

# LEFT MAIN PERFORATION

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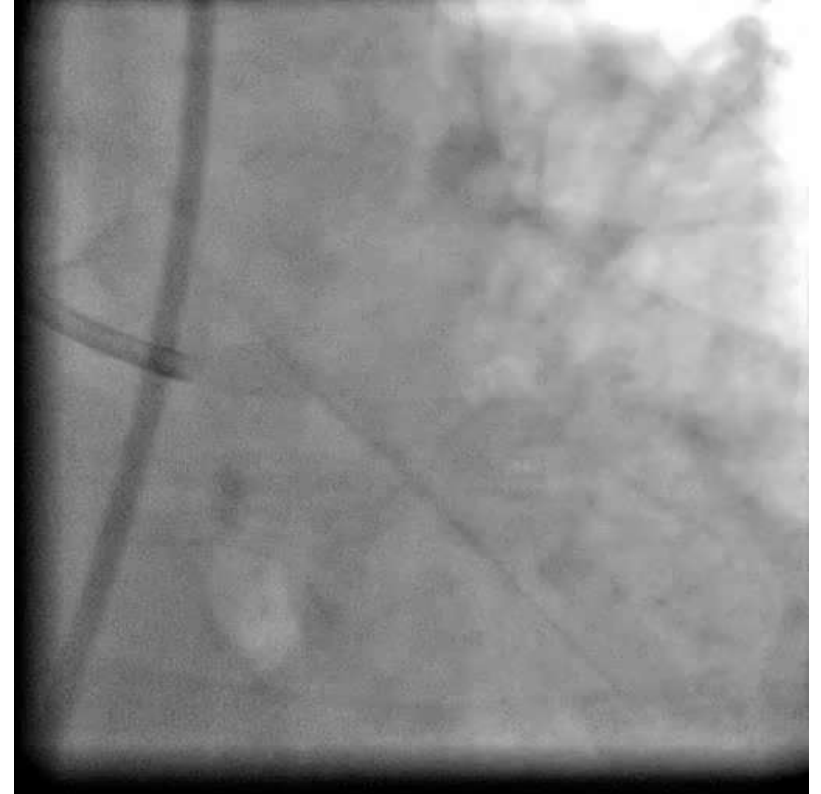
Sanjay Gandhi Postgraduate Institute of Medical Sciences

Lucknow

# Case

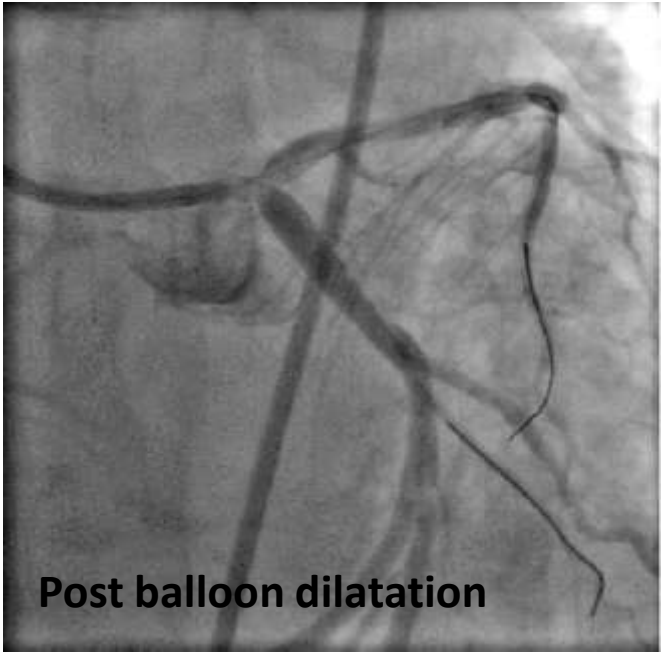
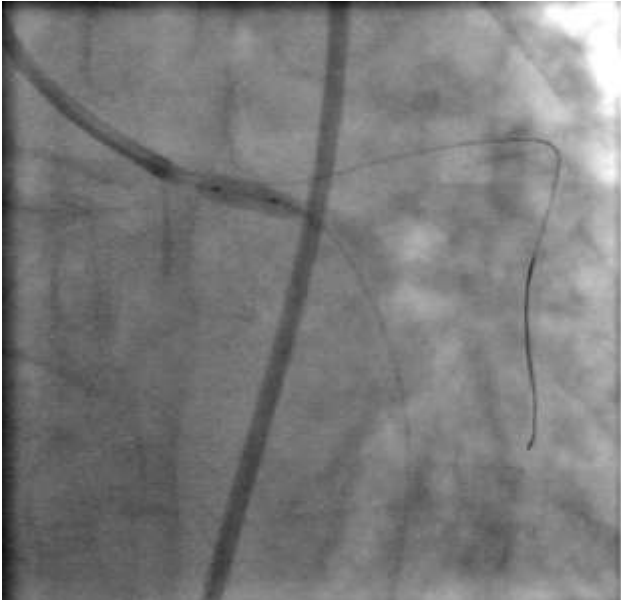
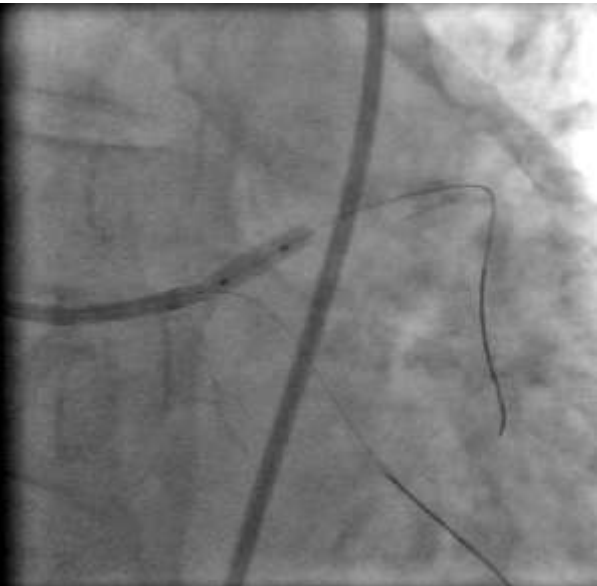
- 65 year/male
- Nondiabetic, Hypertensive
- Angina on exertion II for 3 months
- Normal LV systolic function
- CART LM distal bifurcation severe disease with left dominant system and mid LAD severe already Stented.

# LEFT MAIN SEVERE DISEASE



**Short LM, distal bifurcation severe disease**  
**Each individual vessel at least 4 mm**  
**Plan LM PCI with two stent strategy**  
**Possible SKS**

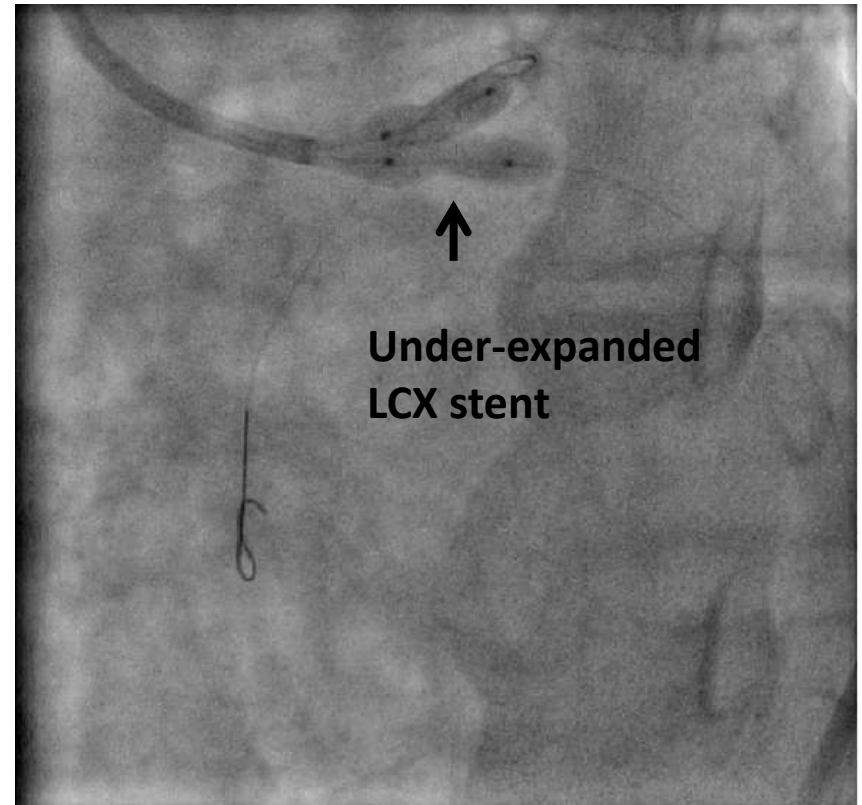
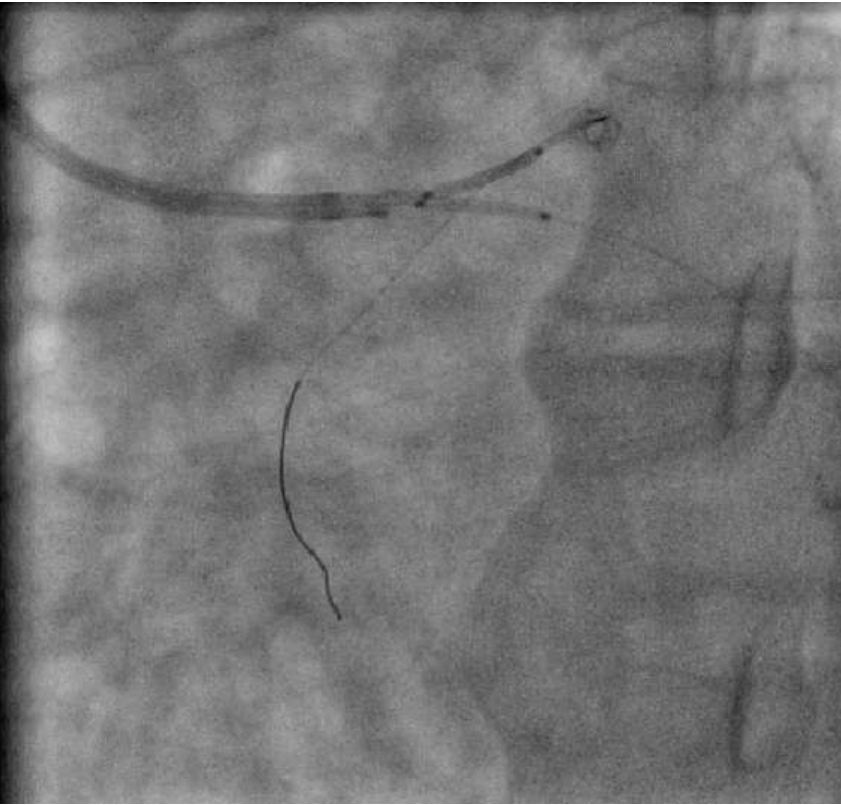
**Wire in LAD and LCX, 3.5mm balloon dilatation of ostial LAD and LCX**



# Result post balloon

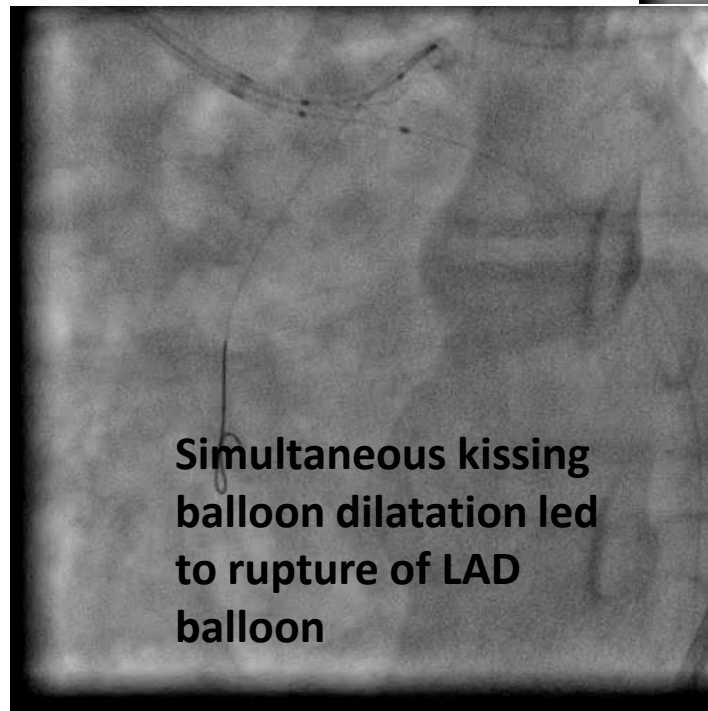
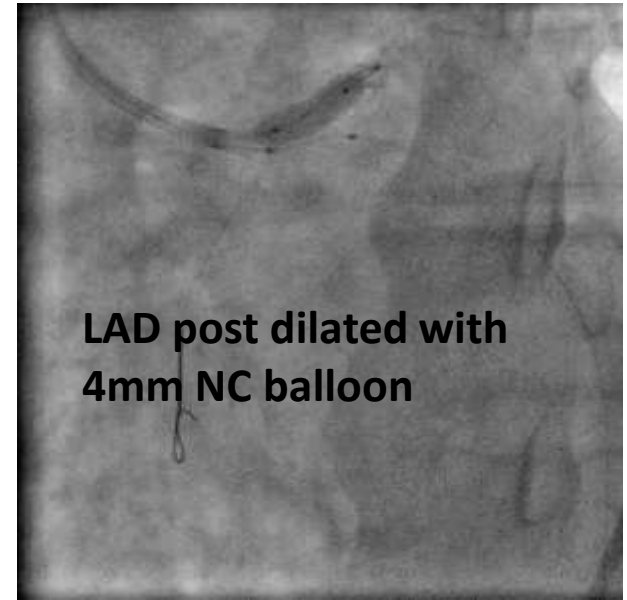
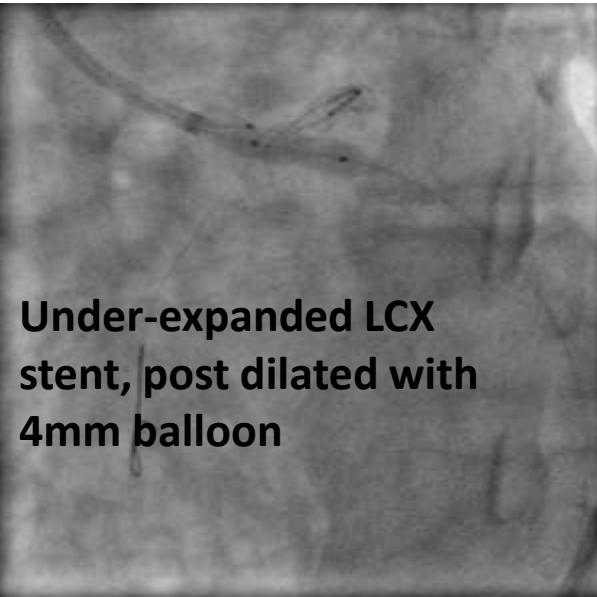


# BIFURCATION STENTING- SIMULTANEOUS KISSING STENT(SKS) TECHNIQUE

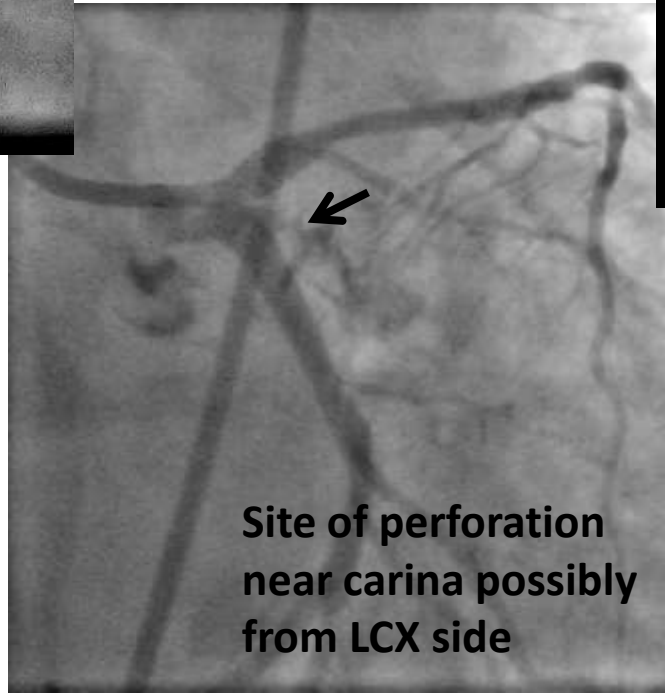
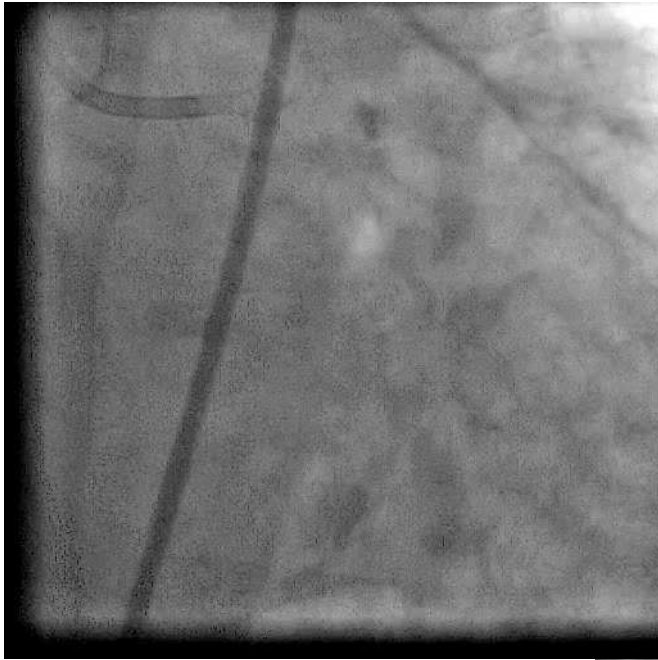


**Simultaneous stent deployment- 4 x 12 mm in LAD and 4 x 12 mm in LCX**

## Each vessel individually dilated with 4mm balloon



# Angio- Immediate post balloon rupture showed massive leak from LM bif region



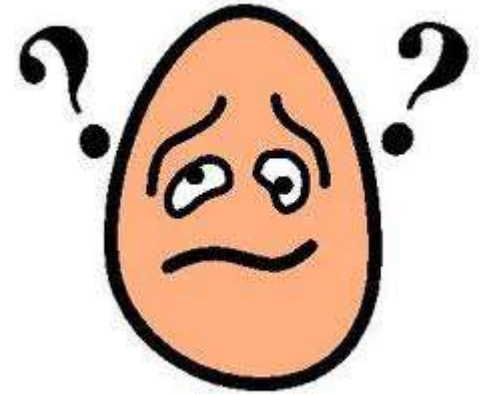


# What went wrong

- The SKS strategy
- Over sizing of Stents/ Balloons (4mmx2)
- Not done IVUS

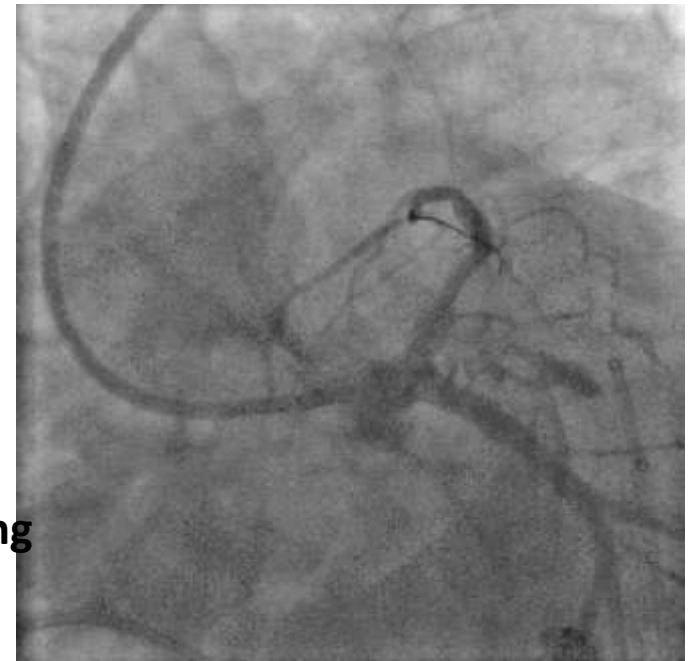
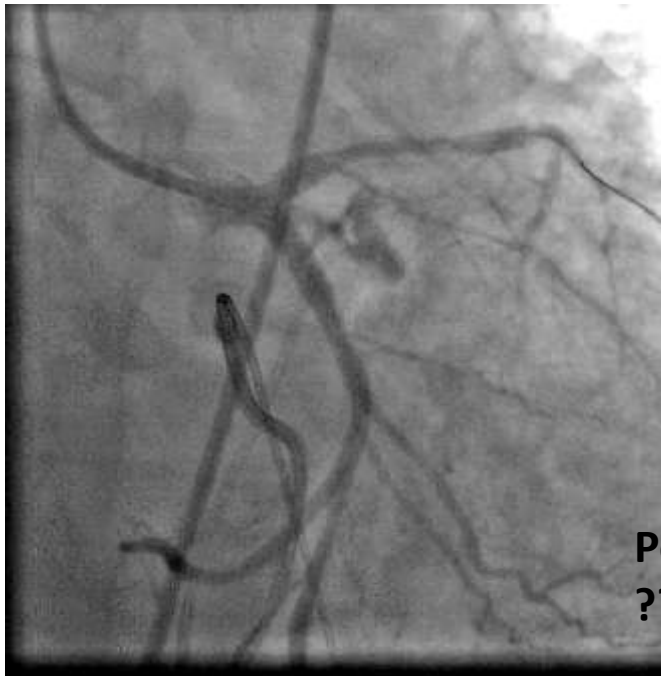
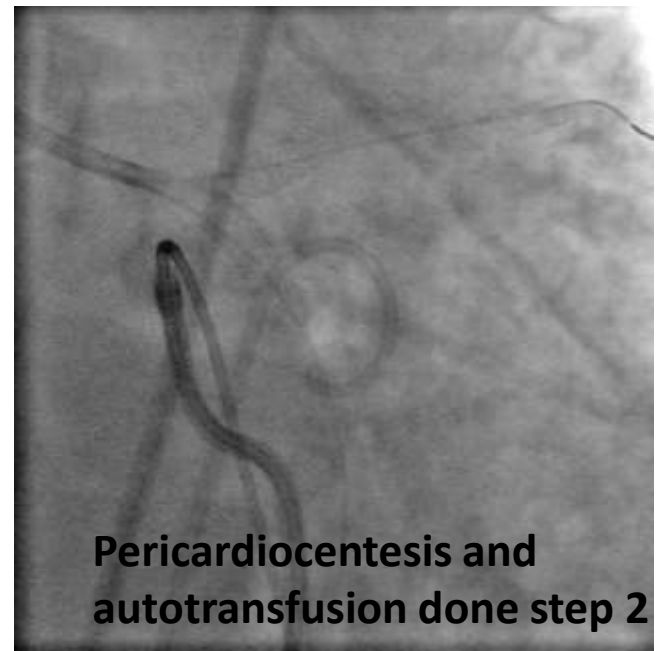
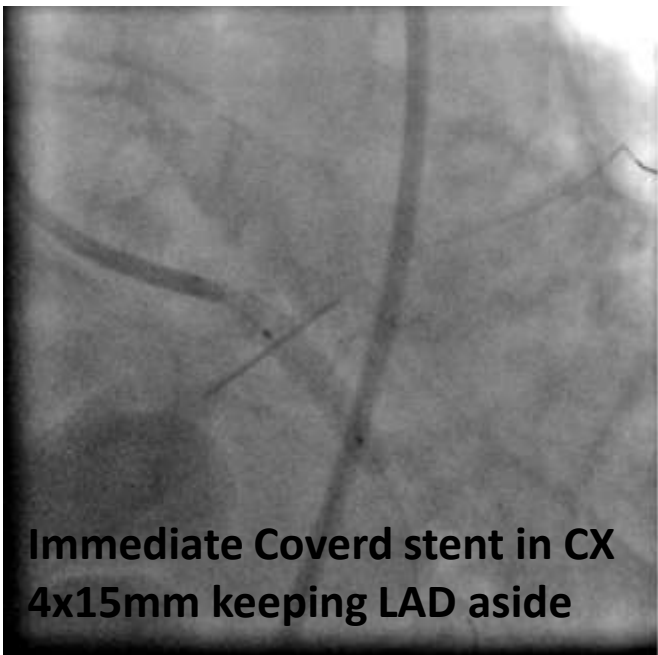
# WHAT'S NEXT?

- Prolonged balloon inflation at site of perforation?
- Implantation of Covered stent?
- Urgent CABG?

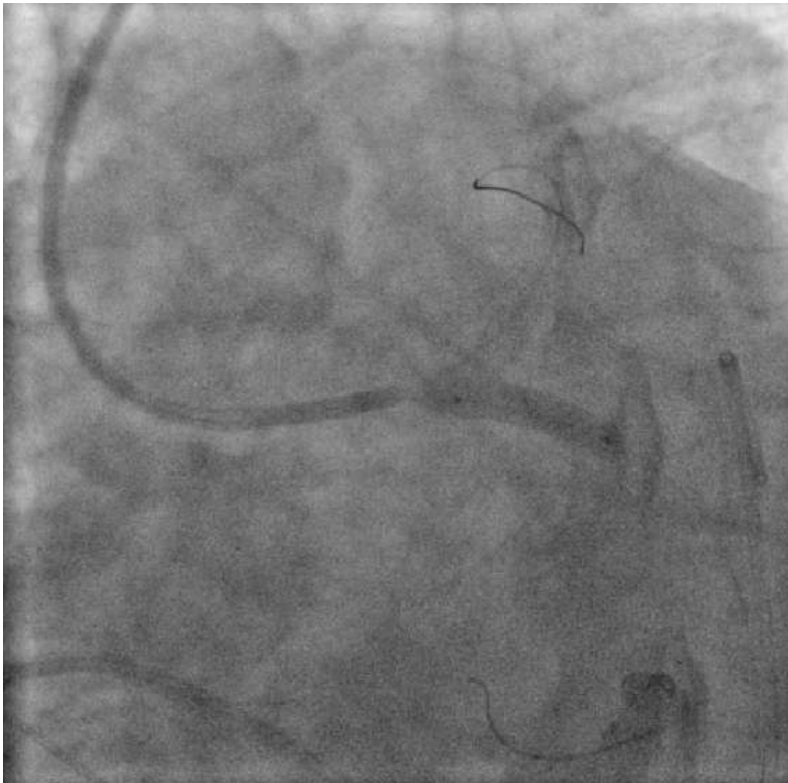


# The problems/Technical Challenges in handling perforation in LM region

- Covered stent can close the second division (CX/LAD) so almost not an option
- Prolonged balloon inflation may not be withstood by the patient (Global ischemia)
- Can not afford to close any of the daughter vessels (the entire heart depends on them)



2<sup>nd</sup> covered Stent a little more proximal in LCX because of the possibility of first stent having missed the site of leak



**2<sup>nd</sup> Covered stent 4 x 16 mm in LCX**



**Post 2<sup>nd</sup> covered stent in LCx leak still persisting**

# Balloon occlusion in Ostial CX Leak Still ON

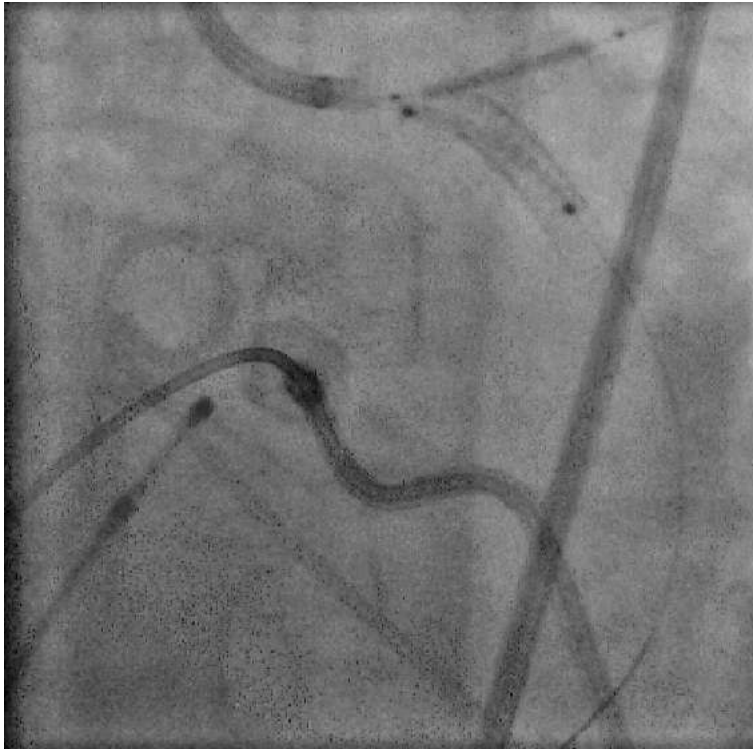


**WHERE IS the Leak From???**

**LM/carina**

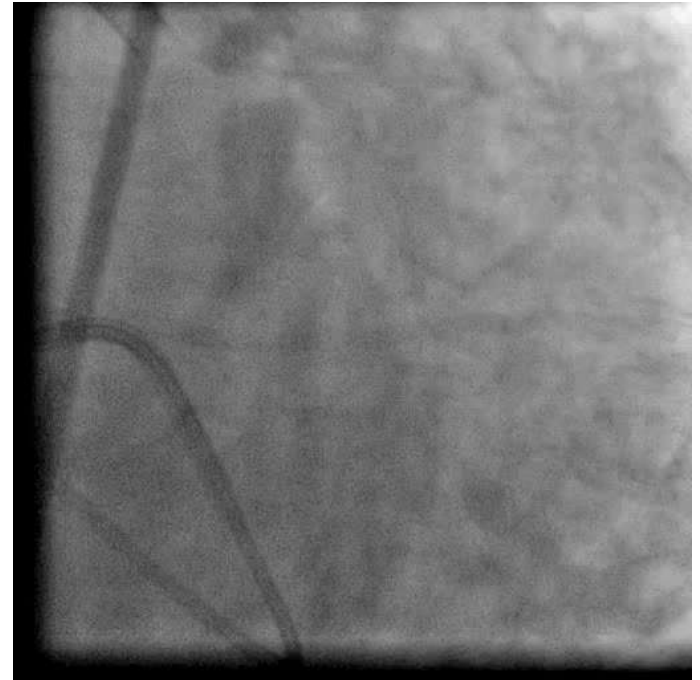
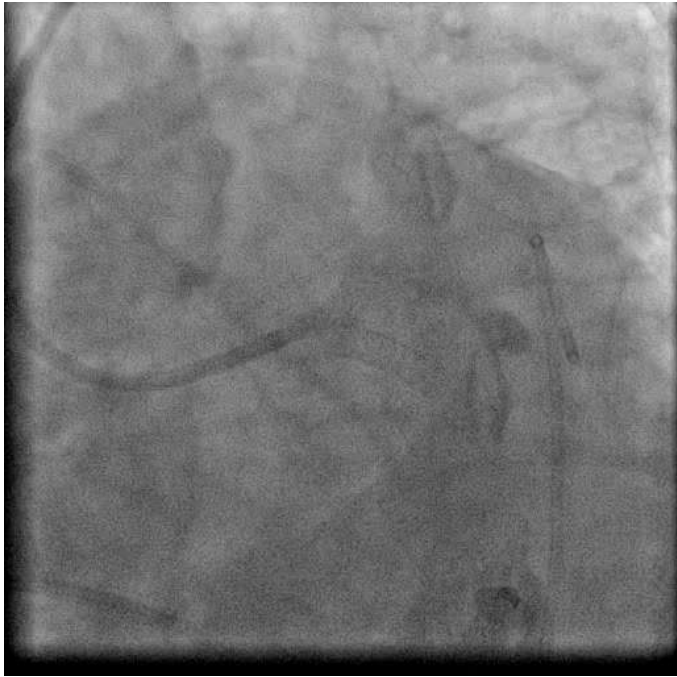
**What Next???**

# Simultaneous covered stent in LAD and LCX assuming leak from Carina



**Covered stent 3 x 15 mm in LAD and 4 x 19 mm in LCX deployed simultaneously to cover the carina**

# No respite- Final angios



**Post covered stent in LAD and LCX, vessels patent but leak still persisting**

**GC and BP maintained, Auto transfusion**

**Temp pacing done for back up**

**No other thinkable interventional approaches left**

**Sent for Urgent CABG**

**Patient expired during surgery because of continuous bleed**



# WHAT WENT WRONG?

- Wrong selection of case?
- Didn't do IVUS?
- Sizing of stent?
- SKS technique?



I think I oversized the LM part of stent  
4+4 gives LM approx. 5.3mm

Was there any other technique to salvage the patient



THANK YOU

*GOOD JUDGEMENT COMES  
FROM EXPERIENCE*

*AND*

*EXPERIENCE COMES FROM BAD  
JUDGEMENT*