



A difficult graft PCI: guiding the way

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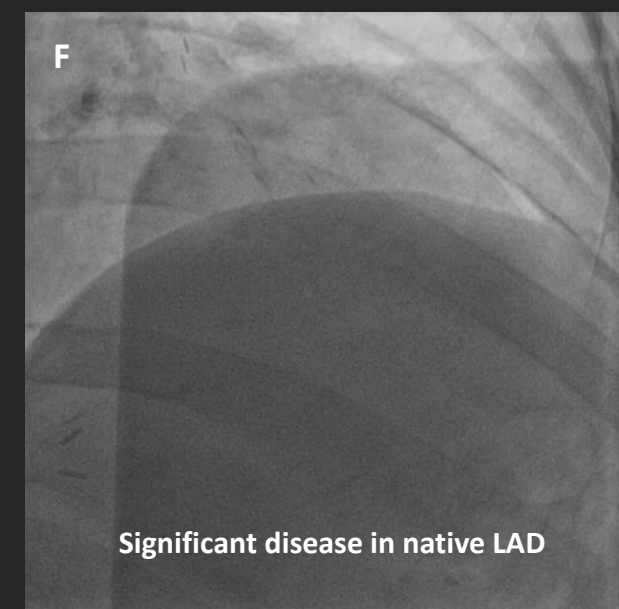
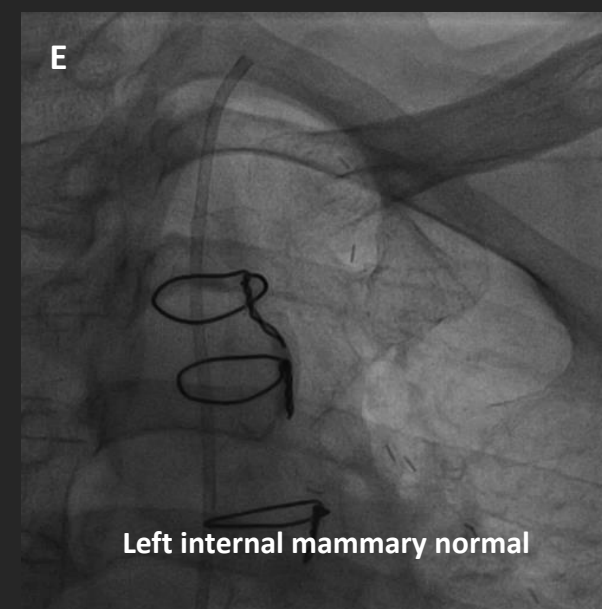
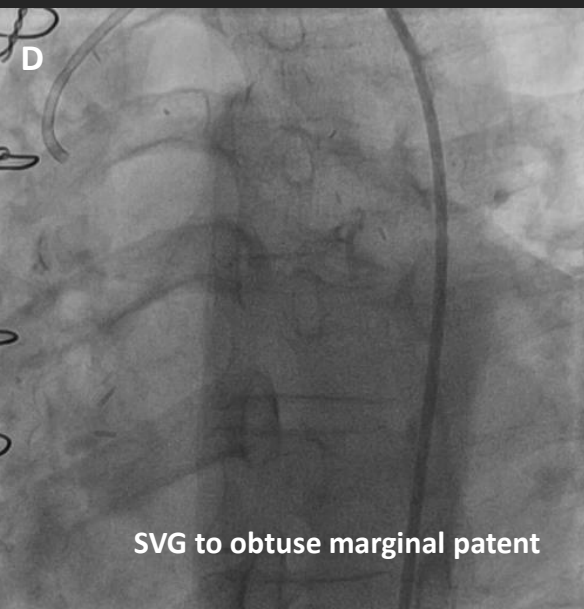
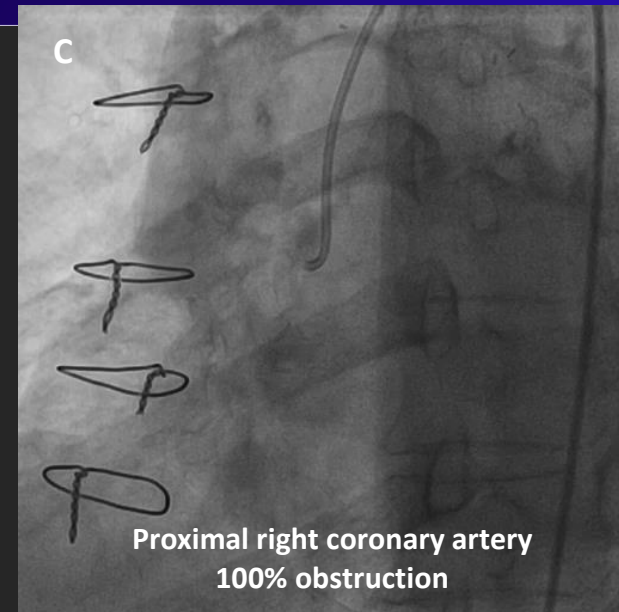
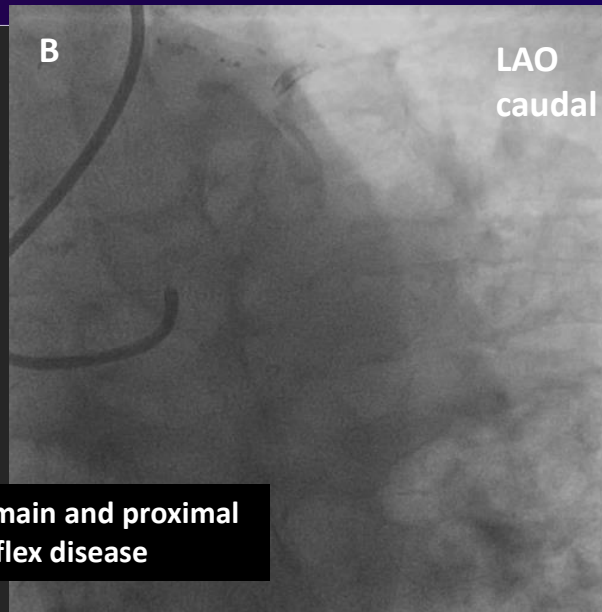
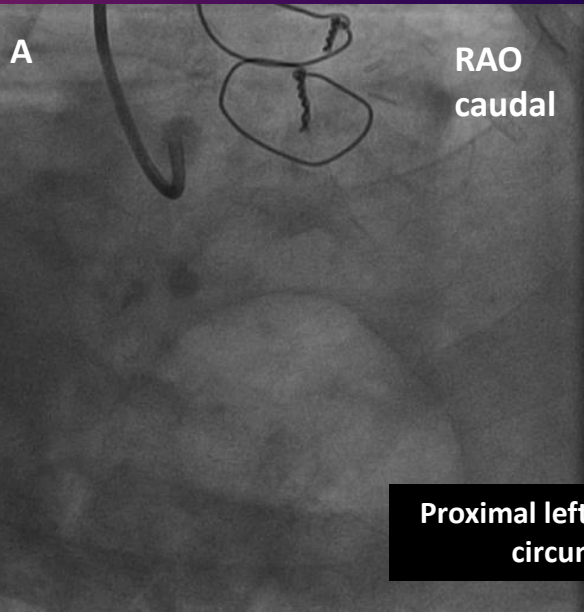
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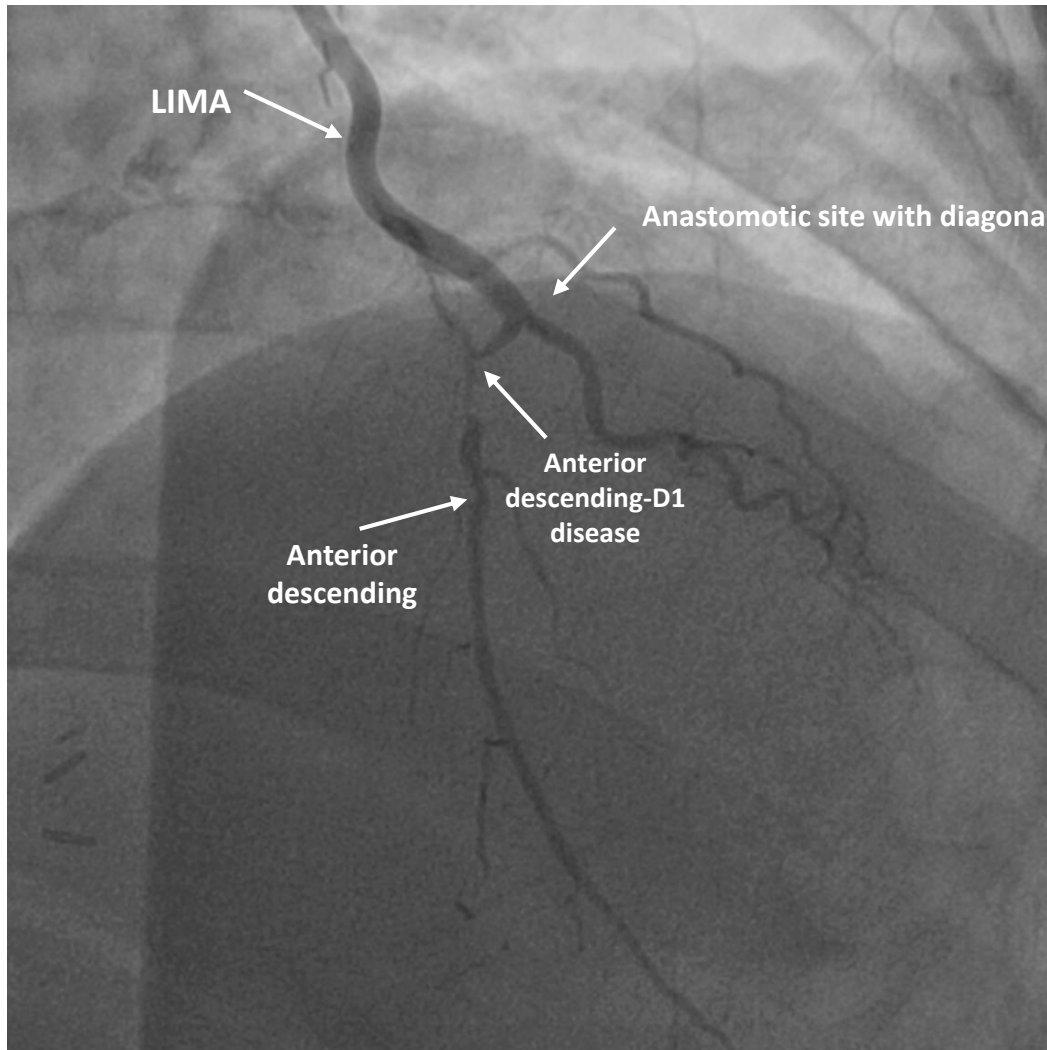
Case Summary

- 76-year-old man with diabetes and hypertension
- Off-pump CABG—17 years back
 - Left internal mammary to a large diagonal
 - SVG to obtuse marginal
- Recent presentation: NSTEMI
- Angina on exertion class II
- LVEF = 45%

Coronary Angiogram



Native Left Anterior Descending



Anticipated difficulties

Tortuous left internal mammary
 Difficult wiring because of odd angles
 Small vessel size
 Which portion to stent?

A

Both arteries wired with Sion blue

B

2 x 10 mm balloon could not pass

C

Serial dilation with 1.5 x 10; 2x 15;
2.5 x 20 balloons

D

Angiogram after balloon angioplasty

E

Tried passing 2.25 x 18 mm DES

F

Guidewire prolapsed out

PCI of Left Anterior Descending



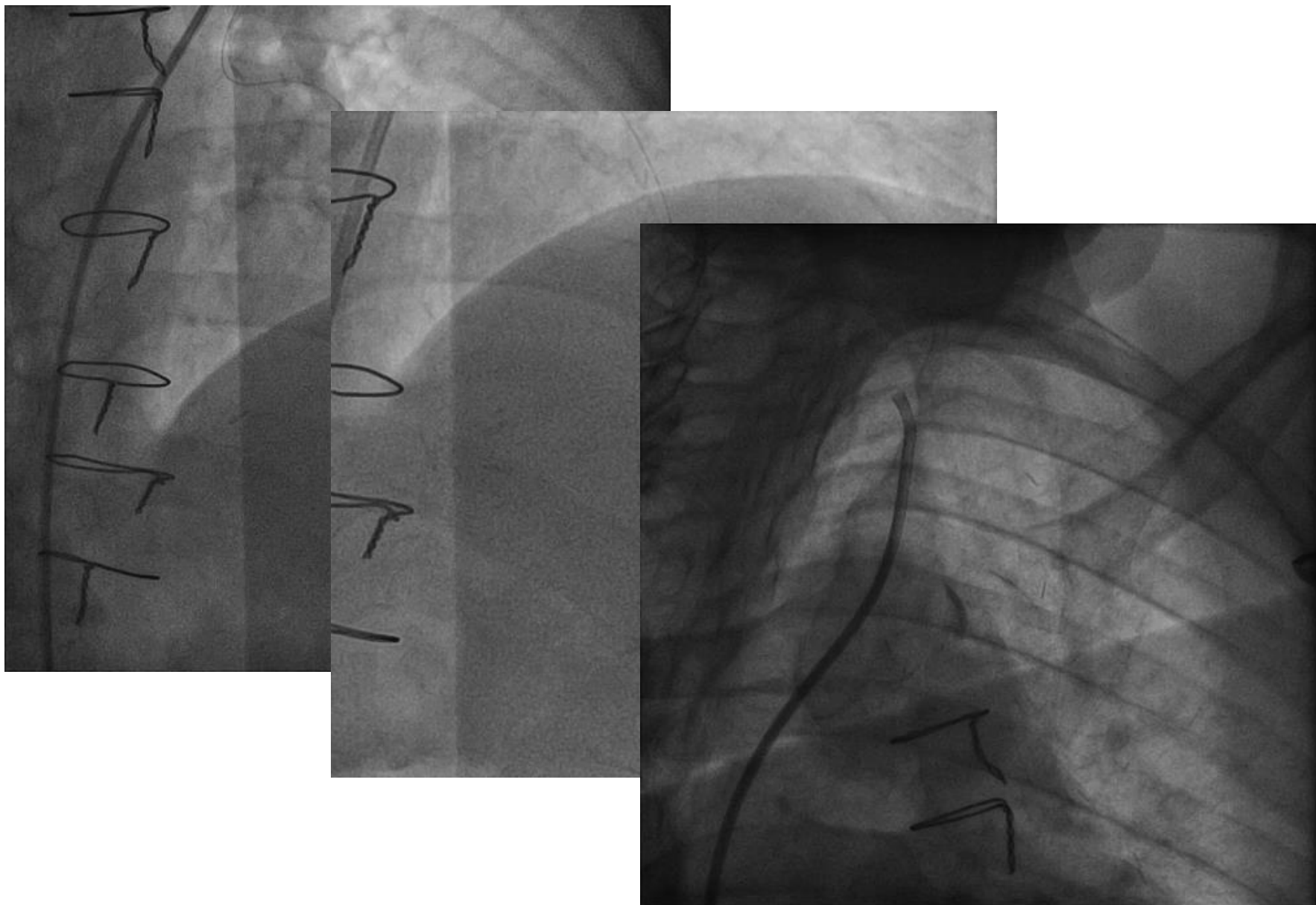
Mother-in-child catheter
tracked over stent shaft

Terumo Heartrail 5F straight catheter
Soft flexible tip, 120 cm length
Can be advanced with guidewire in-situ



Deep intubation over stent shaft

PCI of Left Anterior Descending



PCI of Left Main and Circumflex

6F, right radial access, JL guiding

2 x 15 mm balloon could not pass

Balloon dilatation with 1.5 x 15 mm balloon
2 x 15 mm balloon could not pass

Upgrading to 7F Backup Left Guide

PCI of Left Main and Circumflex

Balloon dilatation with 2 x 15 mm balloon
2.5 mm x 10 mm cutting balloon

Terumo 5F straight catheter
Mother-in-catheter
Bed preparation with

3.5 x 30 mm stent could not pass!!

PCI of Left Main and Circumflex

Right femoral, 7F Backup Left Guide
Tracking the mother-in-child catheter over the
balloon catheter

Deep intubation over balloon catheter

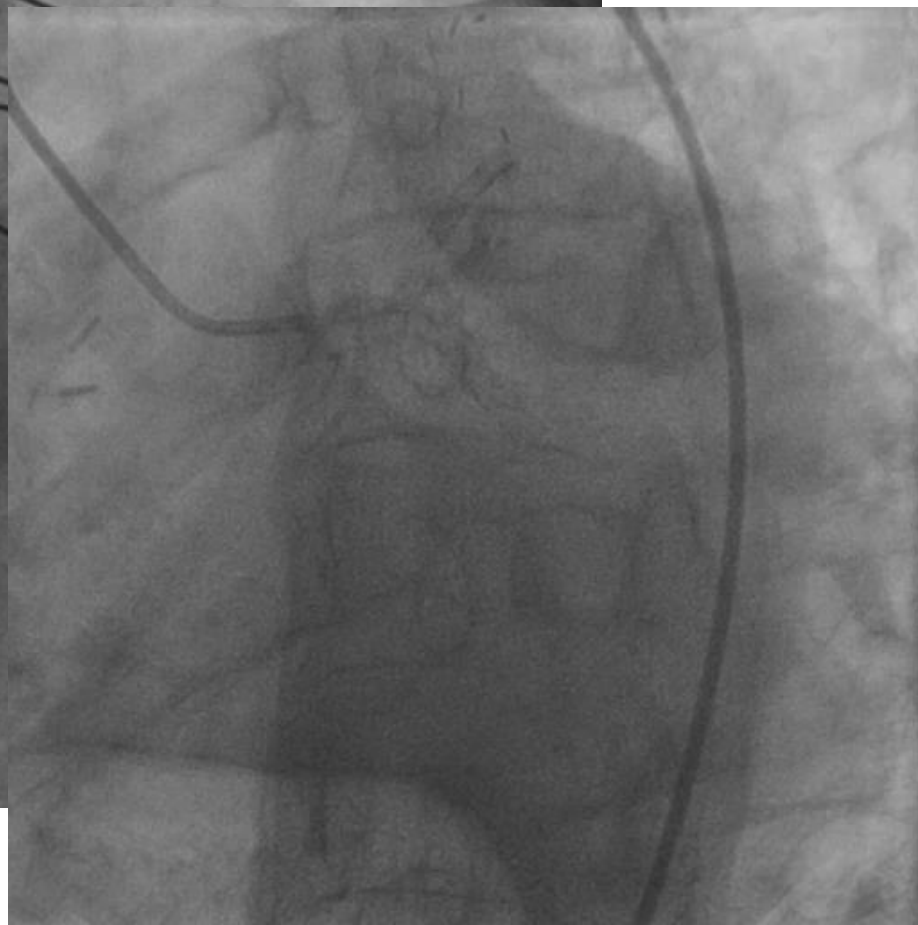
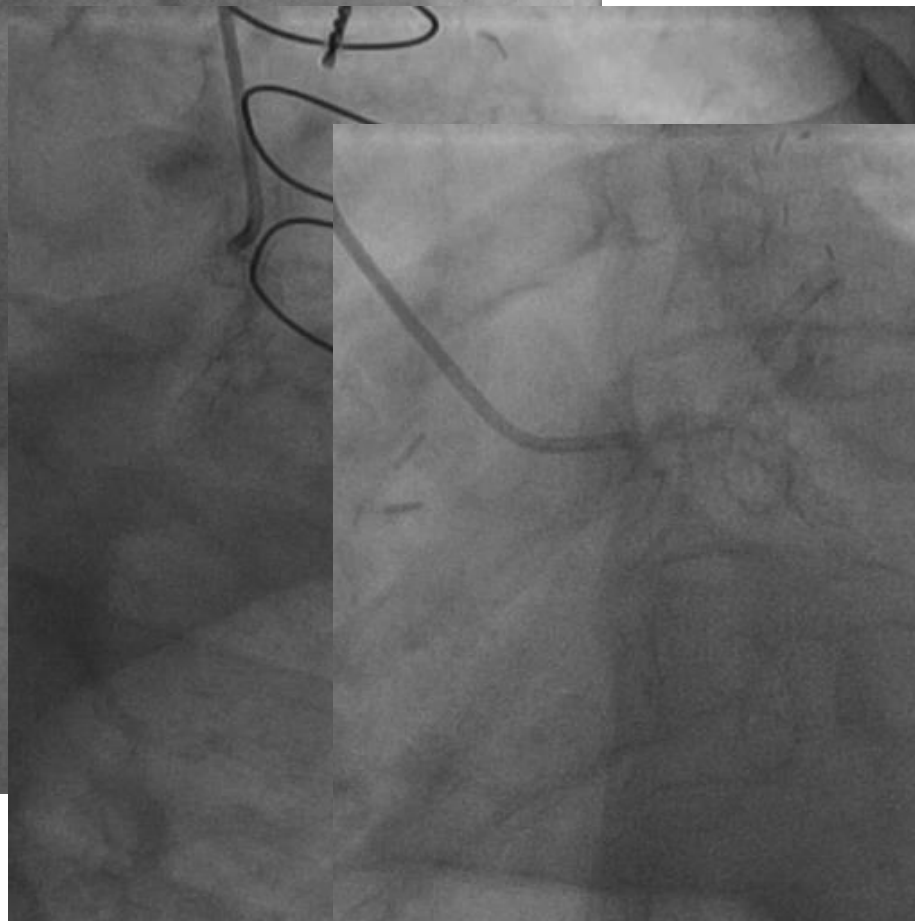
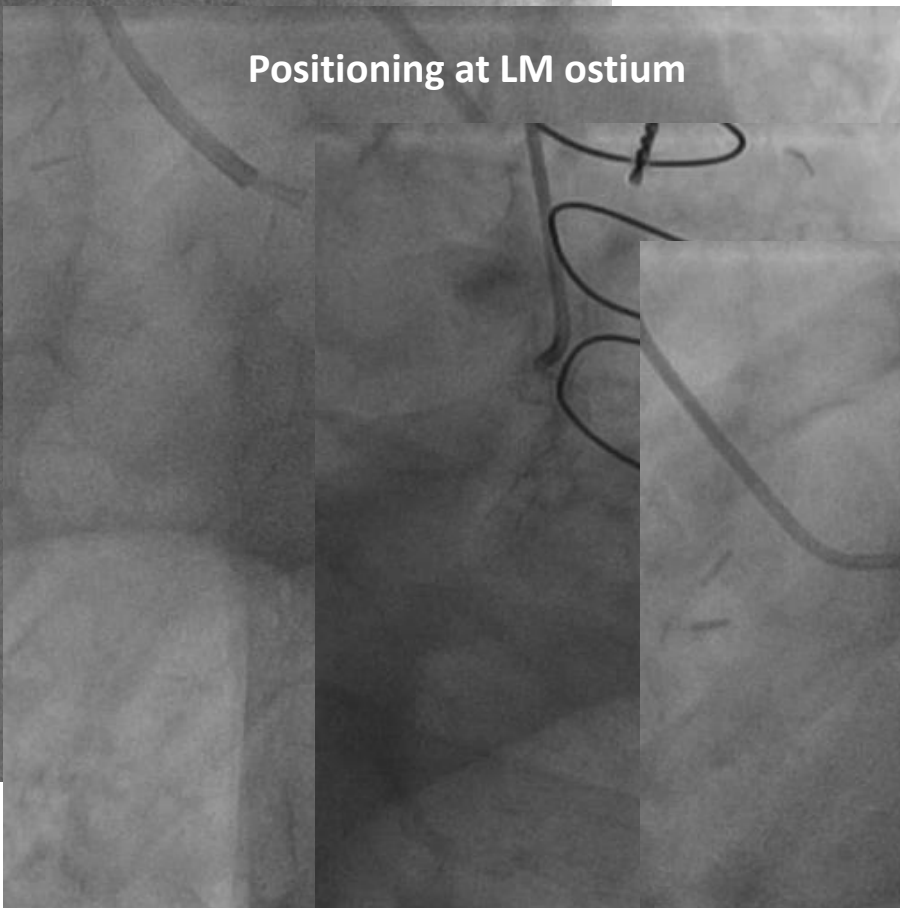
Balloon dilatation with 3 mm NC balloon

Distal stent positioning

PCI of Left Main and Circumflex

Proximal stent positioning

Positioning at LM ostium



Learning Points

Guide support for complex interventions

- Deep intubation of internal mammary traditionally considered dangerous
- Soft-tipped mother-in-child or guide extension catheters
- Advance over shaft of balloon catheter or by balloon-assisted tracking
- Guide-extension catheters can provide good support for proximal native vessel PCI if selective intubation is done using
 - Careful manipulation of guiding catheter
 - Tracking over balloon catheter