transradial Coronary angiography showing a critical ostial left anterior descending artery stenosis [Solid arrow] with TIMI 2 flow with normal left circumflex artery. Right coronary angiography showed the chronic total occlusion of the mid segment [Arrow head] with intracoronary bridging collaterals, TIMI 1 flow in distal RCA.



**Fig. 2.** A–D 6 Fr. Left Judkin's catheter engaged and with the help of BMW wire in LCX to support, Whisper wire used to cross the LAD ostial stenosis which was predilated with semi compliant 2.0 × 10 mm balloon. The drug eluting stent was deployed across the ostio-proximal segment of LAD. Final angiography showing no residual stenosis with TIMI 3 flow in LAD.

Download English Version:

<https://daneshyari.com/en/article/8669712>

Download Persian Version:

<https://daneshyari.com/article/8669712>

[Daneshyari.com](https://daneshyari.com)