



Bifurcation LCX-OM by DK Crush Technique



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Brief History

- 64 years patient
- Diabetic ,hypertensive ,dyslipidaemic,overweight
- Complaining of recurrent exertional chest pain , attacks of early morning dyspnea
- **ECG** : inverted T wave in inferior leads,
- **Echo** : hypokinesia of basal and mid both posterior and lateral walls , Moderate mitral regurge
- She had **coronary angiography** 3 days before coming to our centre that showed normal co-dominant RCA ,LAD normal ,LCX - big OM bifurcational lesion.

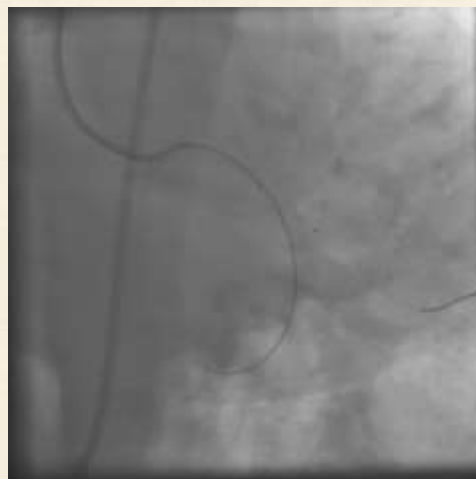
LCX wiring by Runthrough M.Fielder XT for main branch



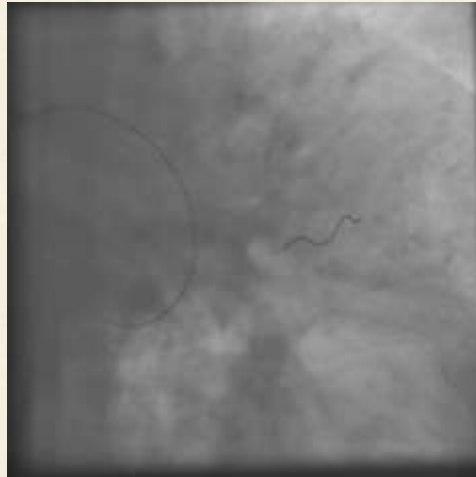
IVUS study for LCX,OM plaque



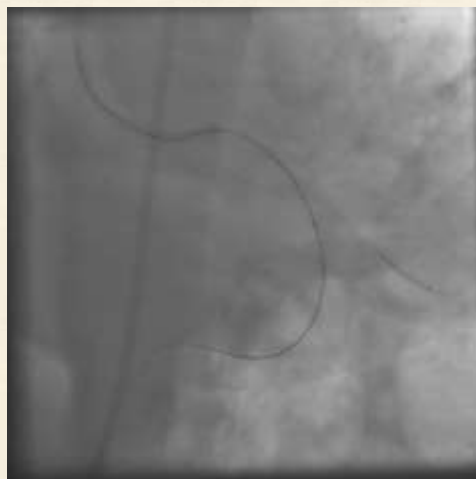
PTCA to osteal OM

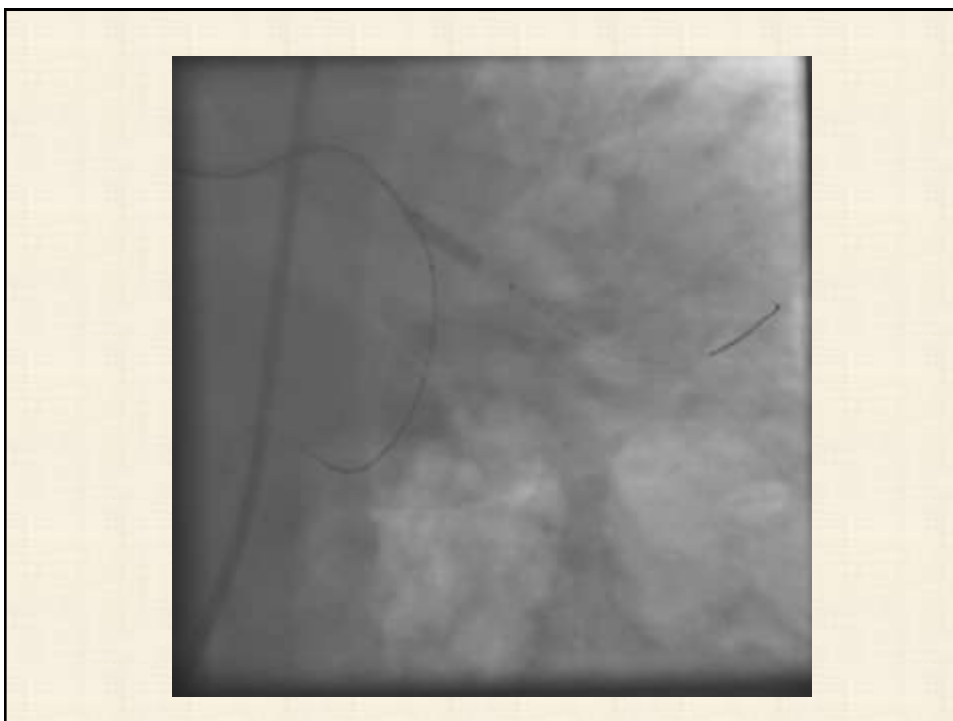
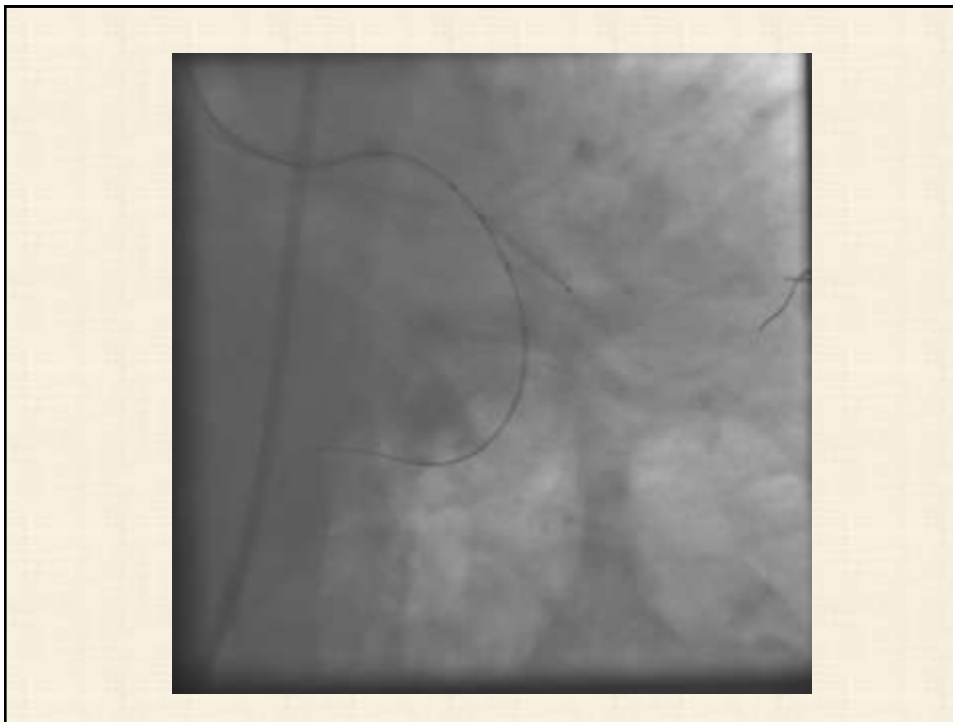


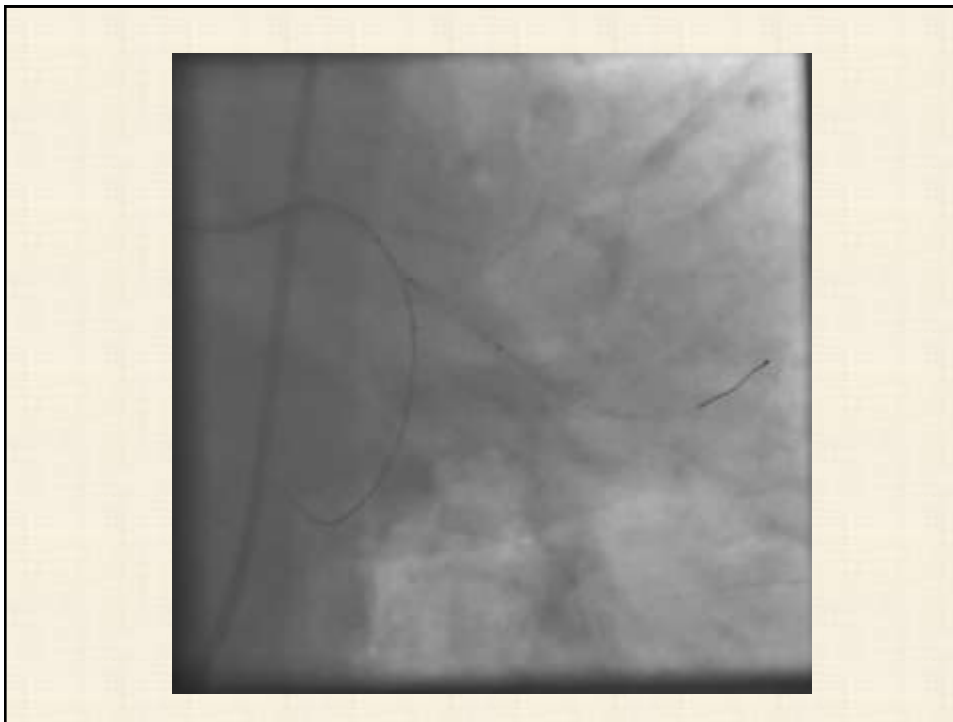
Post PTCA Angiography



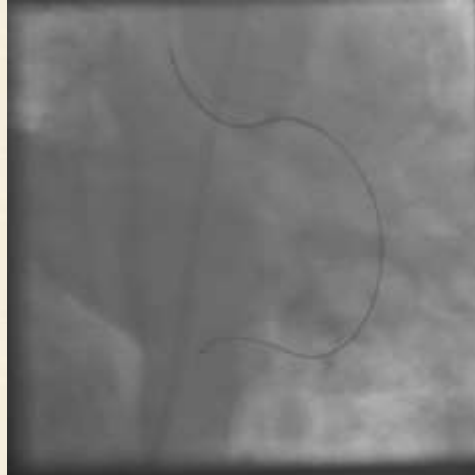
Osteal OM Stenting







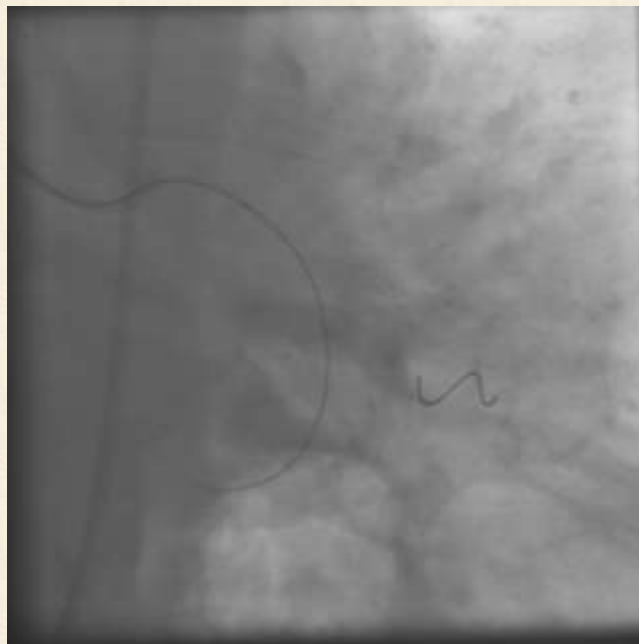
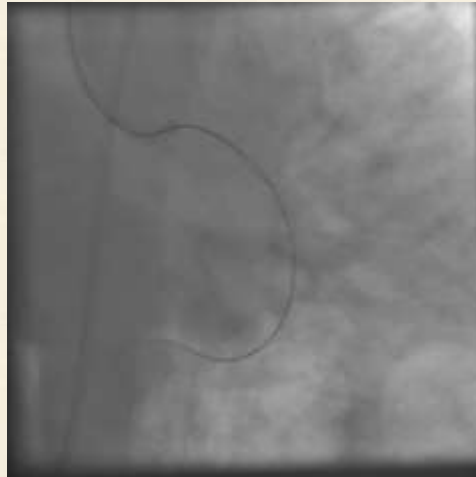
Post OM stenting

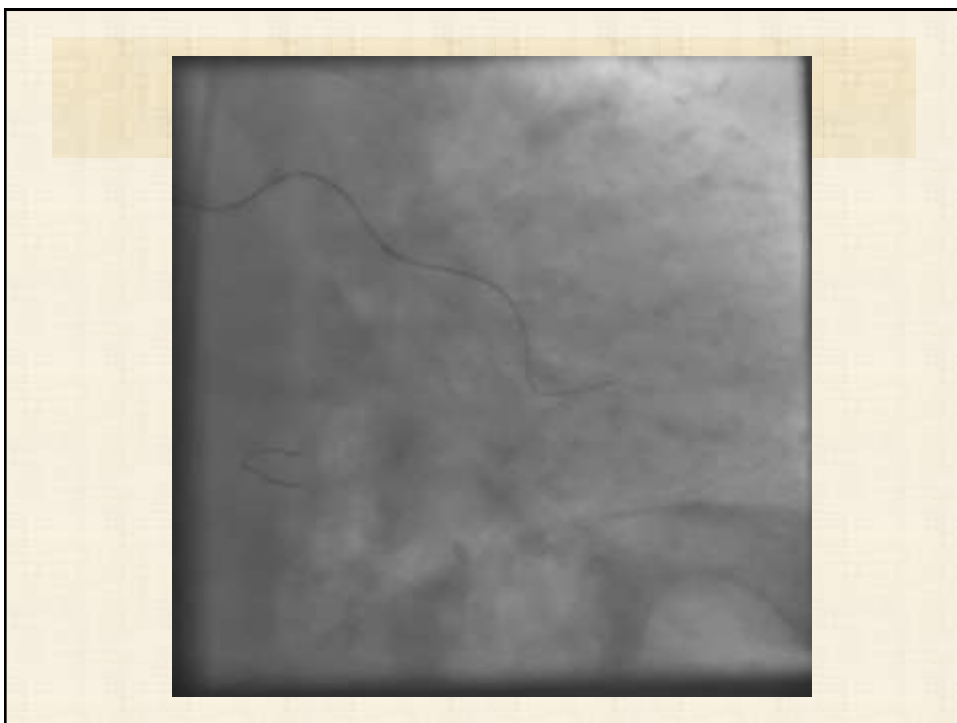
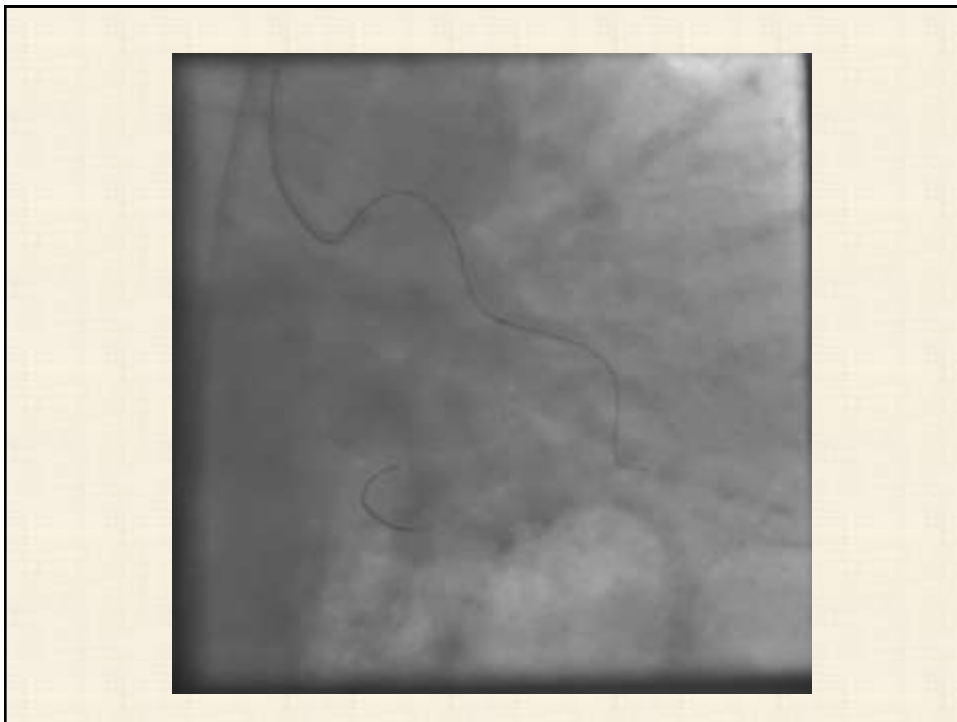


IVUS study after OM stent crush

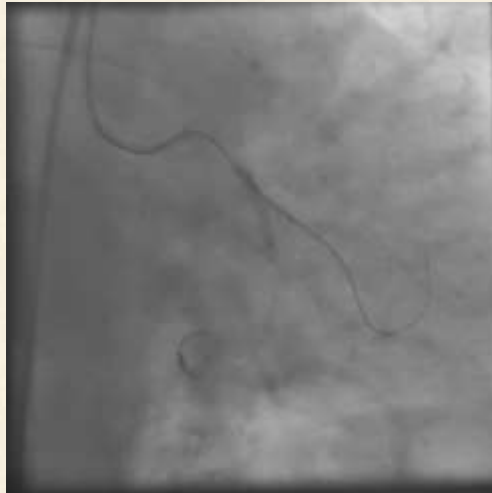


Re-wiring OM Through Crushed stent

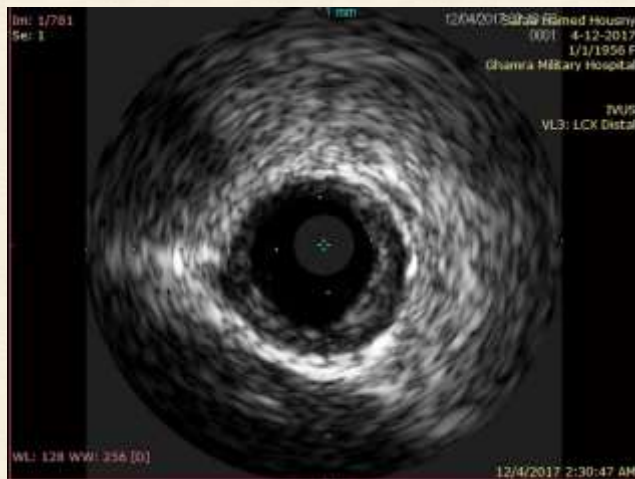




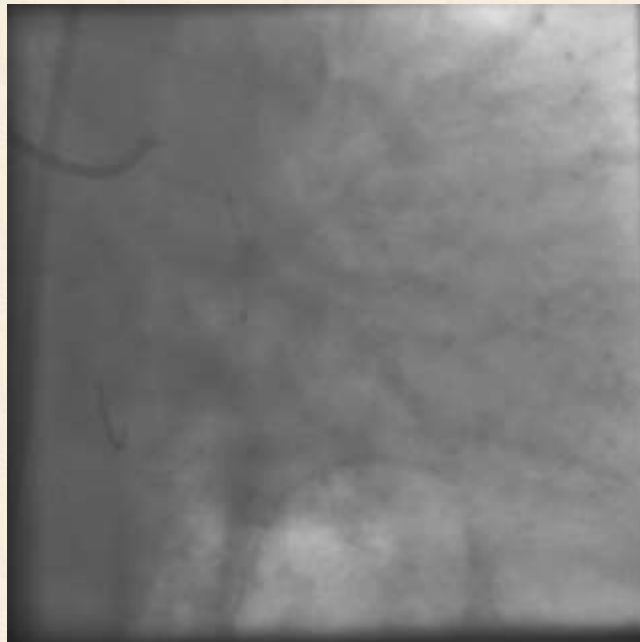
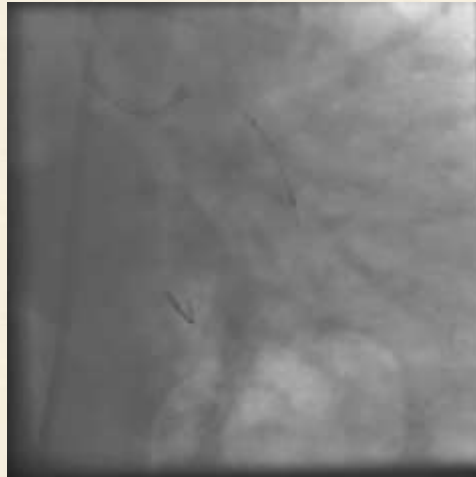
1st kissing

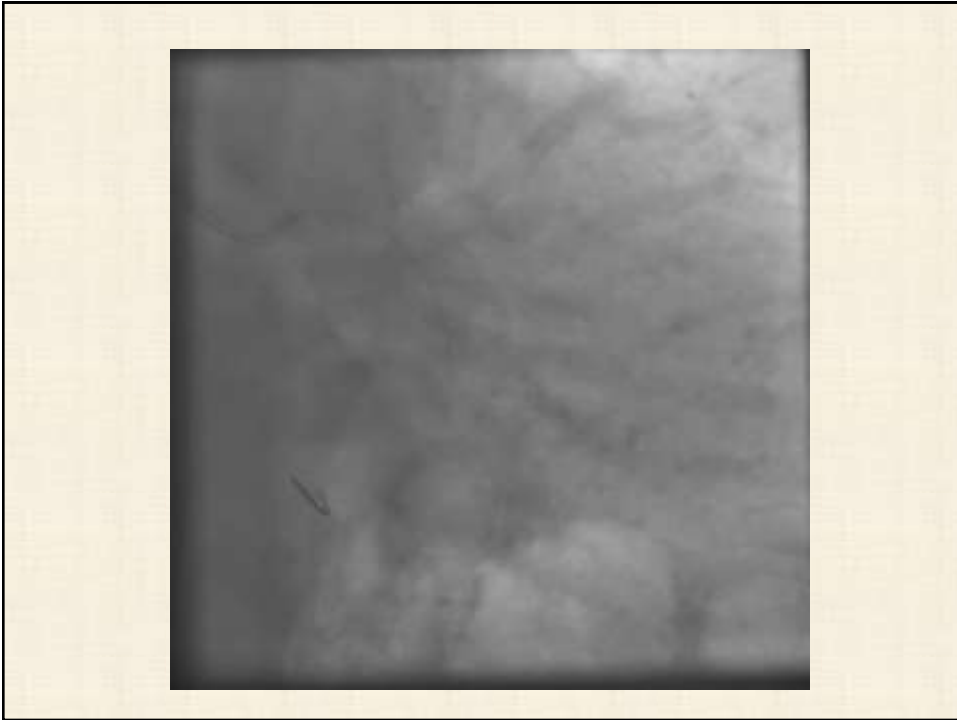


IVUS study after 1st Kiss

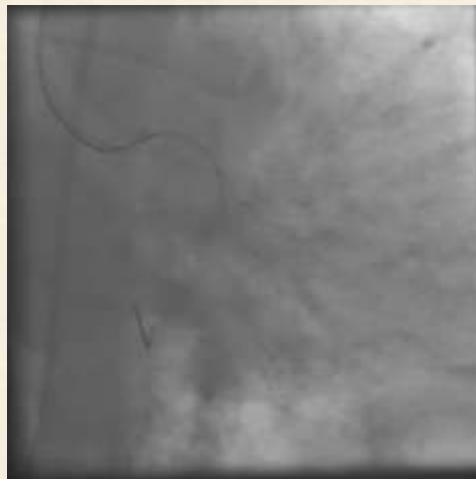


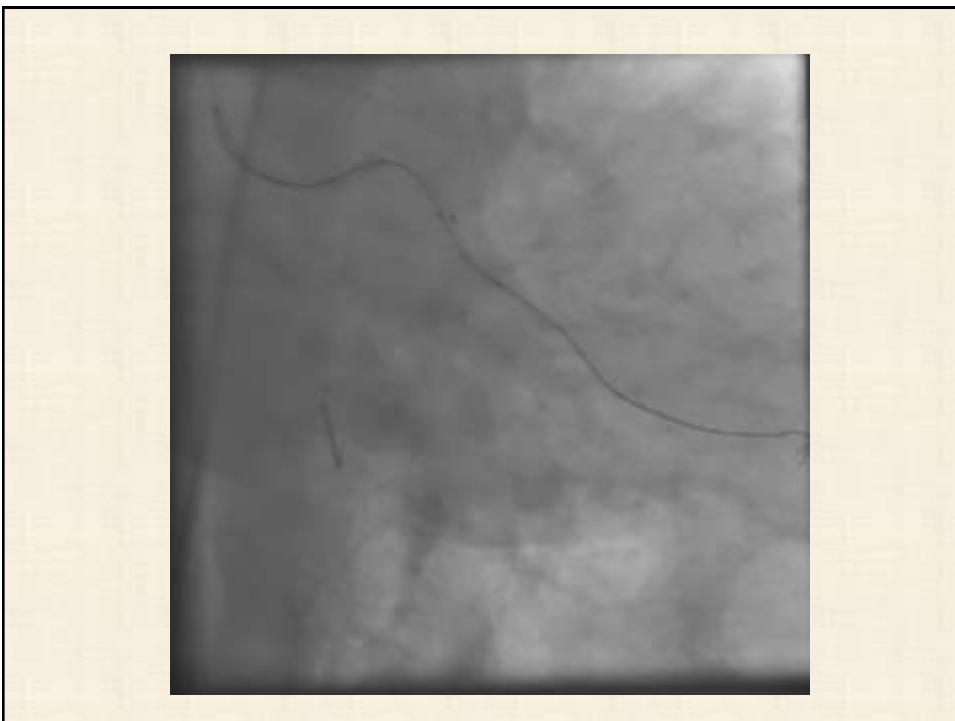
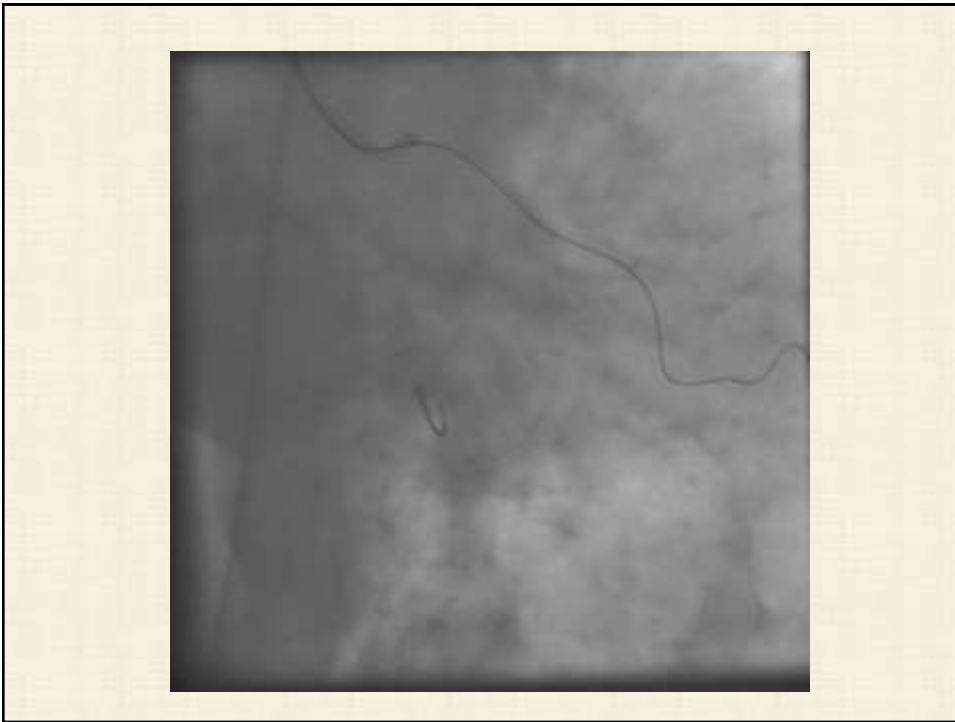
LCX stenting

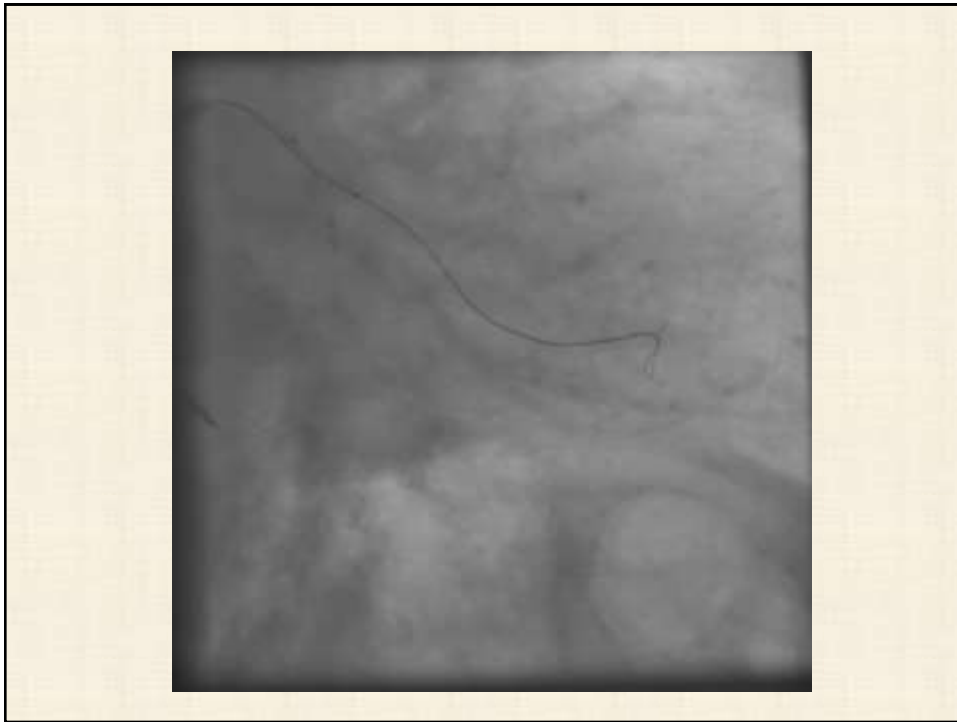




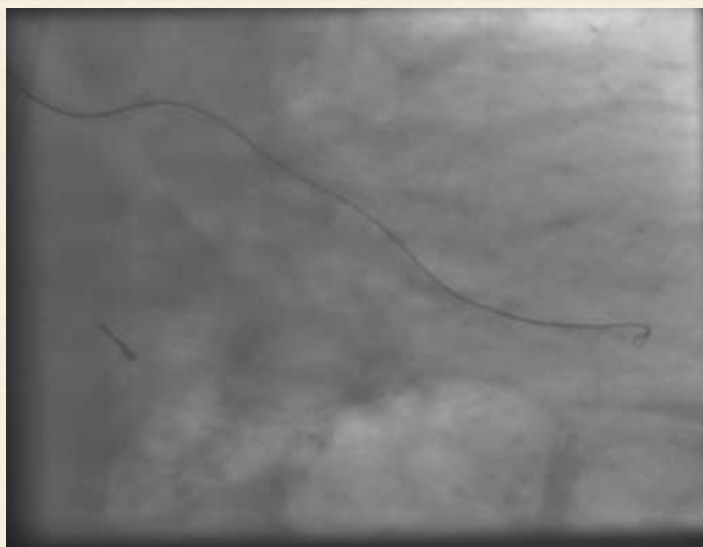
Re-wiring OM for second Kiss







Final Result



Trials related to the case

- **DK CRUSH-I study:** DK crush is better as regards ST-ISR and MACG compared to classic crush
- **DK CRUSH-II study:** compared to DK crush to T stenting showed significant TLR lower in DK crush after year follow up.
- **DK CRUSH-III study:** comparing DK crush VS Culotte technique for TTT of UPLMCA showing culotte stenting for UPLMCA bifurcation lesions was associated with significant increased MACEs mainly due to increase TVR.

- **DK CRUSH-IV study:** simpler is better in side branch stenting.
- **DKCRUSH-V study:** PCI of true distal LM bifurcation lesions using DK crush 2 stents resulted in a lower rate of target lesion failure (TLF) at 1 year than a Provisional T stenting for ttt of unprotected distal LM true bifurcation lesions.
- **DKCRUSH-VI study:** Angiographic and FFR guidance of provisional SB stenting of true coronary bifurcation lesions provided similar 1 year clinical outcomes compared to DK crush technique.

Take home messages

- In classic crush technique failure rate of FKBI is about 25 % which associated with higher risk of stent thrombosis and ISR mostly at Ostia.
- DK crush is the preferred crush technique, it needs:
 - Rewiring side branch 2 times
 - Kissing 2 times
 - POT is essential

- DK crush can optimize distorted side branch stent as 1ST Kiss rebuilt the shape of bifurcating anatomy.
- leave only 1 metal stent layer at site of ostial lesion for 2ND rewiring and 2ND kiss.
- Also prevent repeated distortion of the side branch stent by balloon and stent of main vessel.

