

**Spontaneous Dissection of Left Main, LAD and LCX
after Guide Cath Engagement: A nightmare in
cathlab to deal with**



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Patient Profile

- **ABS, 62M**
- **Recent Unstable Angina with a background of chronic stable angina for a long time**
- **CAD Risk Factor: Active Smoker, Dyslipidemia, HTN**

Angiogram

- **LM STEM: Normal**
- **LAD: Good size artery. 95% plaque associated with a big DG. Distal vessel has TIMI-II flow. DG is ok.**
- **LCX : Good size artery. Mainly represented by a big OM and ok. Distal circ small.**
- **RCA : Dominant artery. Mild changes. No obstructive problem. PDA and PLB ok.**

95% plaque associated with a big D1. Decision to go ahead with PCI on ad hoc basis

ABU BAKAR SIDDIQUE, 61 YRS

BD1/454529

M

Run 3 - Frame 1 / 76

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78.7kV, mAs, 908mA, 7ms

Zoom 100%



RAO -4.2°
Cranial 35.7°

L 138
W 187

12:46 PM
17/11/2013

ABU BAKAR SIDDIQUE, 61 YRS

BD1/454529

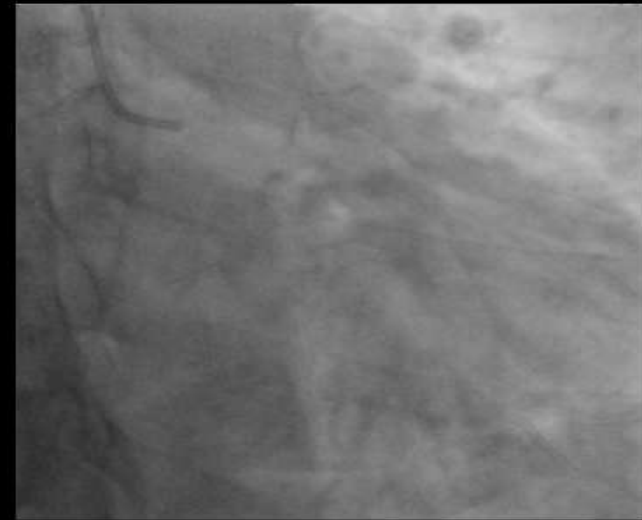
M

Run 2 - Frame 1 / 57

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73.1kV, mAs, 736mA, 5ms

Zoom 100%



RAO -14.9°
Caudal -28.7°

L 138
W 187

12:46 PM
17/11/2013

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M

Run 4 - Frame 1 / 75

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75kV, mAs, 829mA, 6ms

Zoom 100%



LAO 40.6°
Caudal -2.0°

L 138
W 187

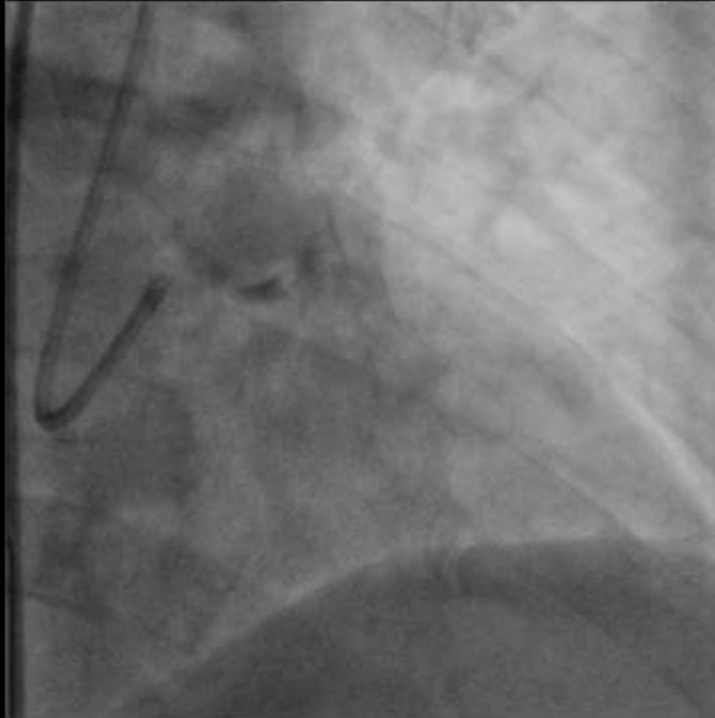
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After Guide catheter engagement: check shots showed dissection of LAD and LCX (likely extending from LMS)

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M
Run 5 - Frame 1 / 33

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74.7kV, mAs, 814mA, 6ms
Zoom 100%



RAO -32.4°
Cranial 22.5°

L 138
W 187

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 6 - Frame 1 / 26

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77.4kV, mAs, 923mA, 6ms
Zoom 100%



RAO -26.3°
Caudal -33.6°

L 138
W 187

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Further shots re-confirmed the extension of dissection

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M

Run 7 - Frame 1 / 22

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78.9kV, mAs, 905mA, 7ms

Zoom 100%

ABU BAKAR SIDDIQUE, 61 YRS

BD1/454529

M

Run 8 - Frame 1 / 25

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77.2kV, mAs, 925mA, 6ms

Zoom 100%



RAO -26.3°
Caudal -33.6°

L 138
W 187

RAO -26.3°
Caudal -33.6°

L 138
W 187

1:08 PM
17/11/2013

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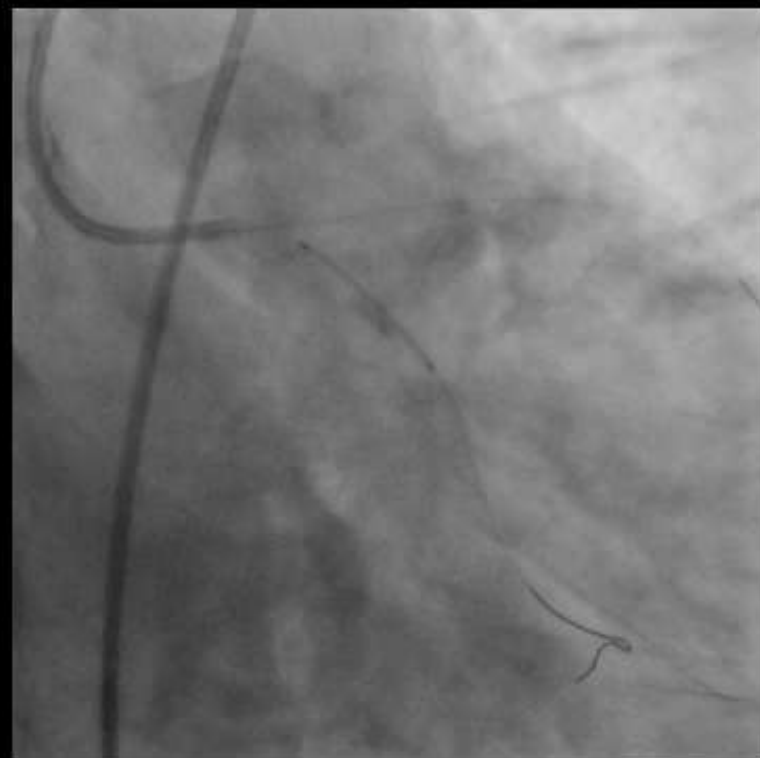
Immediately both LAD and LCX wired. LCX directly stented with a 3.0 mm x 22mm stent at 14 ATM and secured up to the ostium.

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 11 - Frame 1 / 28

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83.1kV, mAs, 860mA, 7ms
Zoom 100%

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 12 - Frame 1 / 71

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81.6kV, mAs, 876mA, 7ms
Zoom 100%



RAO -30.7°
Caudal -34.6°
L 138
W 187

RAO -30.7°
Caudal -34.6°

L 138
W 187

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LCX-post stenting. LAD then stented directly with a 3x 18mm stent directly at 14 ATM, covering ostium to proximal segment.

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M

Run 13 - Frame 1 / 16

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82.1kV, mAs, 870mA, 7ms

Zoom 100%

ABU BAKAR SIDDIQUE, 61 YRS

BD1/454529

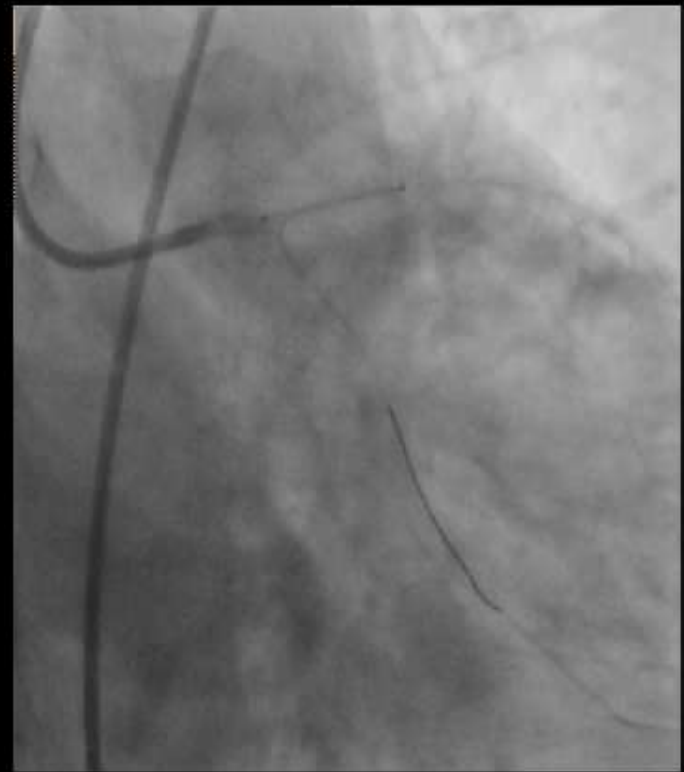
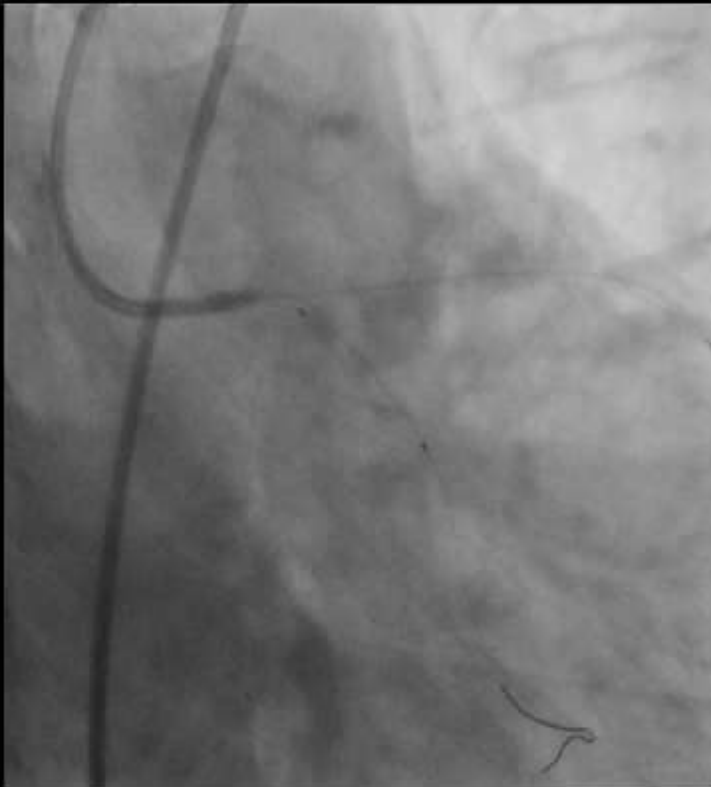
M

Run 19 - Frame 1 / 21

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84.3kV, mAs, 847mA, 7ms

Zoom 100%



RAO -30.7°
Caudal -34.6°

L 138
W 187

1:1
17/11

RAO -30.7°
Caudal -34.6°

L 138
W 187

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LAD proximal stent deployed and post dilated.

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M

Run 23 - Frame 1 / 22

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81.6kV, mAs, 876mA, 7ms

Zoom 100%

ABU BAKAR SIDDIQUE, 61 YRS

BD1/454529

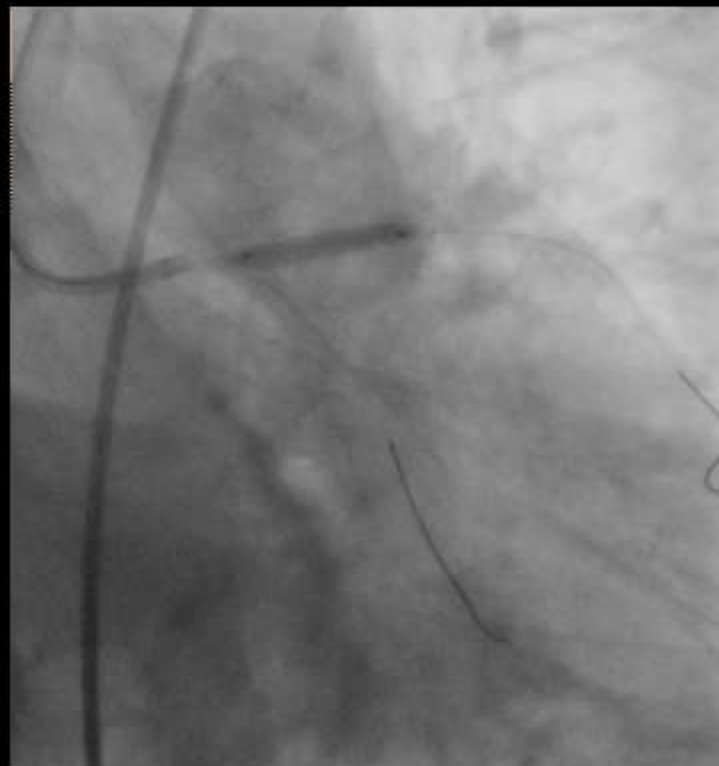
M

Run 24 - Frame 1 / 8

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80.2kV, mAs, 891mA, 7ms

Zoom 100%



RAO -30.7°
Caudal -34.6°

L 138
W 190

RAO -30.7°
Caudal -34.6°

L 138
W 190

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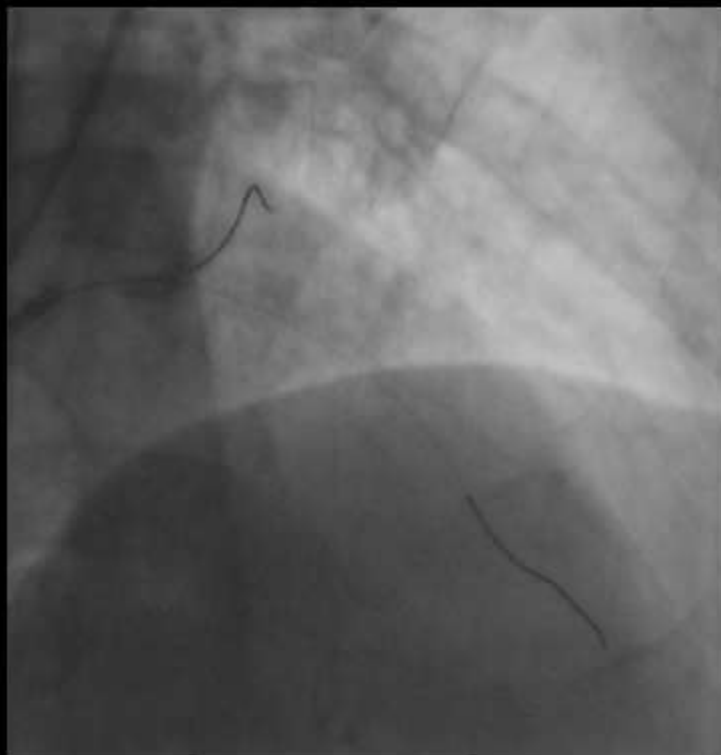
LAD flow established. Concentration given to treat the original culprit lesion. 3rd wire passed to main LAD, keeping the D1 wire in position. This lesion was pre dilated

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BD1/454529
M
Run 25 - Frame 1 / 37

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81.7kV, mAs, 875mA, 7ms

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 33 - Frame 1 / 5

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73.9kV, mAs, 778mA, 6ms
Zoom 100%



RAO -25.9°
Cranial 42.0°

L 138
W 190

RAO -14.2°
Cranial 37.0°

L 138
W 190

1:31 PM
17/11/2013

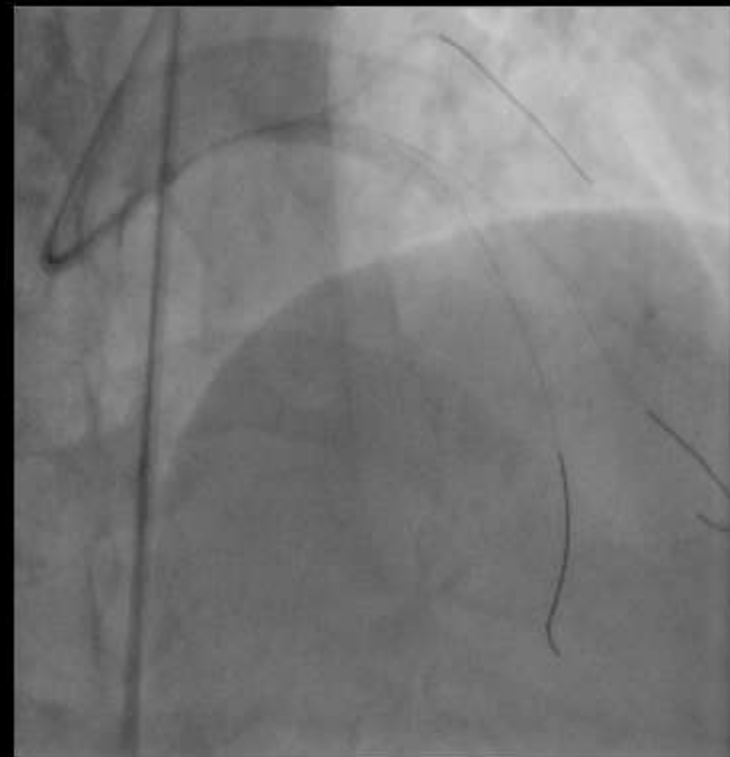
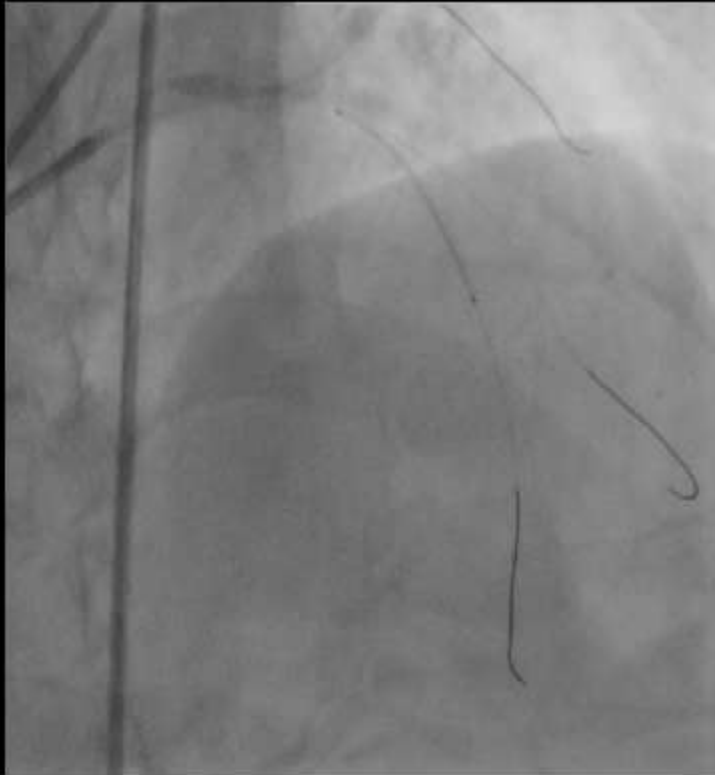
Proximal to mid LAD lesion (target lesion) stented with a 2.75 x 30 mm stent at 12-16 ATM.

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 40 - Frame 1 / 98

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84.9kV, mAs, 841mA, 7ms
Zoom 100%

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 43 - Frame 1 / 25

Apollo Hospitals Dhaka
81kV, mAs, 881mA, 7ms
Zoom 100%



RAO -21.4°
Cranial 39.4°

L 138
W 190

RAO -21.4°
Cranial 39.4°

L 138
W 190

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17/11/2013

LAD and LCX secured. Check shot showed the original dissection flap of the LM stem.

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M

Run 48 - Frame 1 / 48

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75.8kV, mAs, 870mA, 6ms

Zoom 100%

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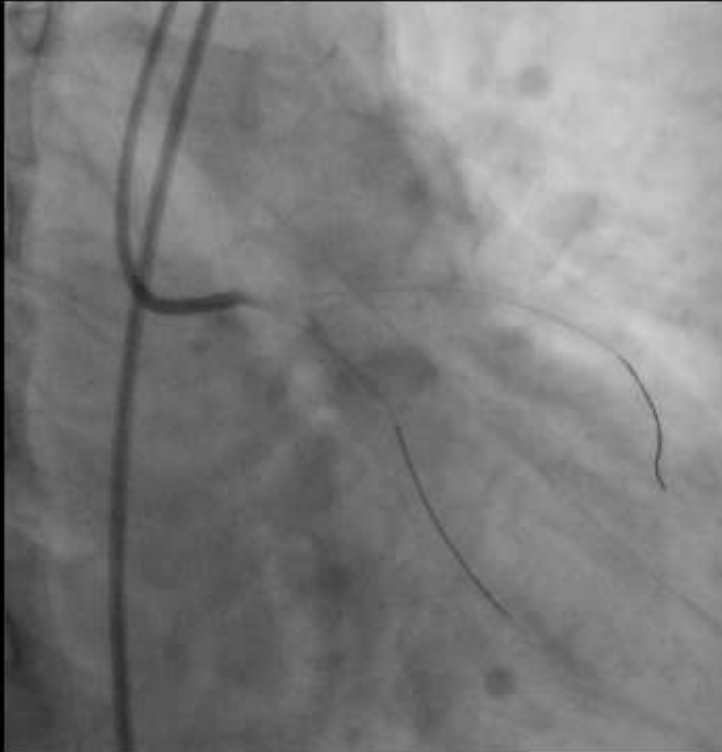
M

Run 49 - Frame 1 / 58

Apollo Hospitals Dhaka

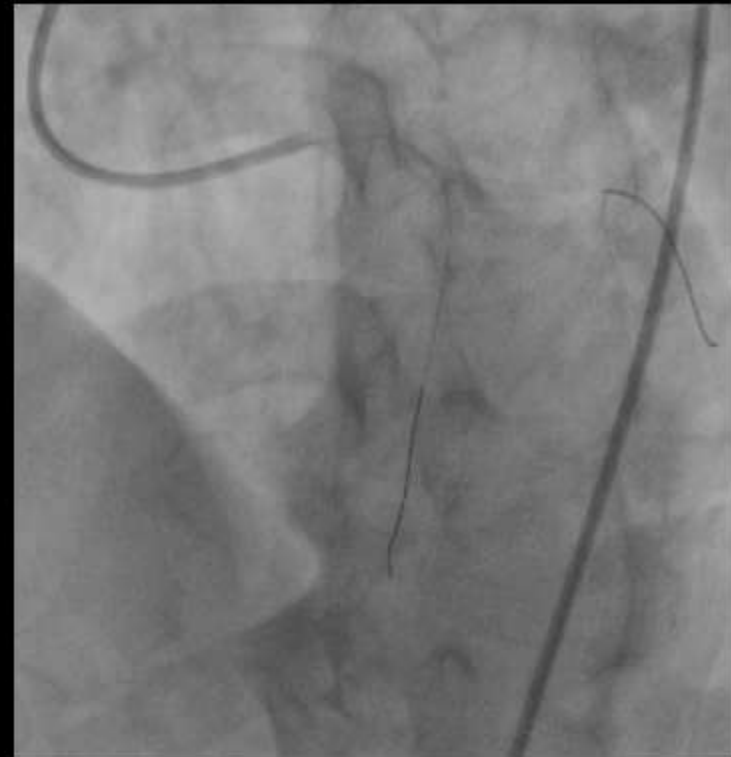
83.7kV, mAs, 854mA, 7ms

Zoom 100%



RAO -35.2°
Caudal -18.4°

L 138
W 190



LAO 20.0°
Cranial 25.7°

L 138
W 190

1:42 PM
17/11/2013

A 4th stent (3.5x15mm) then directly deployed at 16-18 ATM from LMS ostium to proximal LAD overlapping the proximal LAD stent, keeping LCX wire in situ. Further post-dilatation of LM ostium done with same balloon at 24ATM.

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M
Run 50 - Frame 1 / 26

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84.3kV, mAs, 847mA, 7ms

ABU BAKAR SIDDIQUE, 61 YRS
BD1/454529
M
Run 60 - Frame 1 / 50

Apollo Hospitals Dhaka
86.3kV, mAs, 828mA, 7ms
Zoom 100%



RAO -32.4°
Caudal -30.4°

L 138
W 190

LAO 4.0°
Cranial 36.7°

L 138
W 190

1:48 PM
17/11/2013

Final Cine showed well patent LM, LAD and LCX stent

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BD1/454529

M

Run 63 - Frame 1 / 32

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84.6kV, mAs, 844mA, 7ms

Zoom 100%



RAO -30.2°
Caudal -36.8°

L 138
W 190

1:49 PM
17/11/2013

Conclusion

- **At 8 months follow-up, patient doing well and remain asymptomatic with normal capacity.**
- **Dissection probably from engagement of guide catheter (although engagement was easy and straight forward)**

Take Home message

- **Easy case may not be easy always**
- **Straight forward guide catheter can cause dissection.**

Thank you for your patience of hearing

