

C006

Oops, it's snap!

INTRODUCTION

Entrapment and fracture of coronary wire is rare. The incidence is approximately 0.1% to 0.2%. The management of patients with retained coronary wires are difficult. Over the years, there are many case studies on fractured coronary wire fragment retrieval, namely from conservative treatment, percutaneous retrieval and surgical removal. In some case studies, small fractured components were left within a chronically occluded coronary artery without sequelae. Some cases required immediate surgical removal, eventually combined with bypass grafting may be indicated if percutaneous retrieval is unsuccessful or difficult.

OBJECTIVE

In this case, we would like to highlight a case of percutaneous retrieval of retained coronary wire following Rotational atherectomy.

PROCEDURE

We described a case of retained coronary wire. Our patient is a 60 years old Indian lady with cardiovascular risk factor of End stage renal disease, Diabetes Mellitus, Hypertension and Ischemic heart disease. She was referred from other hospital to our center for NSTEMI-ACS.

Coronary angiogram done via right femoral artery approach and showed calcified severe distal Left Main (LM) disease with calcified ostial Left Anterior Descending (LAD) artery lesion to proximal LAD lesion ranging from 60% to 95% disease and calcified ostial Left Circumflex artery(LCx) lesion of 99% disease. The Right Coronary Artery showed calcified moderate disease of mid RCA.

After discussion with respective consultant, we proceeded with percutaneous coronary intervention to LM/LAD (ostial LAD to mLAD) via provisional stenting approach. We used guiding catheter EBU 3.5 6F via right femoral approach. Asahi Rinato coronary wires were advanced into both LAD and LCx. We decided to protect the LCx because of very tight ostial lesion. This was followed by finecross microcatheter insertion into LAD and Rotawire insertion. Rotational atherectomy was done for LM/LAD lesion. We then predilate the lesion with Non Compliance (NC) Euphora balloon size 2.5x 15mm at 26 atm. Stent deployed with Resolute Integrity size 3.0x38 mm at 14 atm. We postdilated the stent with NC Euphora 2.5 mm x 15 mm at 26 atm.

Self-apposing stent, Stentys (X position S) 3.5/4.5 x 27 mm at 14 atm was deployed to LM lesion and postdilated with NC Euphora 4.0 x 15 mm at 24 atm. The final cineangiogram showed impingement of ostial LCx with flow was compromised.

Later, upon removal of Rinato wire from LCx, it was accidentally snapped. We tried to retrieve the fractured wire with Amplatz GOOSE NECK microsnare kit for few times but failed. The

procedure was abandoned in view of long procedure hours, huge amount of contrast had been used and the patient was hemodynamically stable. We decided to reattempt fractured coronary wire retrieval later.

Unfortunately, 3 days later, patient developed NSTEMI-ACS and the ECG changes showed ST depression in lateral leads. Urgent relook coronary angiogram was done and showed no coronary blood flow in LCx and patent LM/LAD stents. Retained coronary wire retrieval reattempted. We used guiding catheter EBU 3.0 7F via 7F femoral sheath. We wired LAD with Asahi Sion Blue. We had difficulty to wire the LCx and multiple wires were used namely Rinato, Fielder XT-R and finally succeeded with Asahi Sion Black. The Amplatz GOOSE NECK microsnare kit then delivered into LCx via Terumo Progreat microcatheter. Eventually, the retained coronary wire was successfully retrieved. We then predilated the LCx ostial lesion with multiple balloons which were Tazuna 1.5 x 15 mm at 16 atm, Tazuna 2.5 x 15 mm at 14atm and predilated the LM with Accuforce 4.0 x 15 mm. the LM/ LCx lesion was stented with Orsiro 2.75 x 18mm. Finally, kissing balloon done for both LM/LAD and LM/LCx lesions with Accuforce 4.0 x 15 mm and Tazuna 2.5 x 15 mm. We also did POBA (Plain old balloon angioplasty) to ostial LM with Accuforce 4.0 x 15mm.

RESULT

TIMI flow III was established in both LM/LAD and LCx. There were no ECG changes thereafter. However, the patient developed Hospital Acquired Pneumonia and she had few days hospital stay. She was discharged well.