

1054 Wandering stent (Dislodged stent)

Introduction of the case

61 year- old gentleman presenting with left sided chest pain associated with shortness of breath for 2 days. Known to have type 2 diabetes and dyslipidemia on regular medications. Chronic active smoker of 40 packs/year and strong family history of coronary artery disease was noted. Previous PCI to LAD was done 2 years ago. ECG showed ST segment depression over inferior and lateral leads. Blood results noted raised cardiac enzymes. Echocardiogram revealed left ventricular ejection fraction of 40% with global hypokinesia.

On examination, the patient was severely dyspneic, tachypneic with cold and clammy extremities. Blood pressure recorded as 90/ 45 mmHg, heart rate -110 bpm. Bilateral crepitation over both lung fields on auscultation. He was intubated in view of severe respiratory distress with Type 2 respiratory failure. Urgent percutaneous coronary intervention for cardiogenic shock with acute coronary syndrome.

Procedure, technique and equipment's used

Diagnostic angiogram was done from right radial approach with 6F sheath. Patent stent in left anterior descending artery with diffusely diseased right coronary artery and calcified mid left circumflex artery were identified.

Proceed with PCI to RCA with JR 3.5 as guiding catheter and runthrough wire. Plain old balloon angioplasty with balloon 2.0 x 20 mm, along the right coronary artery. After POBA, no flow was noted from proximal RCA most likely due to dissection. Repeated balloon angioplasty with non-compliance balloon 2.5 x 20 mm failed to improve the flow. Drug eluting stent 2.5x 48 mm from proximal to mid right coronary artery followed by intracoronary glyceryl trinitrate and verapamil established TIMI III flow.

PCI to LCX was proceeded with plain old balloon angioplasty with 2.0 x 20 mm balloon to mid and proximal left circumflex artery. In view of calcified lesion in LCX, scoring balloon was done in preparing the lesion. Somehow, it was failed to cross the stent. Upsize the balloon to 3.0 x 15 mm and attempted to cross the lesion with the stent again. Buddy wire technique failed to cross the stent. After few attempts, flow limiting dissection was noted. Upon withdrawal, the stent was no more attached with the balloon. The stent was dislodged.

Fluoroscopic examination to head and neck for dislodged stent to carotid and cerebral artery. Finally, the dislodged stent was hanging in the remaining guide wire at the level of arch of Aorta. Attempting to engulf the stent together with wire into the guiding catheter was failed. By using Ampaltz Goose Neck, attempt to snare the dislodged stent was also not succeeded.

Dissection in LCX improved with balloon angioplasty and TIMI III flow established. Dislodged stent was left hanging in the root of aorta.

CT aortogram was done to identify the dislodged stent and it was found in abdominal aorta at the level of renal artery, partially embedded in the intima. Anticoagulant with low molecular weight heparin for 5 days. Aspirin 100 mg od and ticagrelor 90 mg bd were given as antiplatelet therapy. From femoral approach, by using 7 F sheath, dislodged stent was managed to retrieve with the use of Ampaltz goose neck catheter. Patient was discharged well. Repeated echocardiogram showed LVEF 55%. The patient has been doing well with no angina symptoms. No history of hospitalization for acute coronary syndrome was noted over 2 years follow up.

Learning points

1. To deal with no flow after balloon angioplasty.

2. To prepare calcified lesion properly before attempting to cross the stent.
3. Multiple attempts to cross the stent to calcified lesion may lead to stent dislodgement even though it is rare nowadays.
4. Need to familiar with various retrieval techniques for dislodged stent.
5. Crucial to check the carotid and cerebral arteries for proximal migration of the stent.