Aortic & LM type F spiral dissection with occlusion of LAD & LCX in a patient with mid-LCX CTO

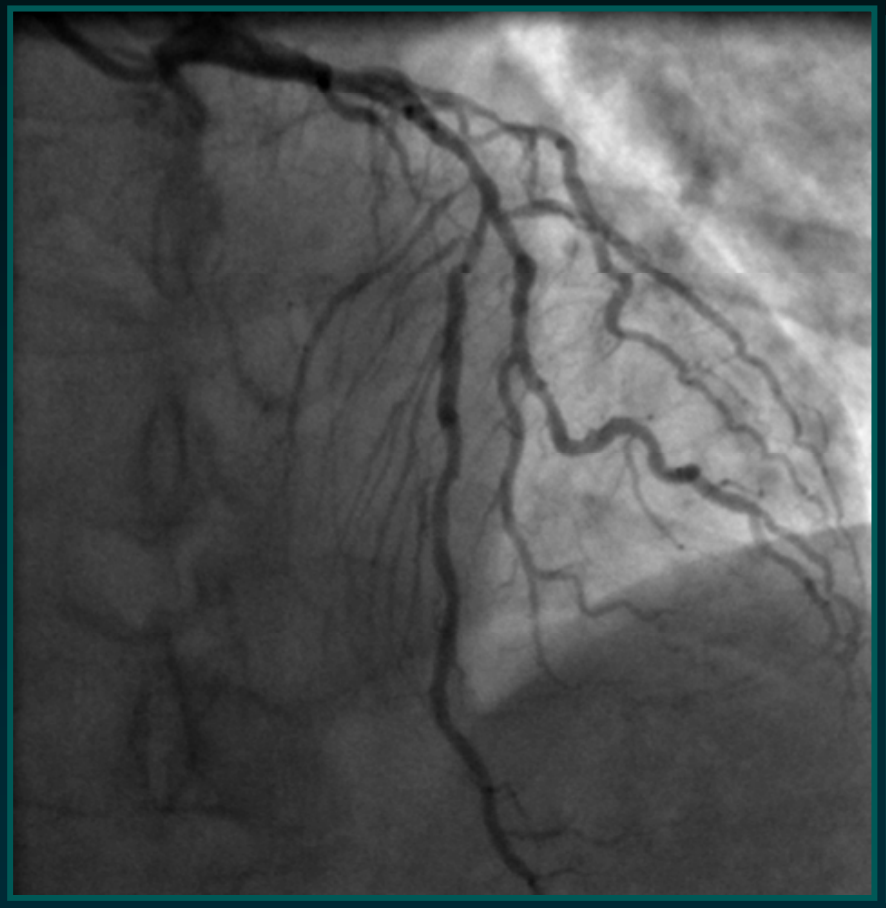
M. Iqbal T. Santoso
National Cardiac Center "Harapan Kita"
Medistra Hospital,
Jakarta, Indonesia

Case: RT, male, 51 yrs. old

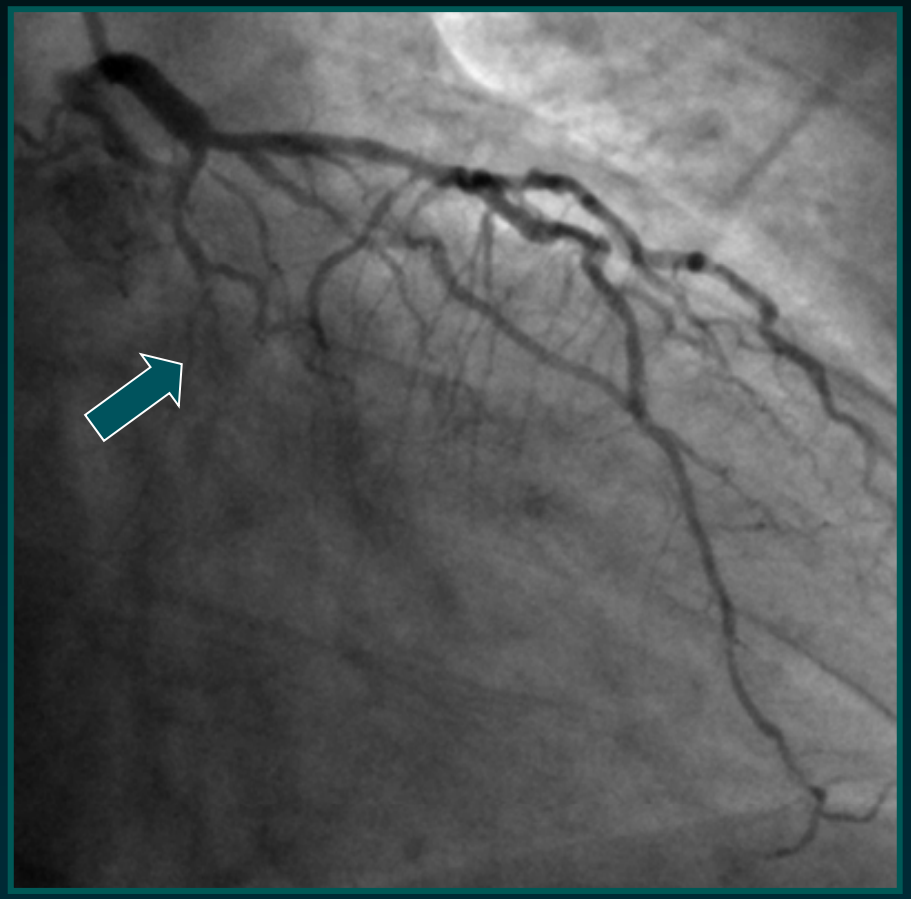
- History:
  - Asymptomatic
  - Risk factors: Hypertension, Dyslipidemia, DM

- PE: BP 150/90
- Lab: normal
- ECG: ST depression and neg T waves in V4-6
- Chest film / echo: normal
- Treadmill: positive for ischemia

Male, 51 yr.o, *asymptomatic*, normal ECG

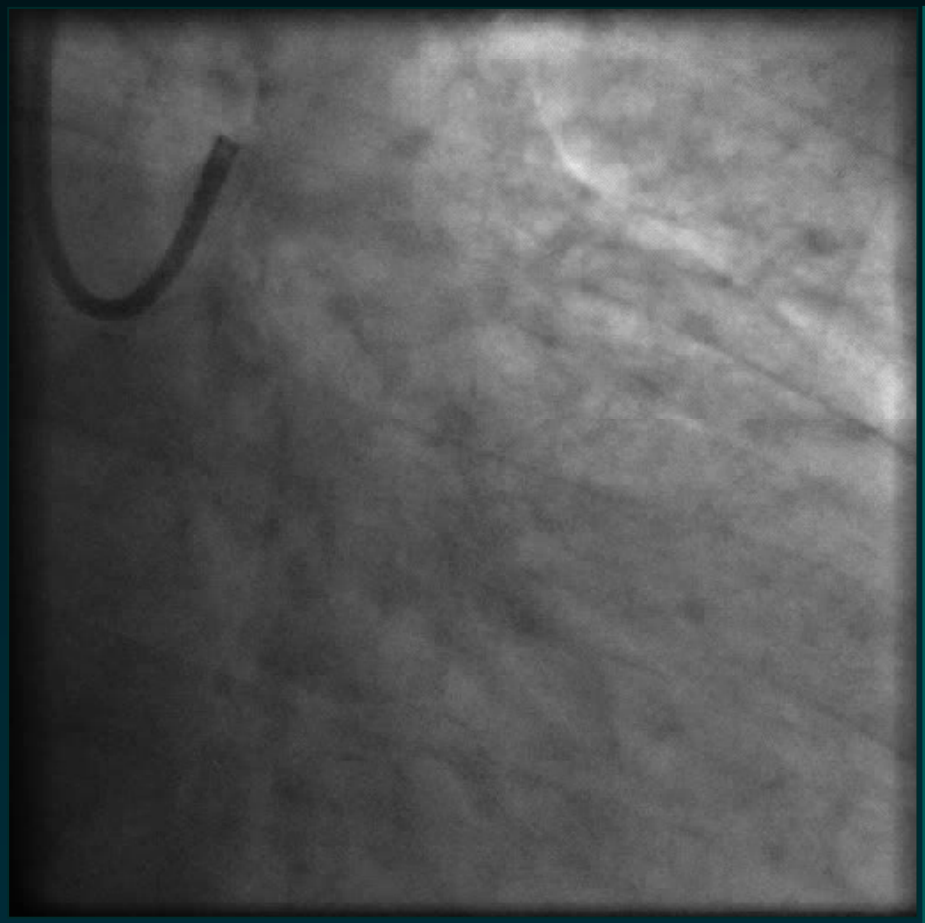


50% stenosis of LADp at the D1 bifurcation

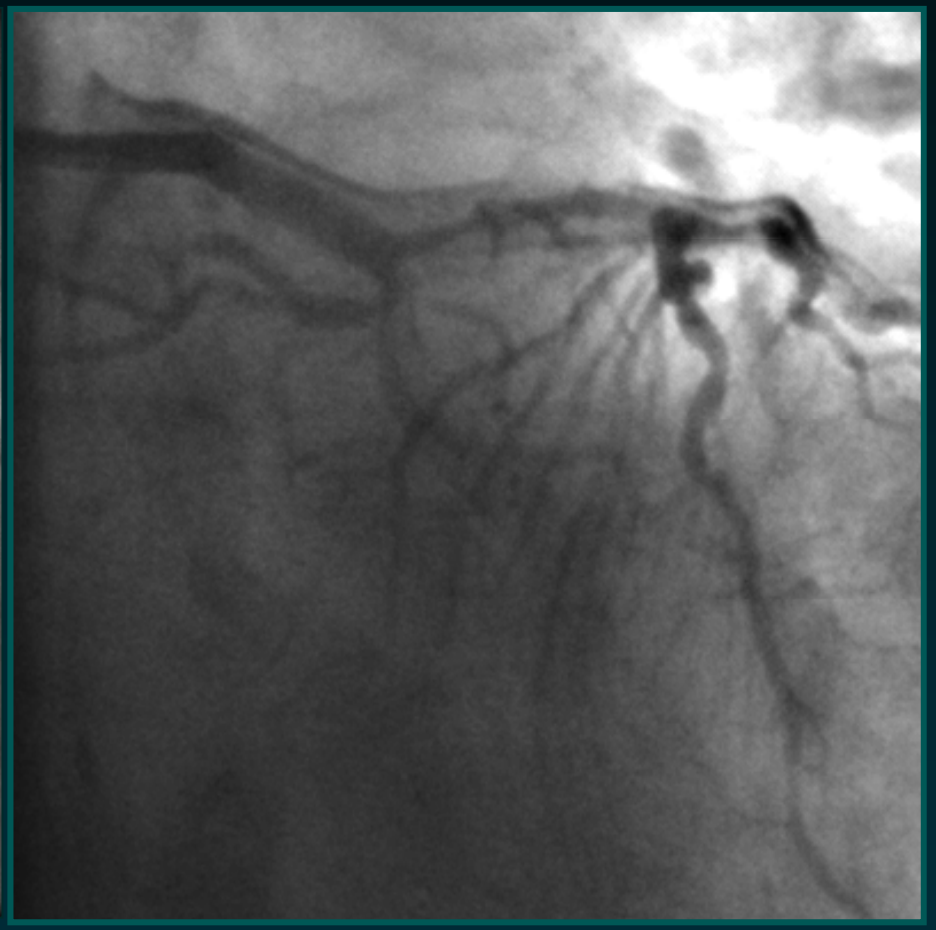


CTO of LCXm (target lesion)

On PCI, performed one week later:
Sudden chest pain with very prominent ST elevation right after guiding catheter engagement (BL3.5, 7F),



LM type F spiral dissection extending to the LAD, D1 & LCX

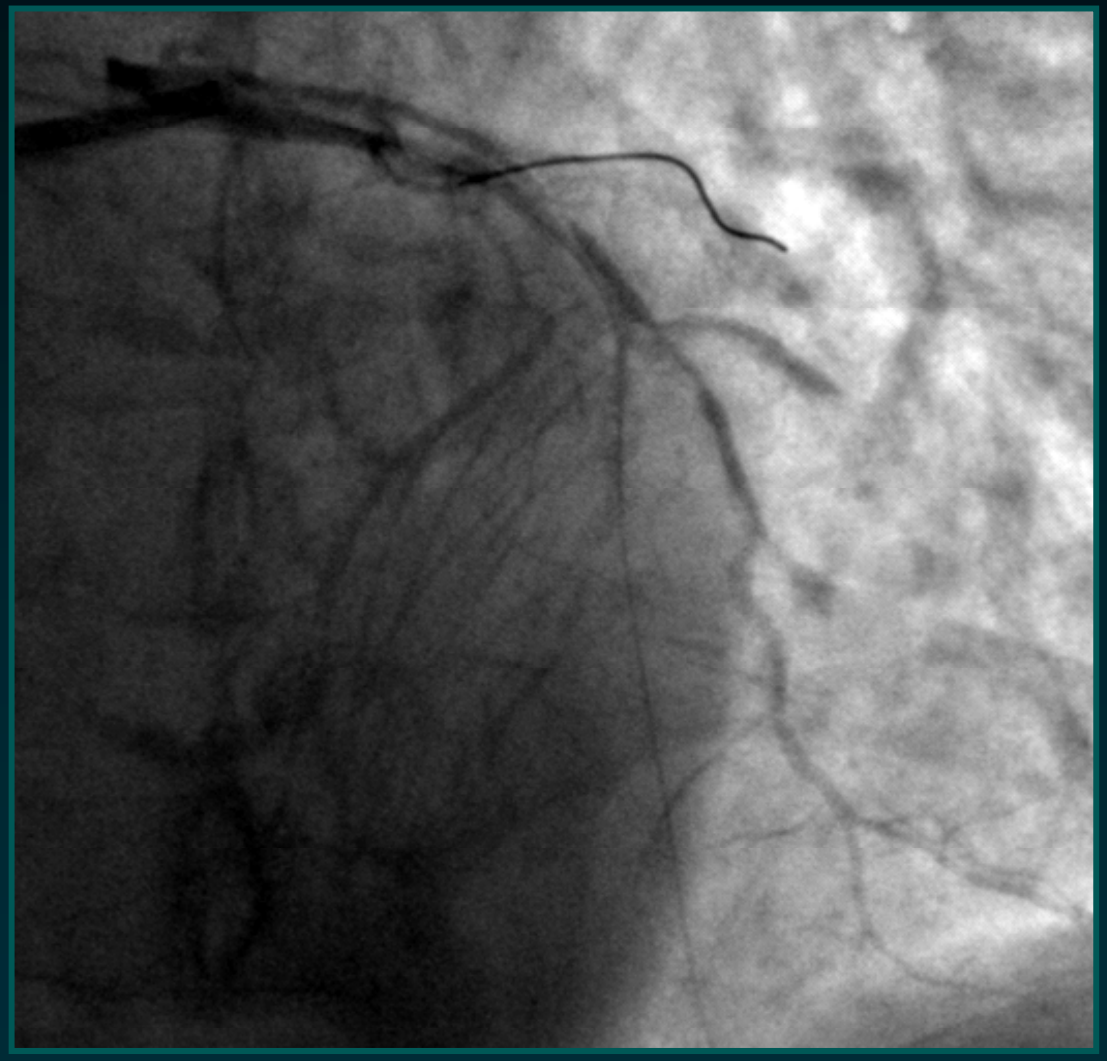


Dissection also involved the aorta

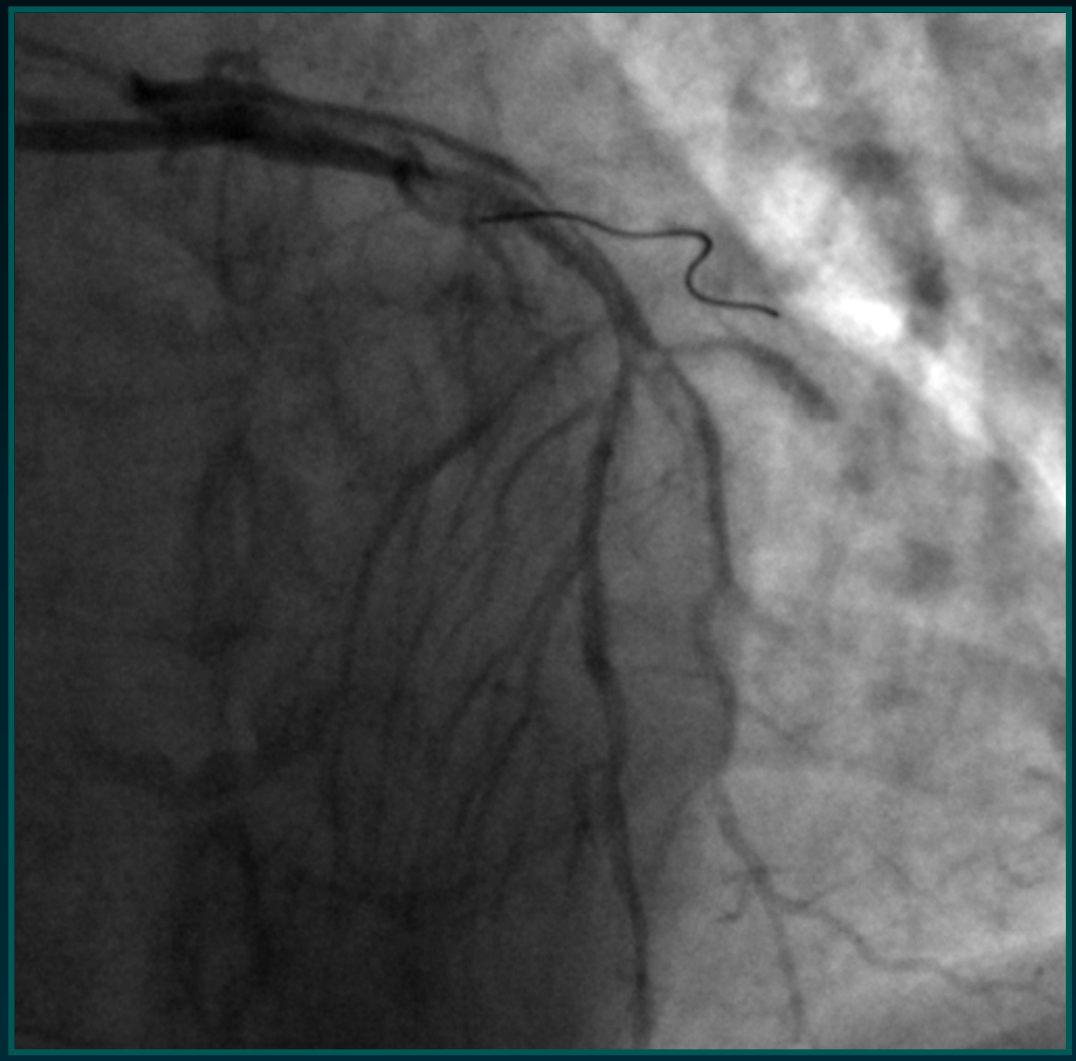
What would you do ?

1. Immediately send the patient for CABG
2. Immediately insert an IABP
3. Immediately stent the LM ostium
4. Immediately stent the LM and LAD
   (& leave the LCX as is)
5. Relax, try to solve all problem one-by-one

Rapid worsening of spiral dissection leading to total occlusion of the LAD



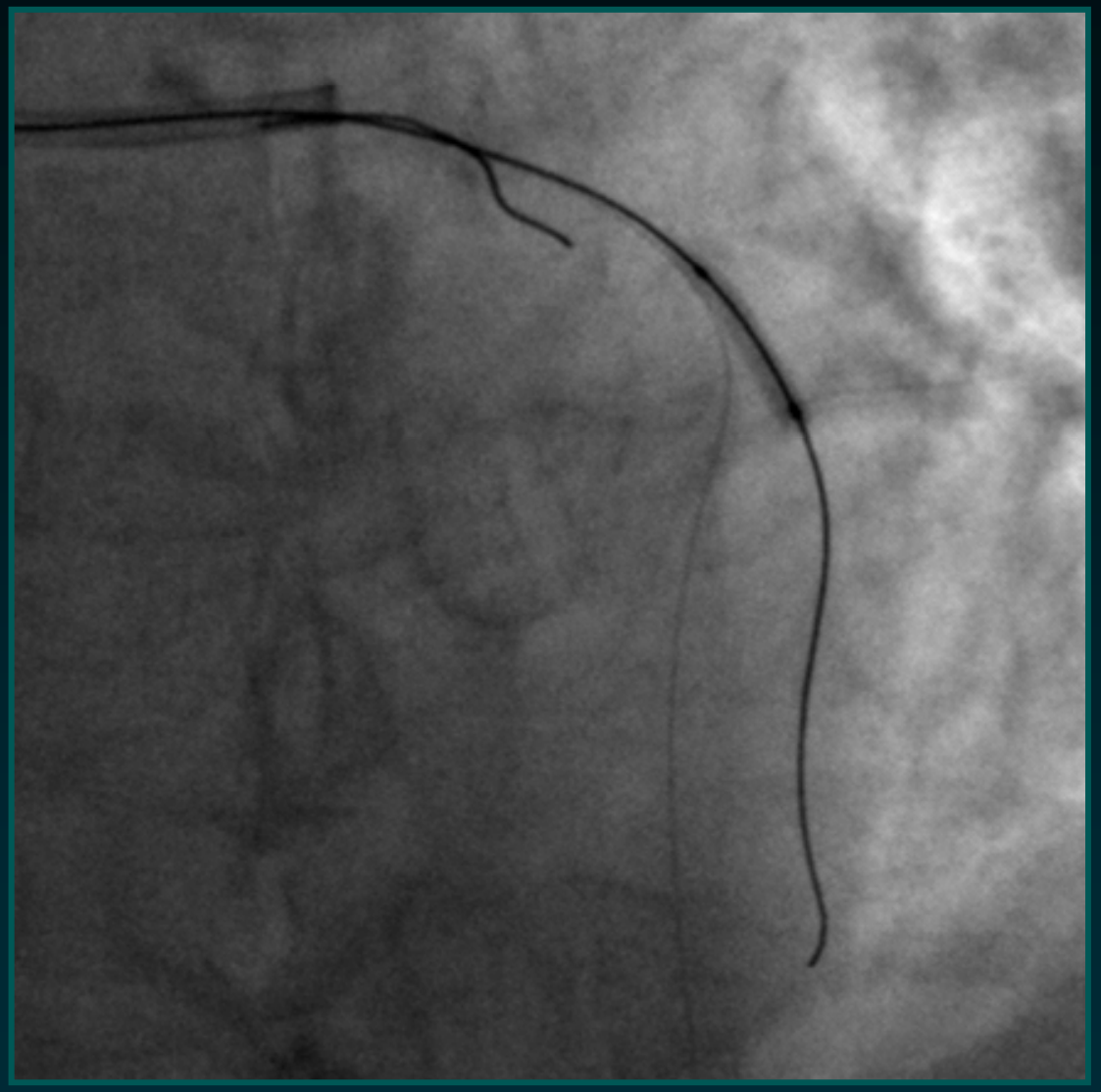
Successful wiring of the LAD & LCX. **LAD was completely occluded**



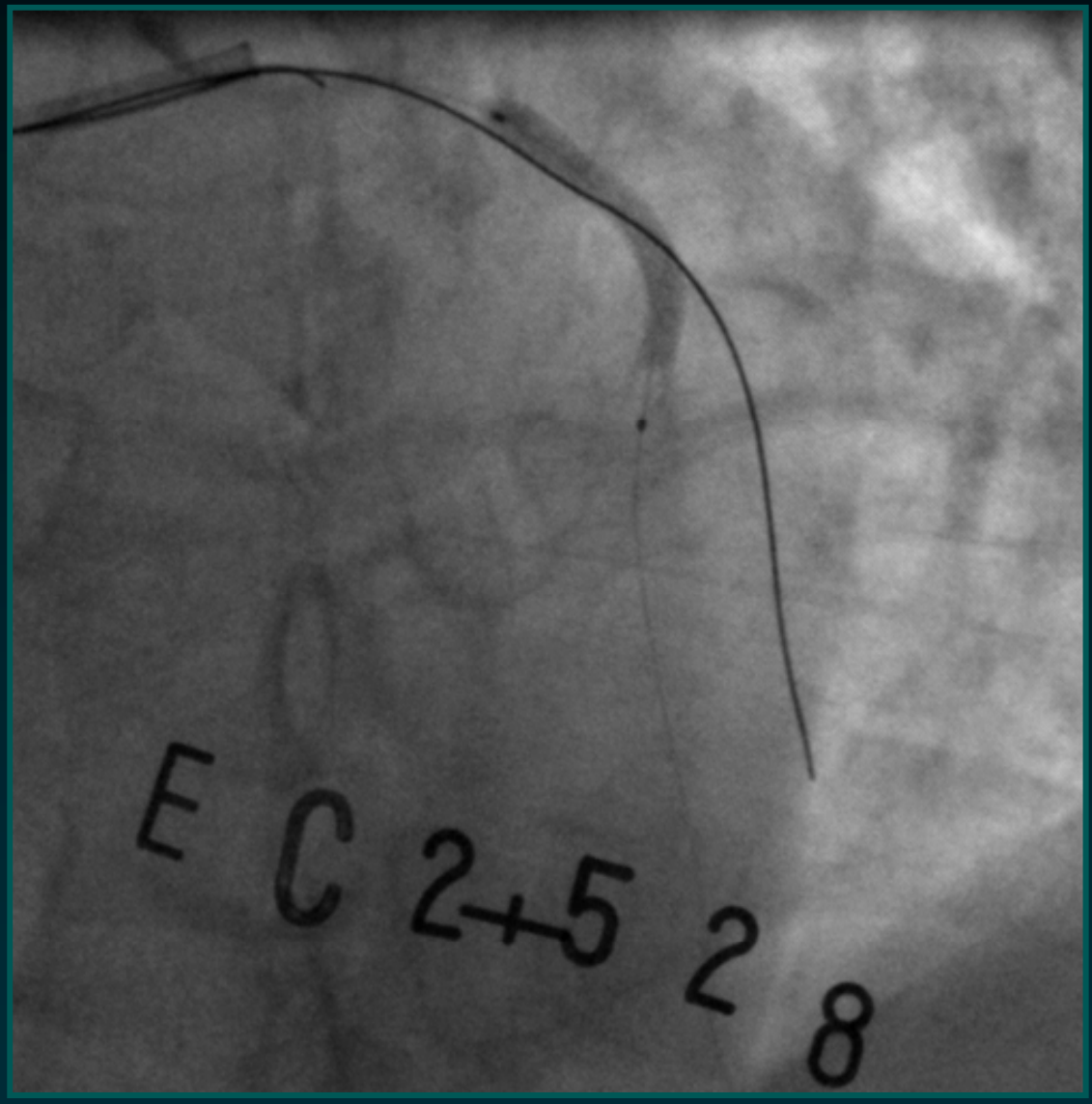
After balloon dilatation of the LAD. **D1, which was an important vessel, was fed from the false lumen.** D1 was very difficult to wire

What would you do ?

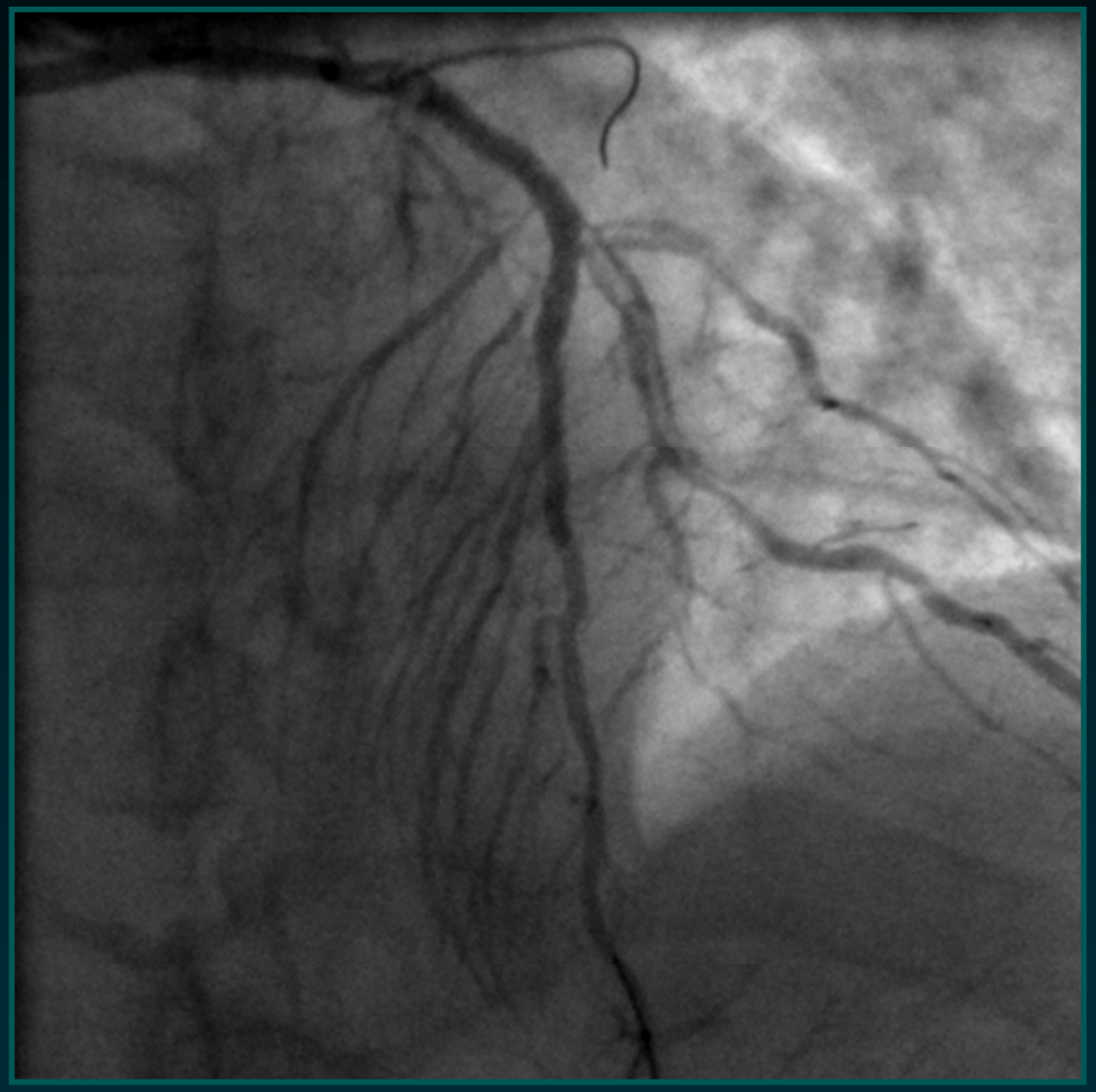
1. As time is critical, forget about the D1. We want the patient survive & most important is to fix the LM/LAD
2. Immediately send the patient for CABG
3. Immediately insert an IABP
4. Immediately stent the LM ostium
5. Immediately stent the LM and LAD
   (& leave the LCX as is)
5. Relax, try to solve all problem one-by-one



Miracle 6 wire was used to puncture
the dissection flap to enter D1, then D1 ostium was dilated

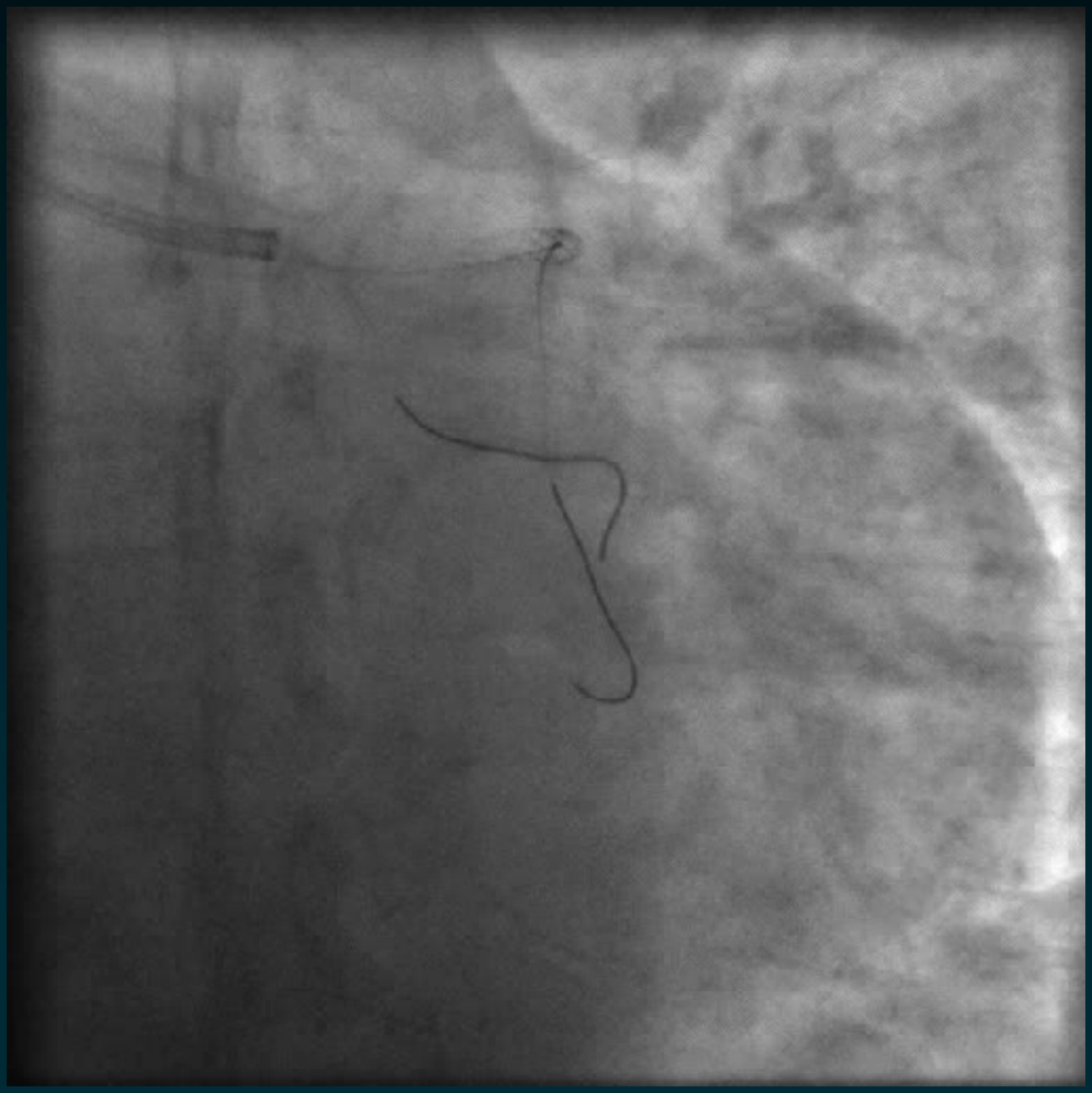


Stenting of LADd (Excel 2.5x28 mm)



After LADp stenting. Residual dissection in D1 was left as vessel patency & flow were still maintained

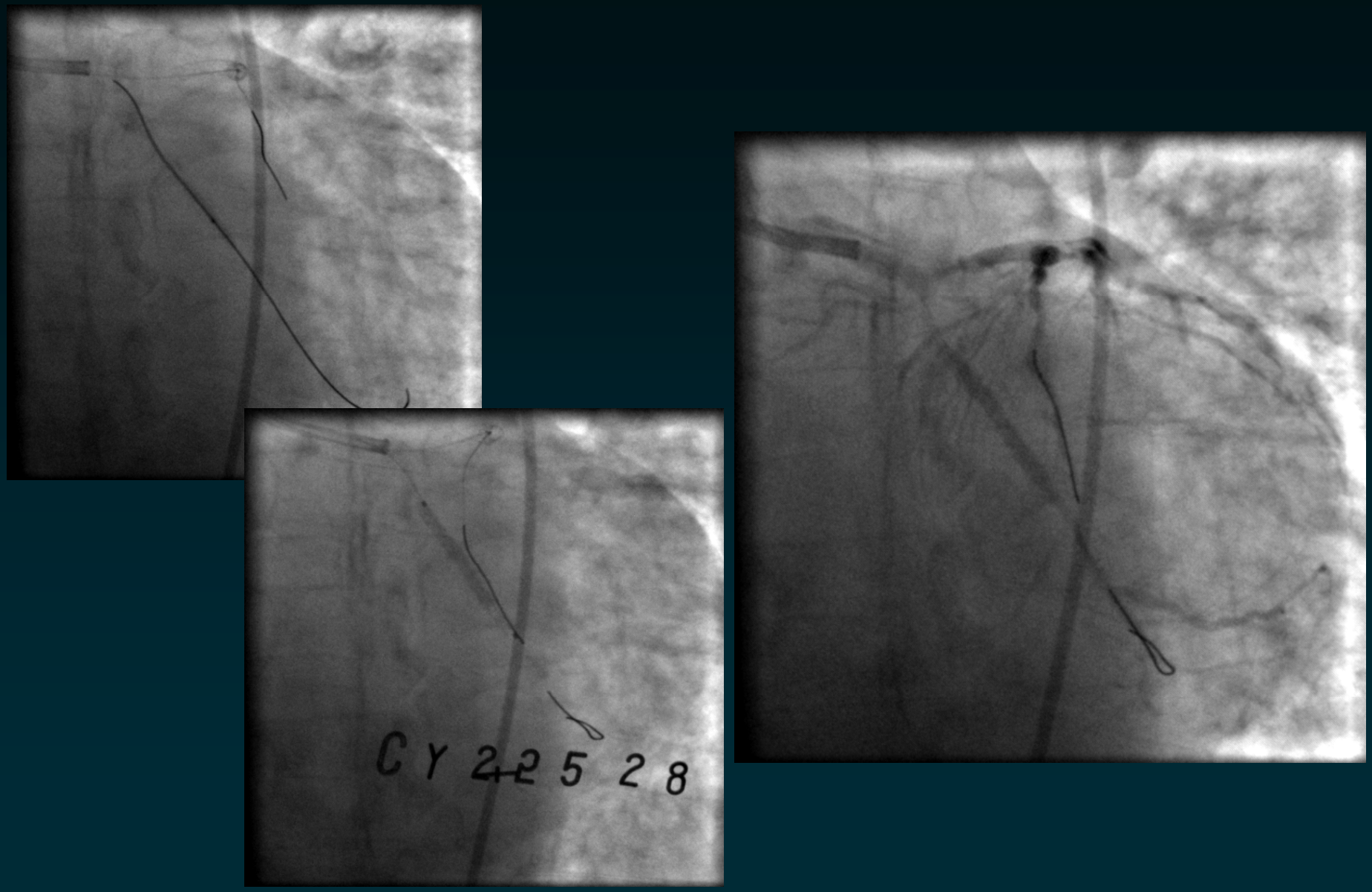
What would you do now ?



What would you do ?

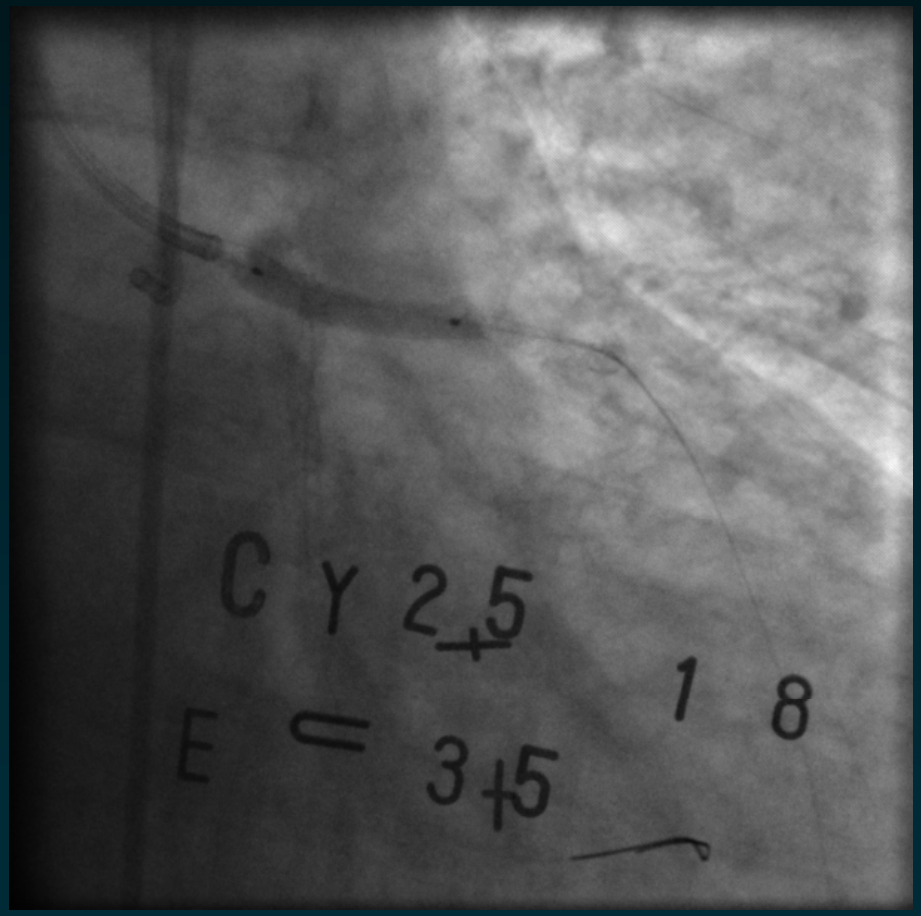
1. Open & stent the LCX CTO (to be followed by stenting of the LAD & LM)
2. Immediately stent the LM and LAD (& leave the LCX as is)
3. Immediately send the patient for CABG
4. Immediately insert an IABP
5. Immediately stent the LM ostium

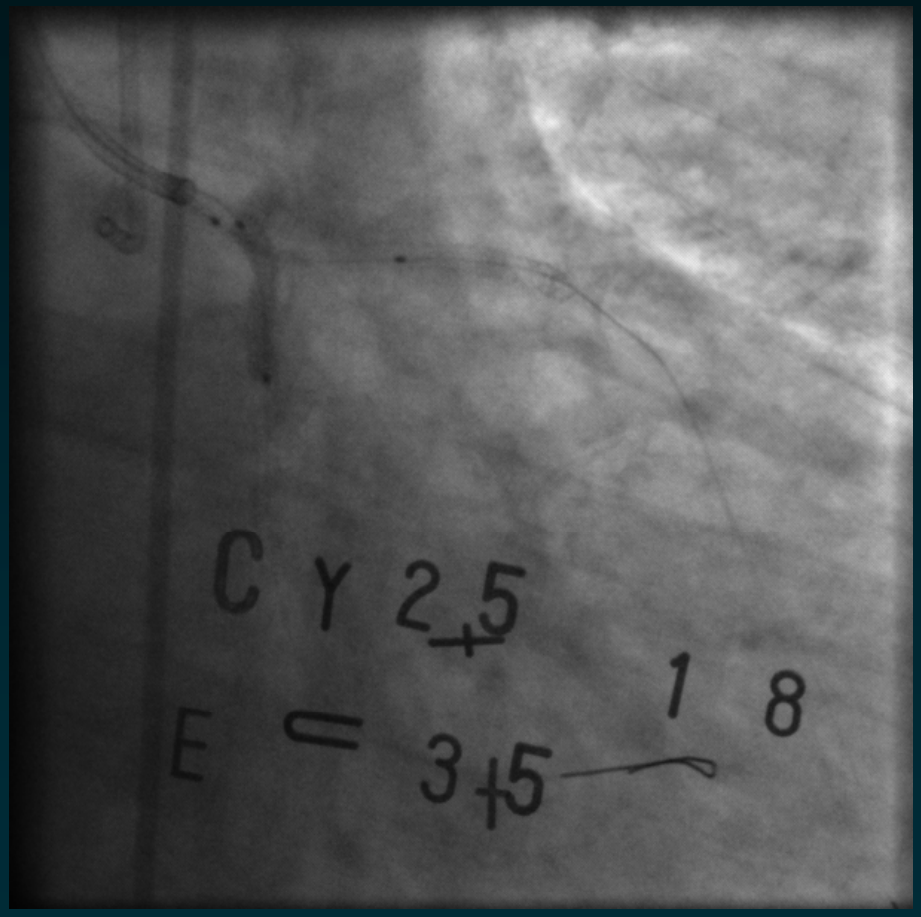
LCX CTO was attended ….



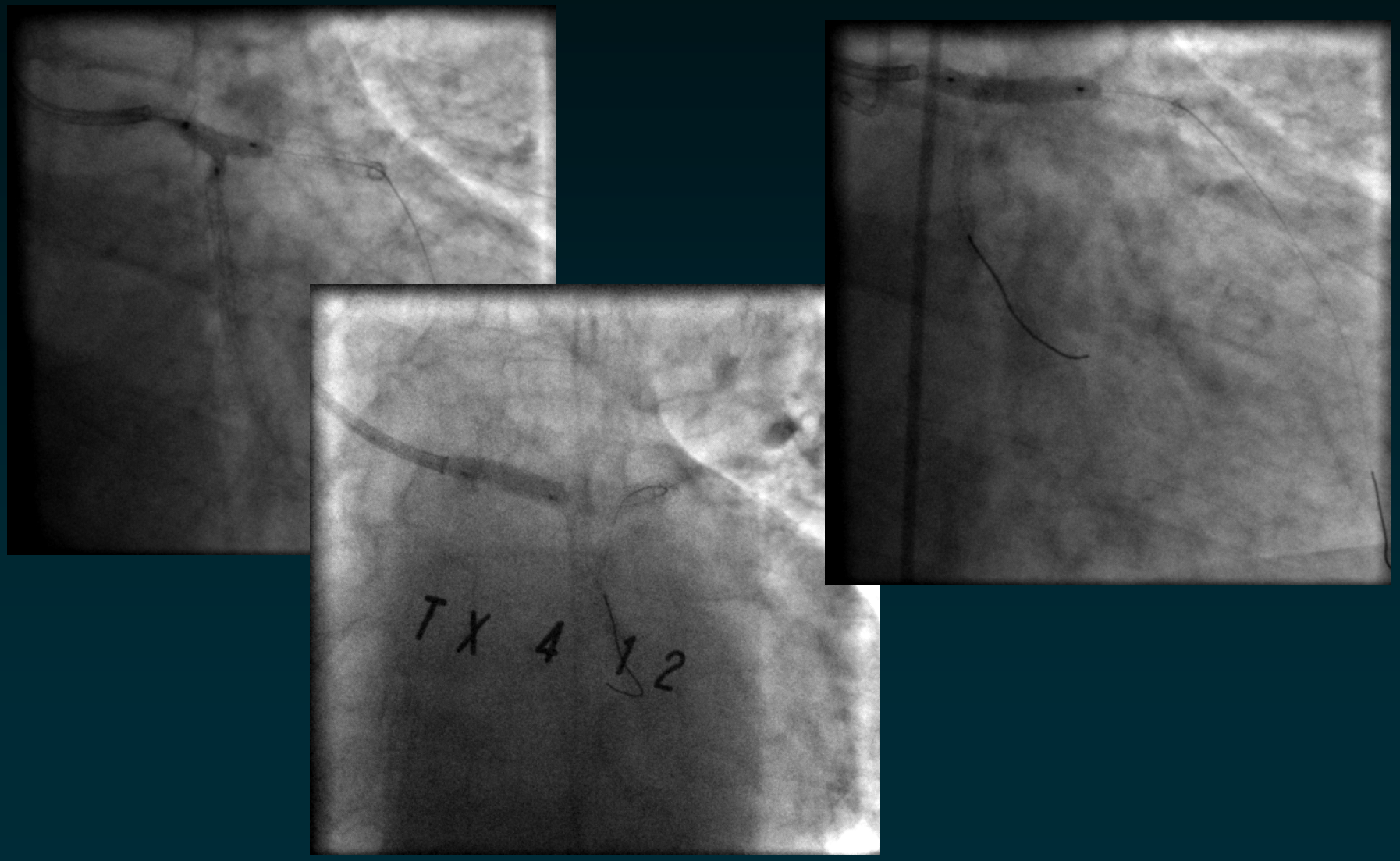
Successful LCX CTO opening & stenting

LM-LAD & LM-LCX stenting: Crushing technique

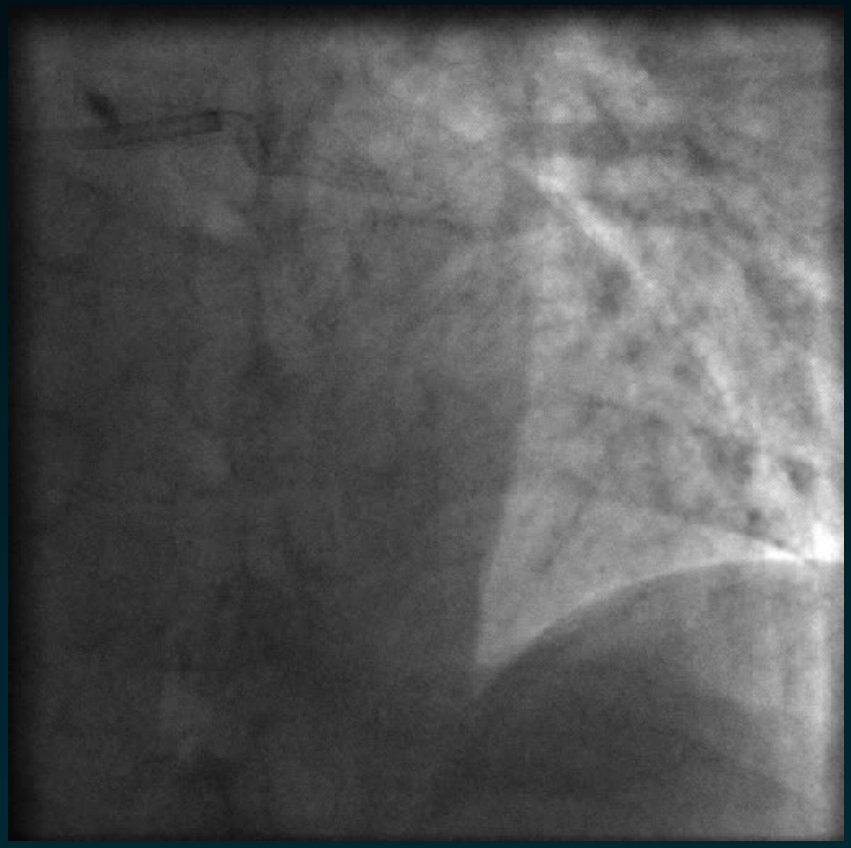




After final kissing balloon dilatation, stenting of the LM ostium & postdilatation

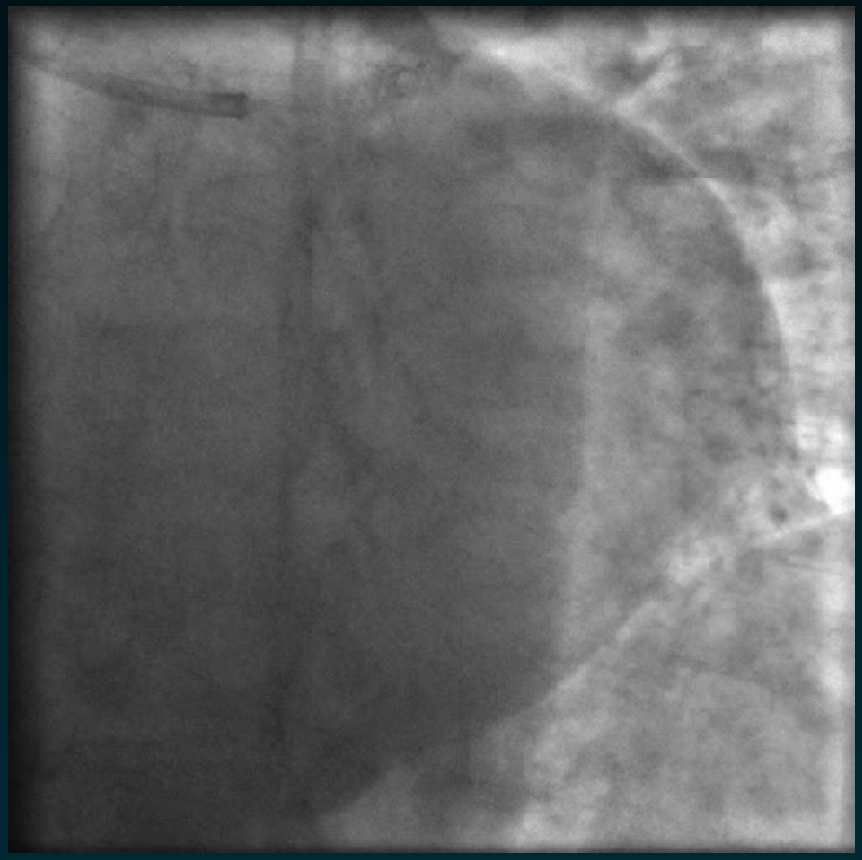


Final result



After placement opening & stenting of LCX CTO; placement of 2 stents in the LM-LAD & LM-LCX using the crushing technique (& kissing balloon dilatation); stenting of the LM ostium.
All stents in the respective vessels were in overlapping one to each other
Patient was still well 4 years later.

Final result



After placement opening & stenting of LCX CTO; placement of 2 stents in the LM-LAD & LM-LCX using the crushing technique (& kissing balloon dilatation); stenting of the LM ostium.
All stents in the respective vessels were in overlapping one to each other
Patient was still well 4 years later.

Take Home Message:
Never, Ever Give Up !!

Good Judgment Comes from Experience,

And Experience Comes from Bad Judgment

(R. Myler)