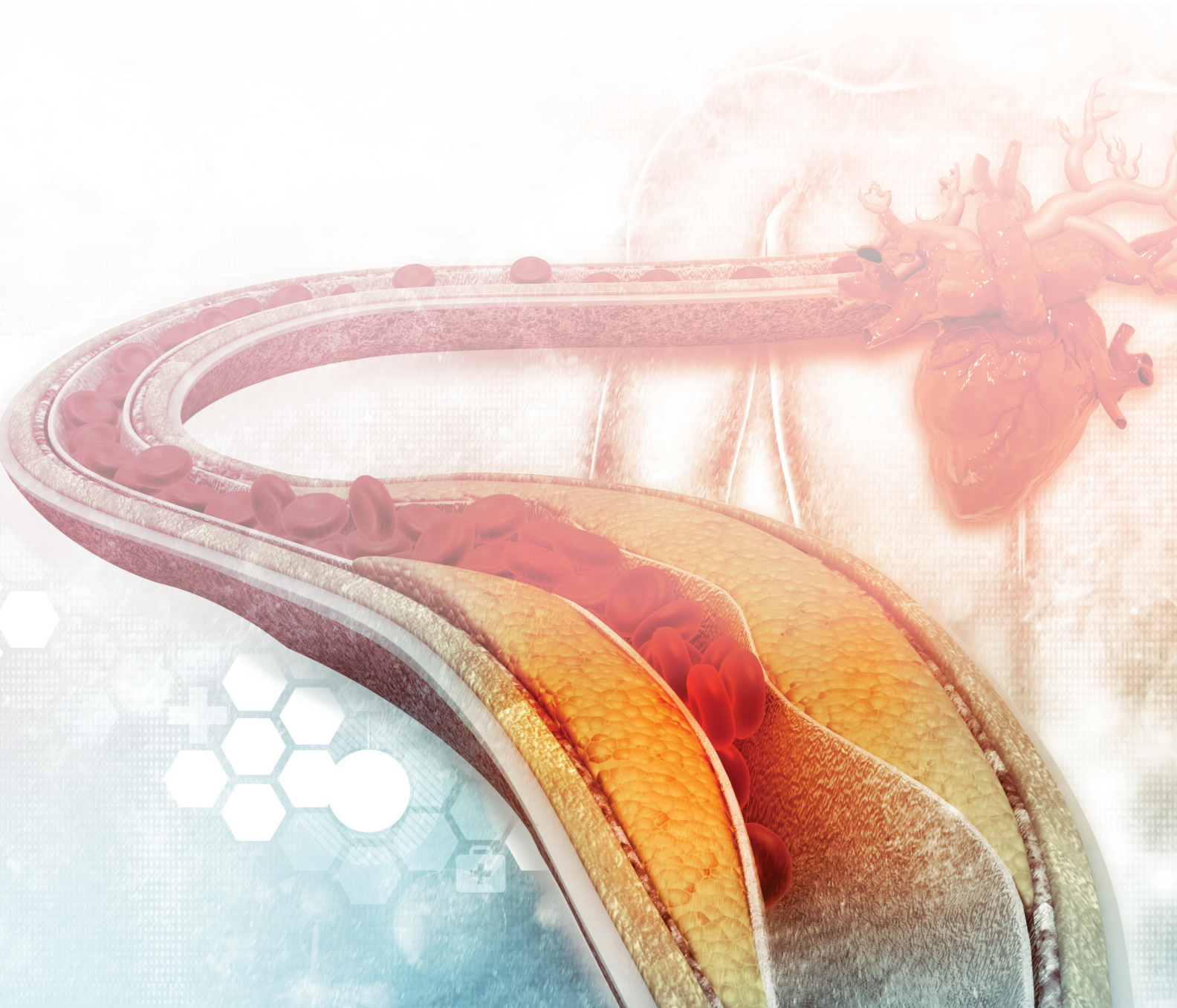


Case Profile Series 2

Case study of a patient with Triple Vessel Disease undergoing PCI to LAD





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CLINICAL PRESENTATION

Mr. O. S. a 71-year-old male, was admitted to the hospital with symptoms such as breathlessness, restlessness, intermittent dyspnea and angina on exertion along with generalized weakness. He is a known case of hypertension, Type 2 Diabetes Mellitus, Benign Prostatic Hyperplasia (BPH).

Patient was advised for coronary angiography based on ECG and 2D echo report.



CORONARY ANGIOGRAPHY REPORT

RISK FACTORS

- Hypertension
- Type 2 Diabetes Mellitus

ECG

- Normal sinus rhythm
- Early repolarization in inferior leads

2D ECHO

2D echo: Normal cardiac valves & chambers. Trivial MR. No regional wall motion abnormality. Normal LV systolic function, LVEF - 60%. Grade - I LV diastolic dysfunction, Trivial TR.

Left Anterior Descending Artery - Proximal Tubular Calcific 80% Diseased; Early Di-Ostium clean.

Post Ostial 60-70% Diffuse Disease

Highlight Bold - Co-Dominant, Diffuse Plaquing

Bold - Tubular 80-90% Disease

Right Coronary Artery - Co-Dominant, Proximal to Mid Tubular Disease Maximum 90%

FINAL DIAGNOSIS

- Triple vessel disease

RECOMMENDATION

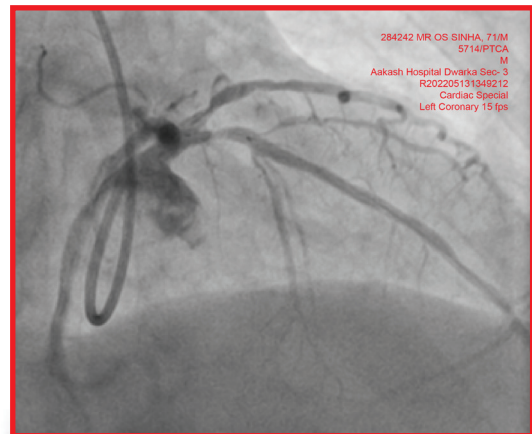
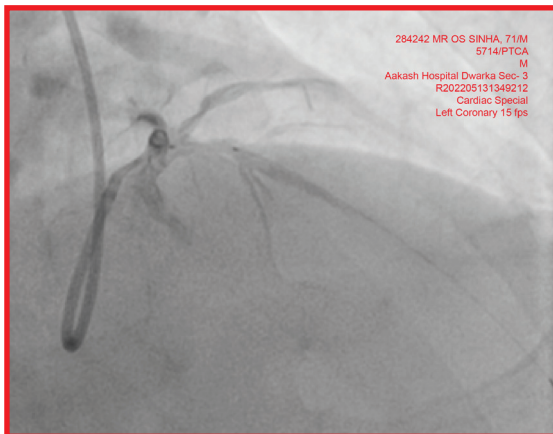
- CABG v/s multi-vessel PCI

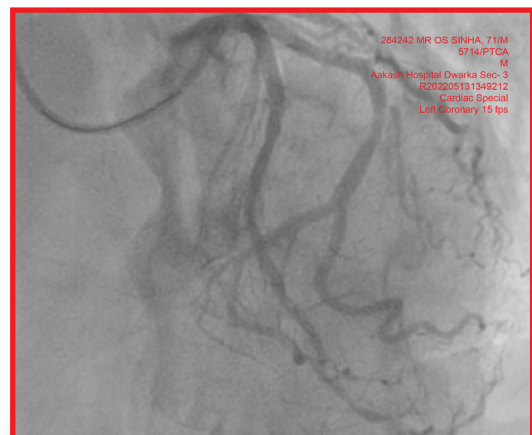
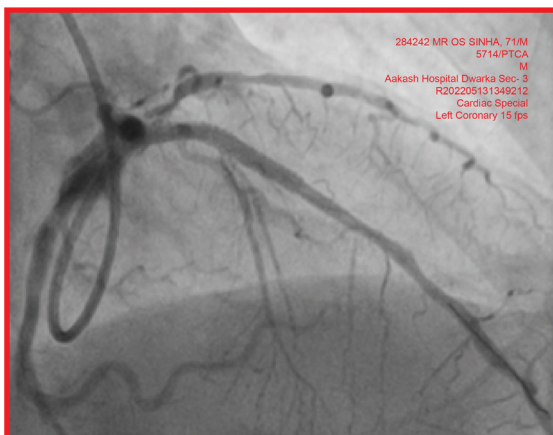
CASE PROFILE SERIES

Procedure done - Patient opted for PCI. He was taken up for Percutaneous Coronary Intervention (PCI) and Left Anterior Descending Artery (LAD).

Initially Wolverine Cutting Balloon was used but after multiple dilatations it did not help much. Then high-pressure balloon **OPN NC 3 x 10** was used, and lesion was successfully dilated at 30 ATM.

PRE-PROCEDURAL FINDINGS





DETAILS OF INVESTIGATION (FINDINGS) POST PROCEDURE:

POST PROCEDURE MANAGEMENT

Post procedure period was uneventful. Patient was later managed with anti-platelets, statin, anticoagulants, betablockers, antianxiety, antacids, and other supportive measures.

CONDITION AT THE TIME OF DISCHARGE

Patient improved symptomatically and was discharged in a stable condition with all vital signs and other parameters within acceptable range and with plan for staged PCI. Patients is doing well on Medical Therapy.

FOLLOW-UP

- Follow-up after 7 days in Cardio OPD with prior appointment with Dr. Amit Pendharkar/Dr. Aayush Singal with CBC and KFT reports.
- Report in emergency department in case of chest pain or difficulty in breathing, syncope or severe headache or any active bleed from any site.

DISCUSSION

- Three-vessel disease (3VD) is the most severe form of coronary atherosclerosis and patients with 3VD and/or left main stenosis are considered a high-risk group. As compared to less severe forms of CAD, 3VD is consistently associated with worse long-term prognosis.¹
- Many a times, the coronary lesions turn calcific and can become a rigid obstacle to optimal balloon and stent expansion. The conventional non-compliant (NC) balloons reach is 20 to 30 ATM limit that can be insufficient. Thus, when conventional NC balloons fail, the new high-pressure **OPN NC** balloon provides an effective and safe alternative strategy for the dilatation of rigid coronary lesions.²

References:

1. Máchal J, Pávková-Goldbergová M, Hlinomaz O, Groch L, Vašků A. Patients with chronic three-vessel disease in a 15-year follow-up study: genetic and non-genetic predictors of survival. *Medicine (Baltimore)*. 2014 Dec;93(28):e278.
2. Secco GG, Ghione M, Mattesini A, Dall'Ara G, Ghilencea L, et al. Very high-pressure dilatation for undilatable coronary lesions: indications and results with a new dedicated balloon. *EuroIntervention*. 2016 Jun 20;12(3):359-65.



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