

Case session 1 : LM stenting complication

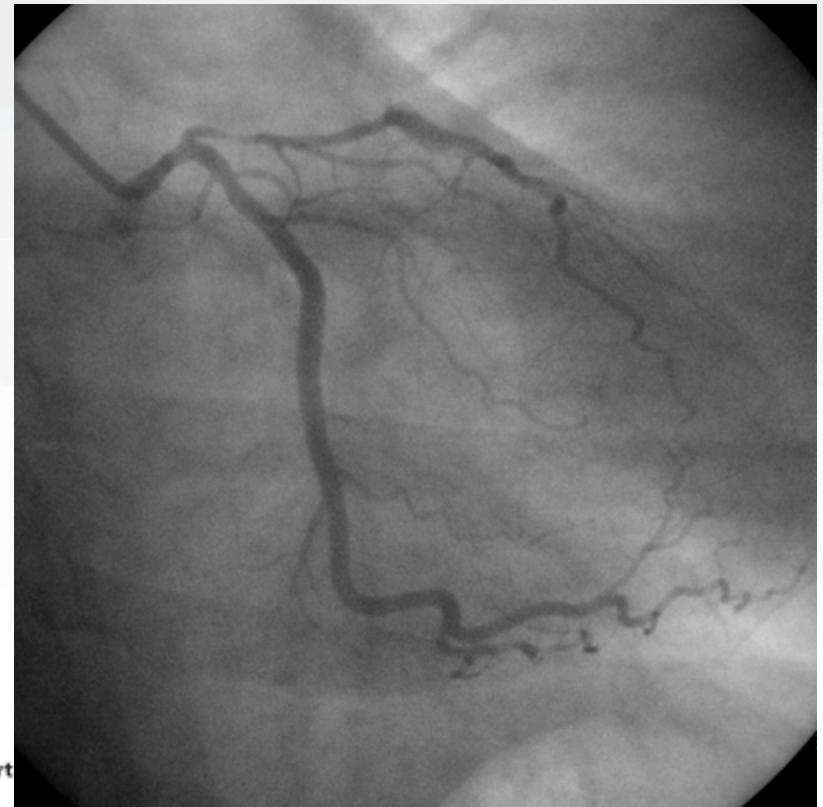
When we should occlude the side branch ...

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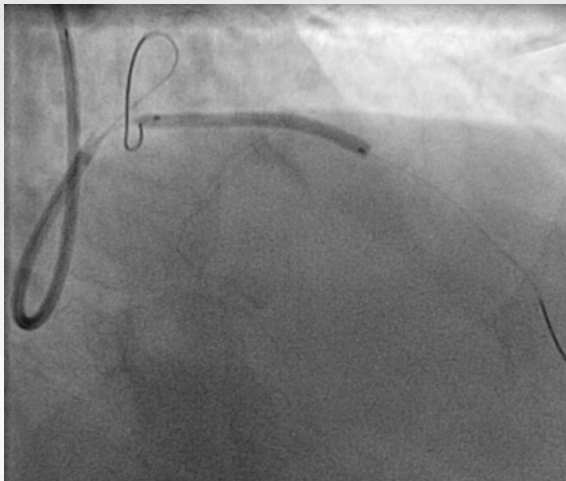
TOULOUSE, FRANCE

- **63-year-old woman referred for angina 2 CCS**
- **Positive stress test**
- 1m65, 75 kg, dyslipidemia
- Coronary angiography : - diffuse, tubular, left main coronary artery (LM) stenosis
- severe ostio-proximal left anterior descending stenosis (LAD)

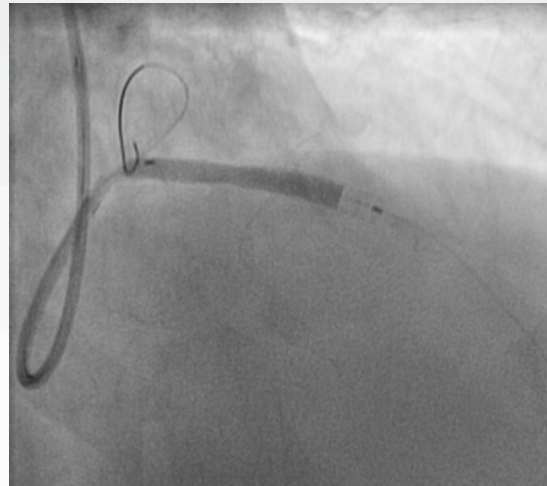


Revascularization strategy ?

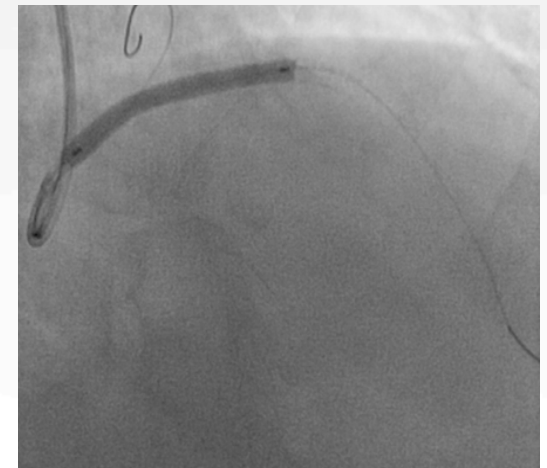
- PCI procedure :
 - Right radial approach, 6 Fr extra back-up guiding catheter
 - 2 guidewires in left anterior descending artery and circumflex artery



LAD lesion predilatation
2,5 x 30 mm balloon



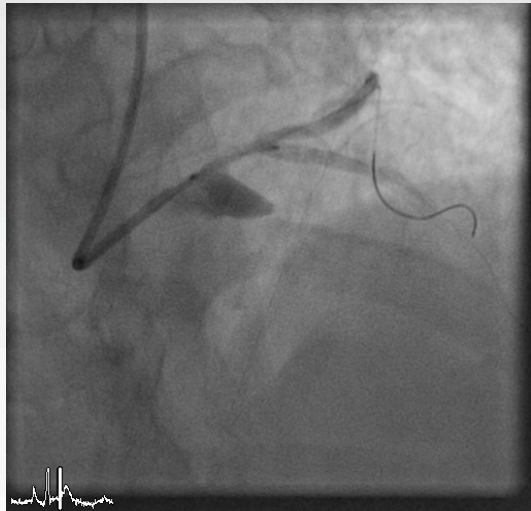
Everolimus eluting stent
3,5 x 33 mm



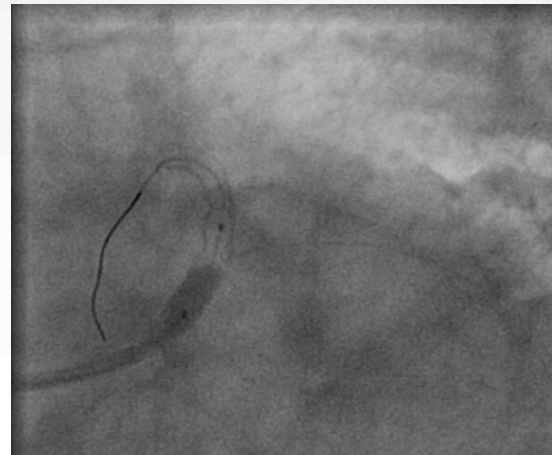
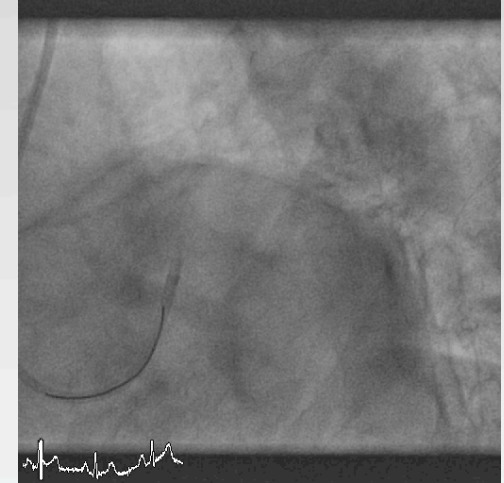
Post dilatation with same
balloon- catheter pulled back

- PCI procedure :

- According to Murray's law and LAD and Cx measured diameters
- Theoretical LM diameter = 4,66 mm

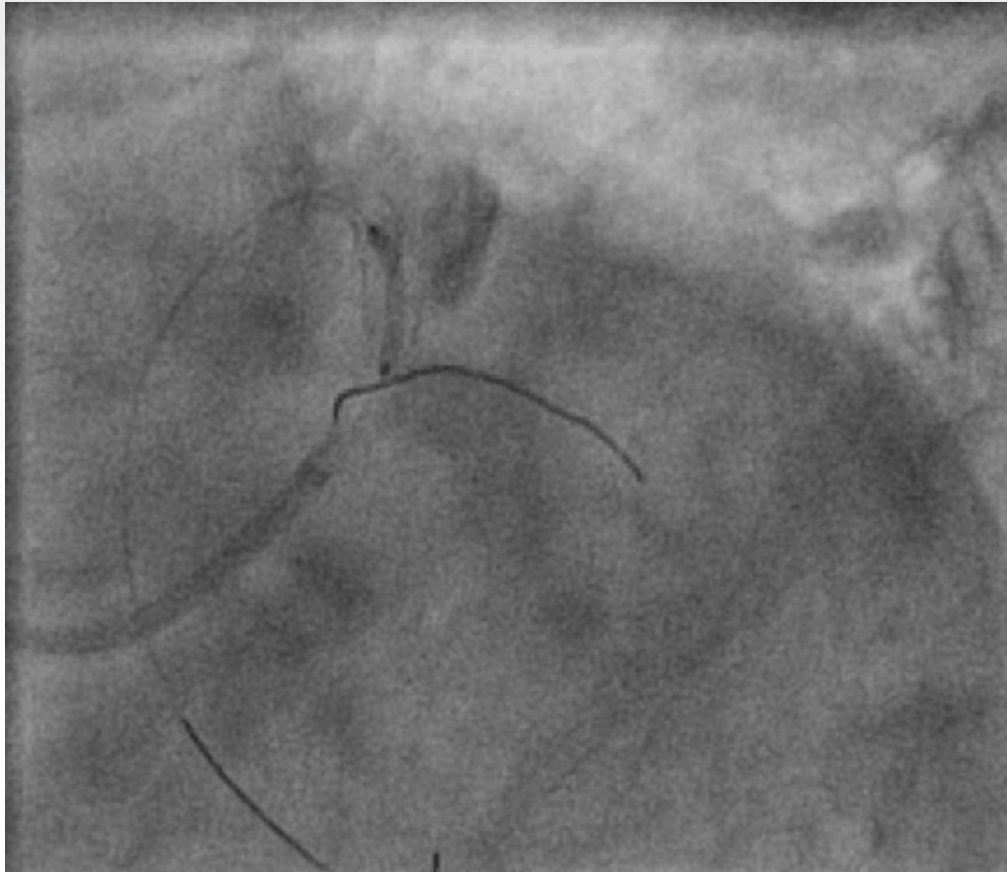


**Everolimus eluting stent
4.0x15 mm in LM**

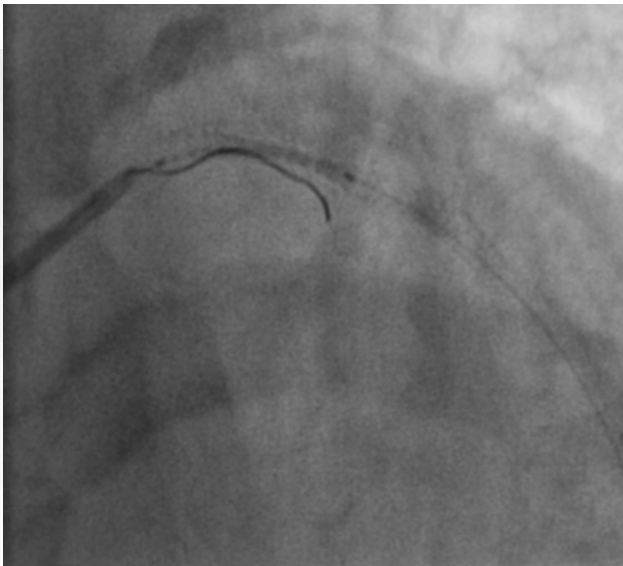


**LM stent expanded
then POT with a 4,5 mm balloon**

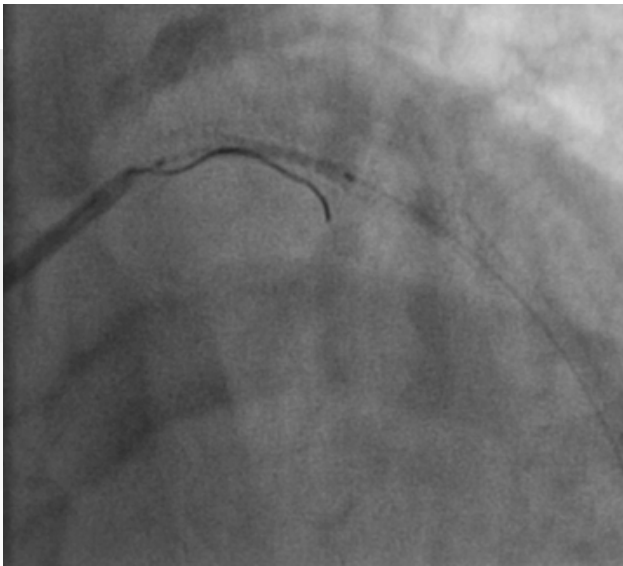
- **Angiographic control :**
 - Huge LAD perforation
 - Stable hemodynamics
 - Re inflation of the balloon while waiting for a stent-graft



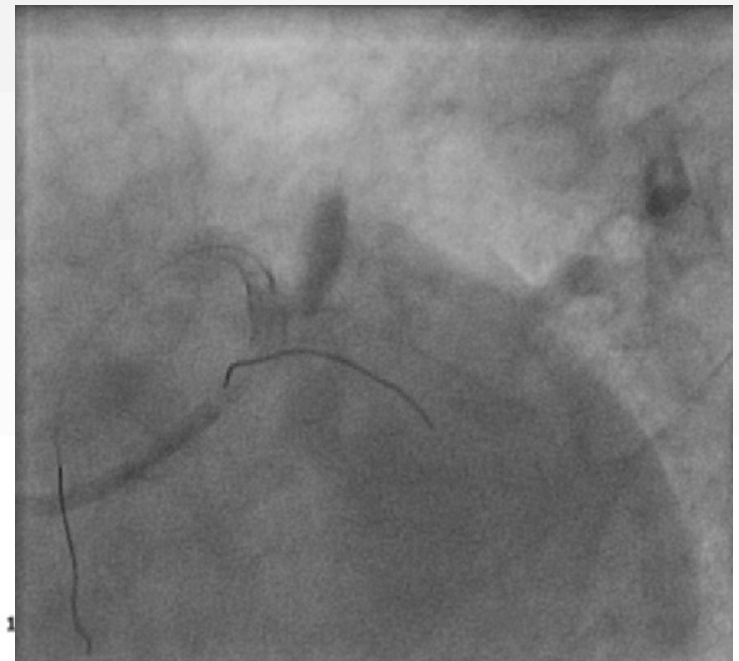
- Jostent GRAFMASTER 3,5 x 19 mm advanced in LAD
- Impossible to advance further and stucked with proximal edge in LM
- Implanted there



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Hemodynamic stability,
Moderate pericardial effusion
Occlusion of the perforation on angiographic control
Decision to stop the procedure



- But ...: after guidewire retrieval from circumflex artery ...

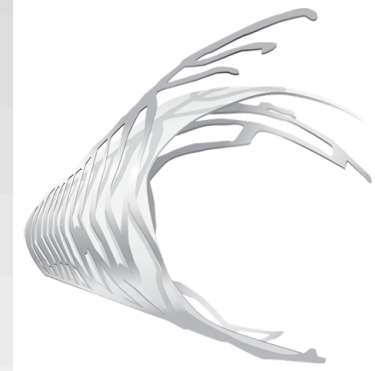
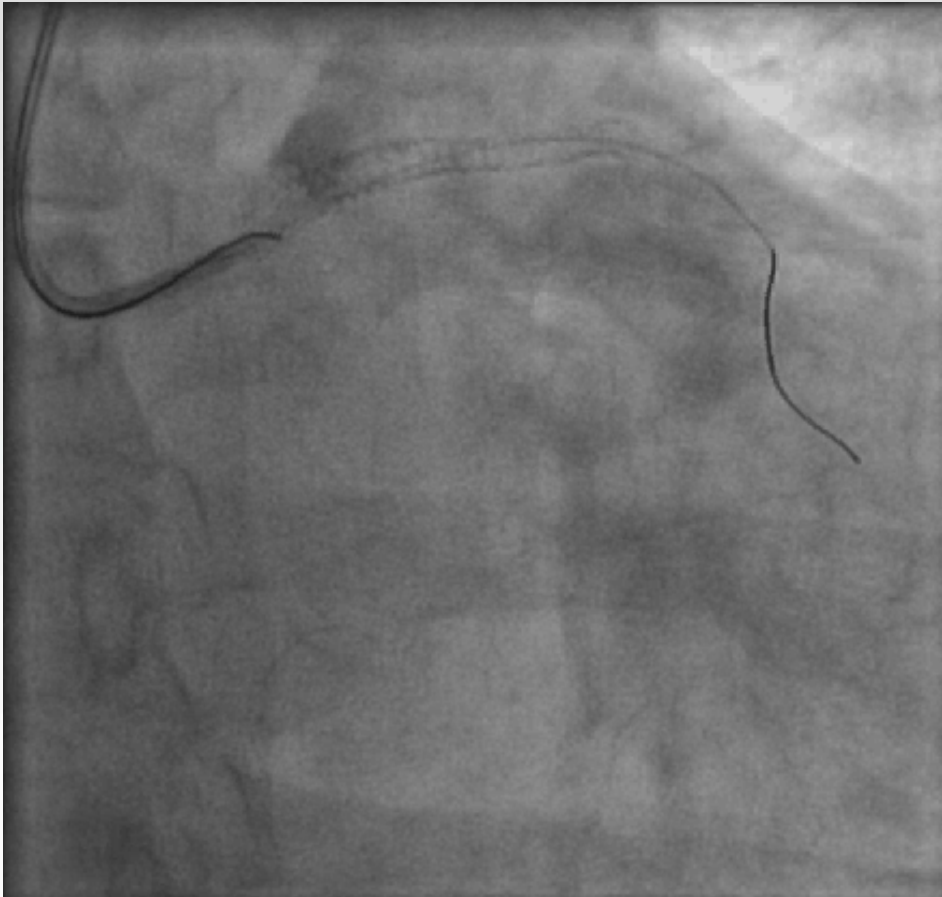


Occlusion of circumflex artery



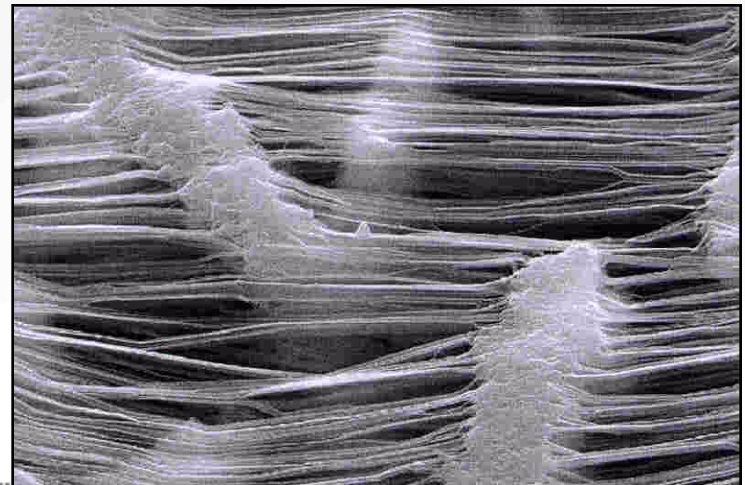
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Therapeutic options

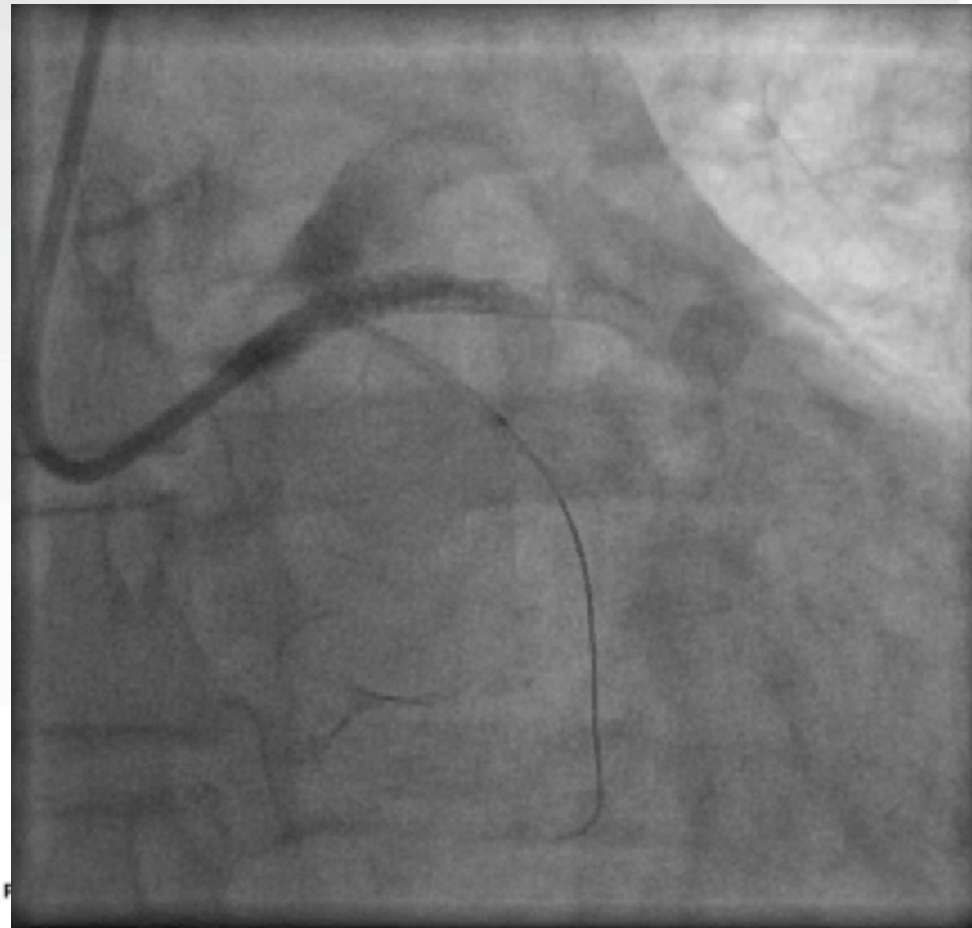


**2 JOSTENT Flex Stents In-between expandable
PolyTetraFluoroEthylene (ePTFE)**

Fibrogenic structure



- While waiting for operating room to be available :
 - attempt to cross ePTFE with chronic total occlusion dedicated guidewire (PROGRESS 200 T) driven by a Finecross microcatheter

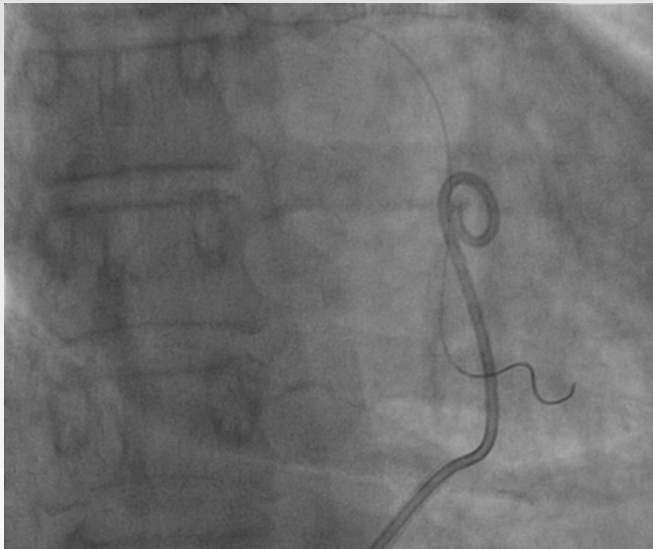


-
- How to complete PCI on Cx ?

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2.0 then 3.0 mm ballooning
Impossible to implant a stent towards Cx



Hemodynamic instability related to
cardiac tamponade
Percutaneous draining



Patient stable
Final angiographic result

- Post interventional course uneventful, discharged day 7
- Systematic angiographic follow up proposed 3 months later because of high potential of restenosis



- 2-year follow-up:
 - NYHA II, free from angina
 - LVEF 65 %, negative stress test (dobutamine TTE)
- What have we learnt with this case ?

in such situation of side branch occlusion by stent-graft implantation in main branch of a bifurcation, it should be known that crossing the graft can be tried and successfully done and can avoid a severe post procedural myocardial infarction or conversion to surgery