Strange Bedfellows

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Case presentation

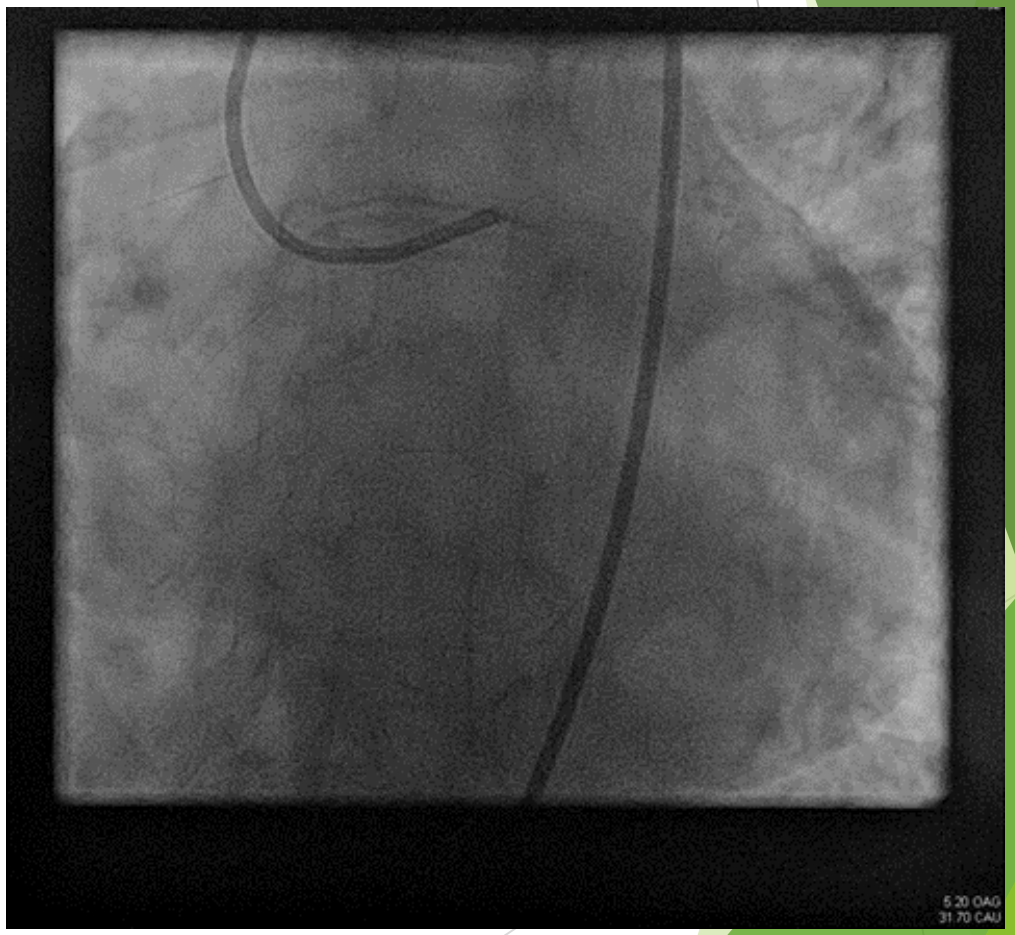
- 58/F, Non-smoker
- Phx:
  - Aortic valve replacement with bioprosthesis for aortic stenosis in 2017
  - Hx of ischemic stroke
  - Hypertension
- Usual medications:
  - Aspirin 80mg daily
  - Metoprolol XR 50mg daily

Case presentation

- Admitted for STEMI, presenting with chest pain and syncope
- In cardiogenic shock upon arrival, BP 72/56
- ECG showed anterior STEMI
- Immediately sent to the cath lab for primary percutaneous coronary intervention

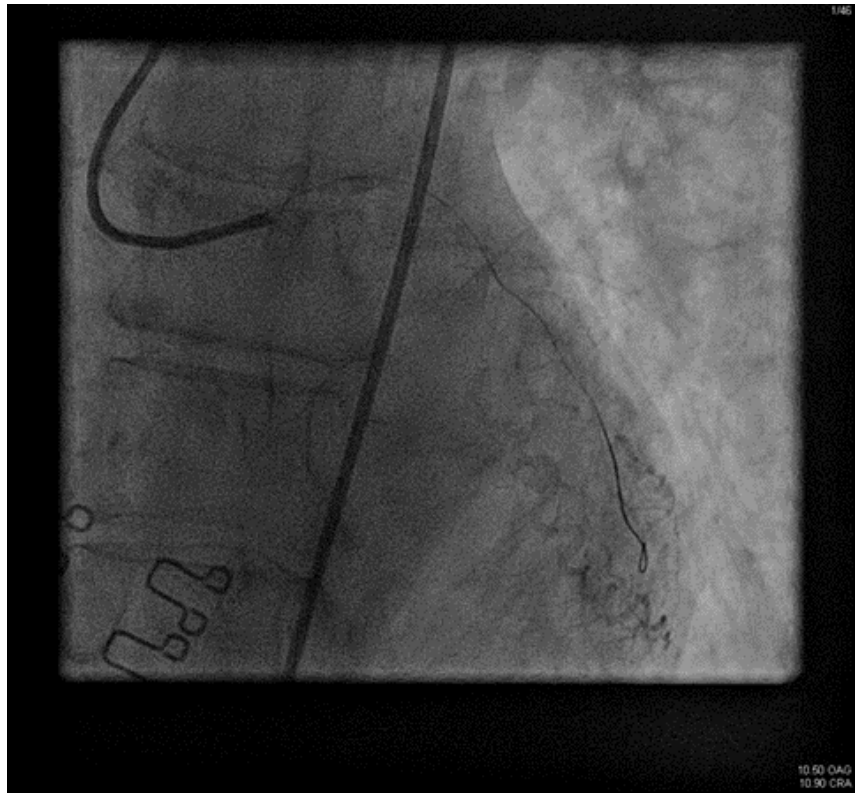
The procedure

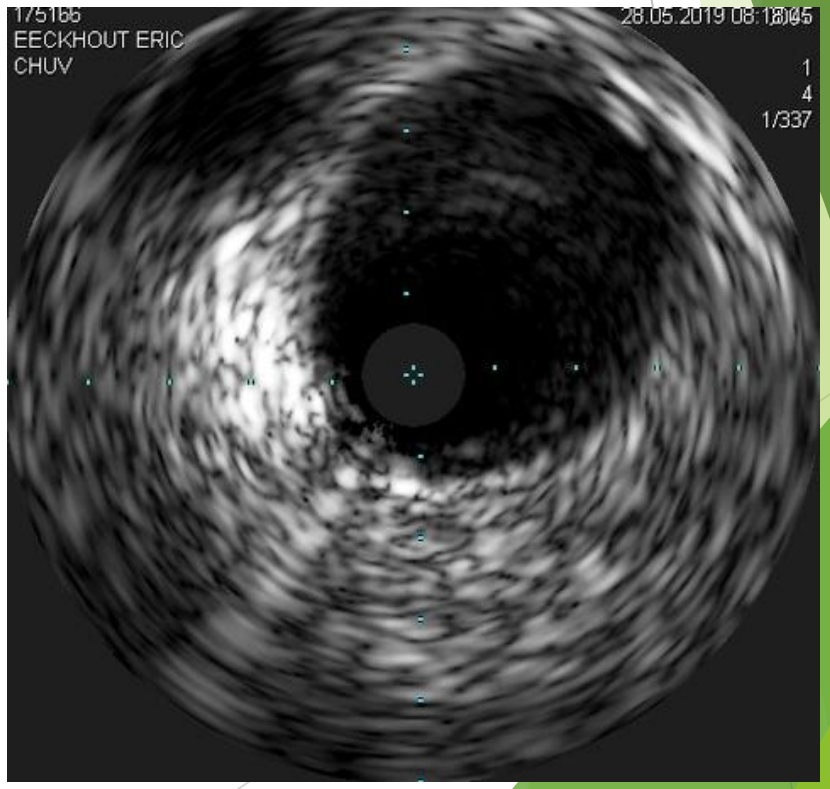
- 8Fr right femoral approach
- RCA was normal
- LCA was engaged with a VL3.5 with damping of pressure noted
  - LM ostium hazy but no critical lesion in LAD or LCX
  - TIMI 3 flow in both arteries



The procedure

- LAD was wired with a sion
- Non-selective angiogram showed large Left main ostium thrombus which was confirmed with IVUS





What to do next?

Concerns:

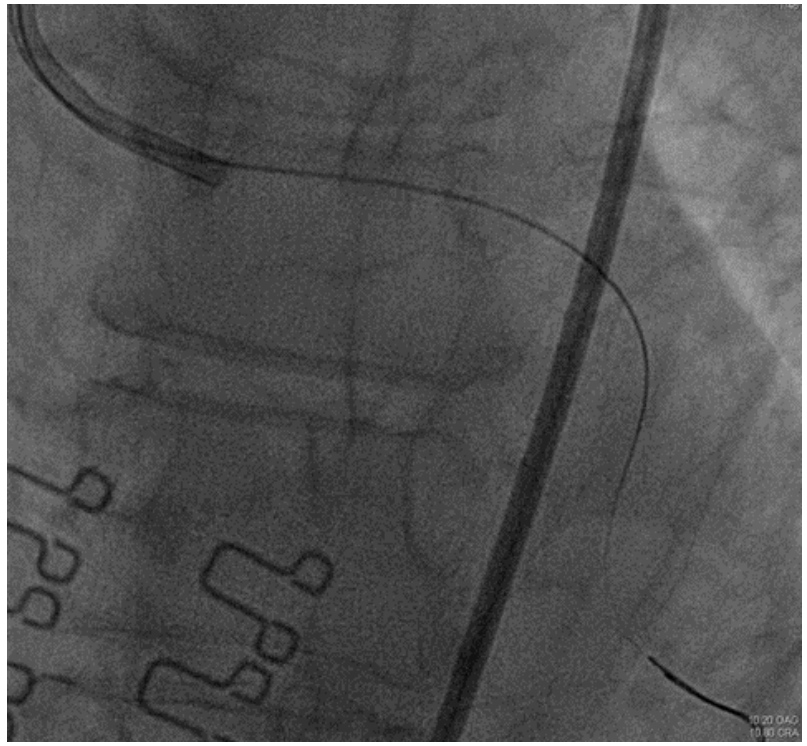
- Patient in cardiogenic shock
- Risk of distal embolization/no reflow
- Large size of the LM ostium

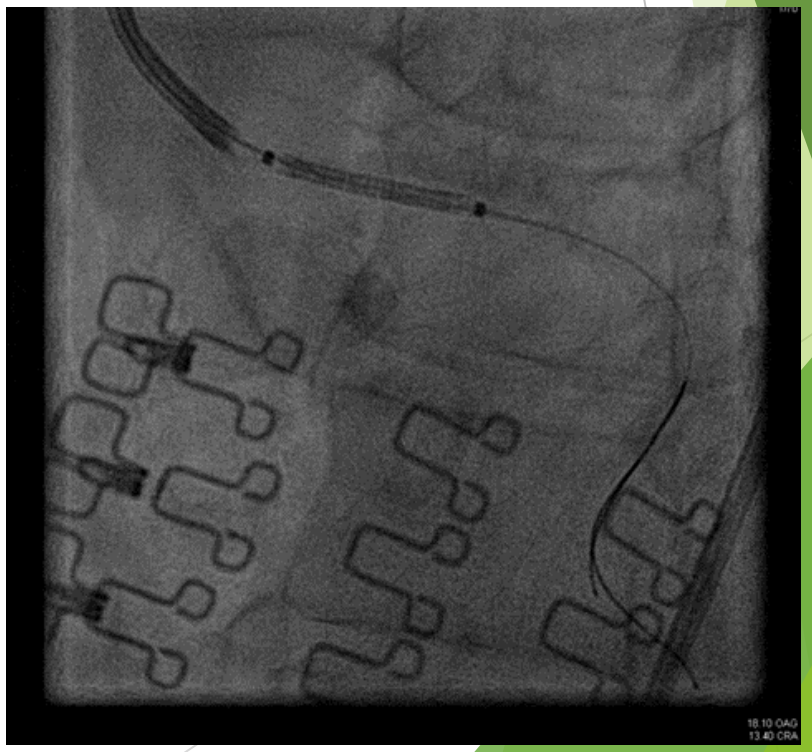
Options:

- Mechanical thrombectomy?
- Filter wire?
- Intra-coronary thrombolytics?
- Direct stenting?
- Deferred stenting?

What we did

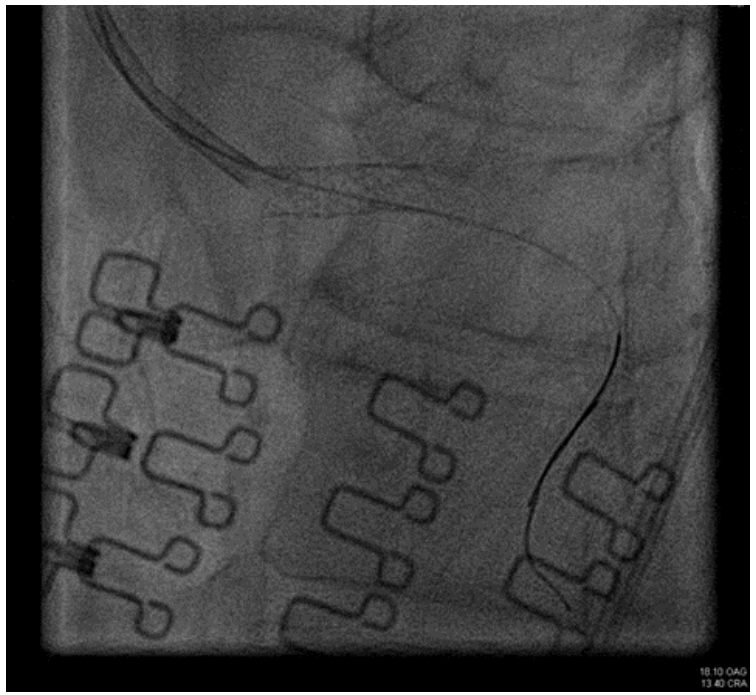
- We chose none of the above
- LAD wired with V18 guidewire
- Direct stenting with Begraft peripheral stent graft 5x18mm

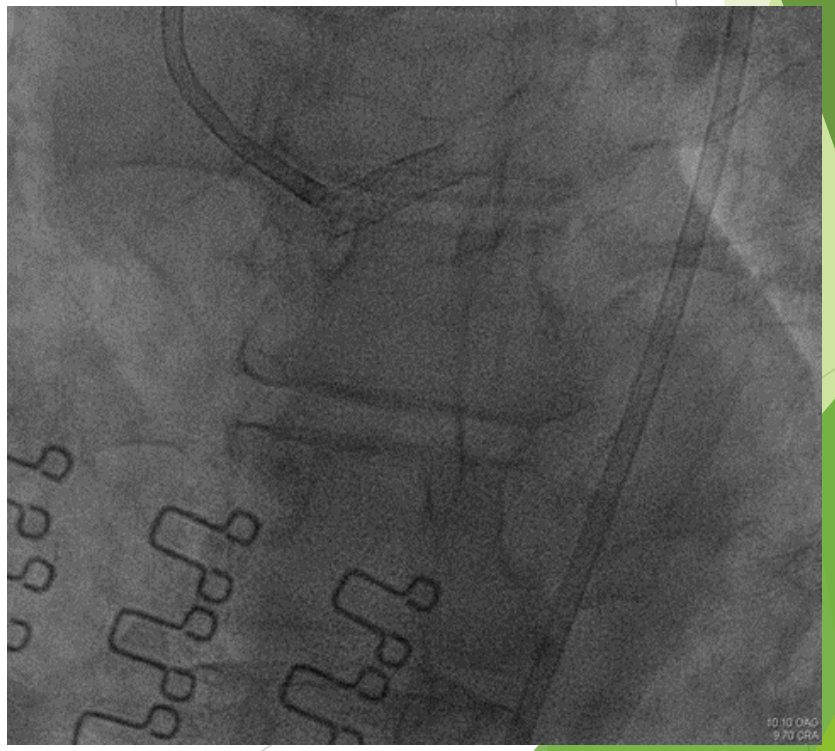




The procedure

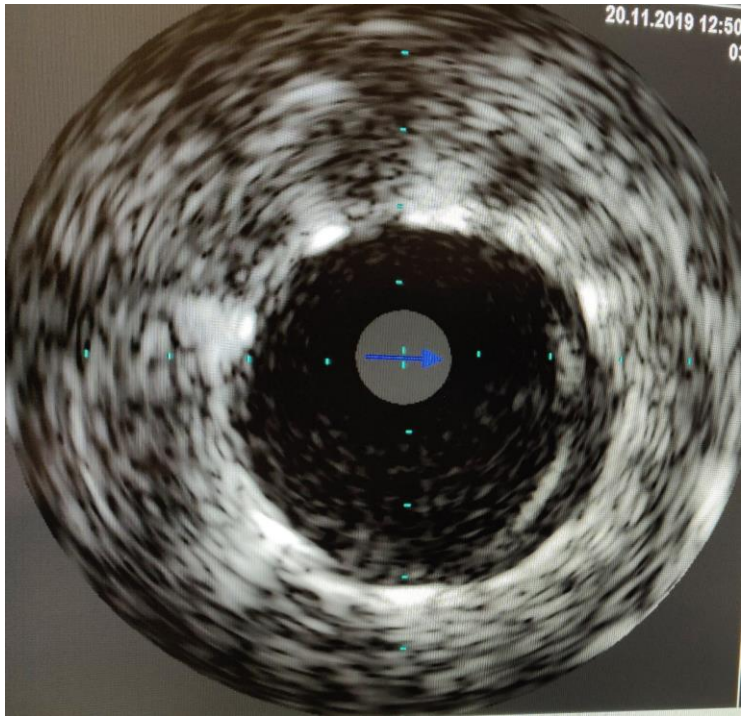
- Stenting resulted in immediate resolution of the ST segment elevation and improvement in patient's hemodynamic status
- Final angiogram showed patent LM with no distal embolization and TIMI 3 flow in both LAD and LCx

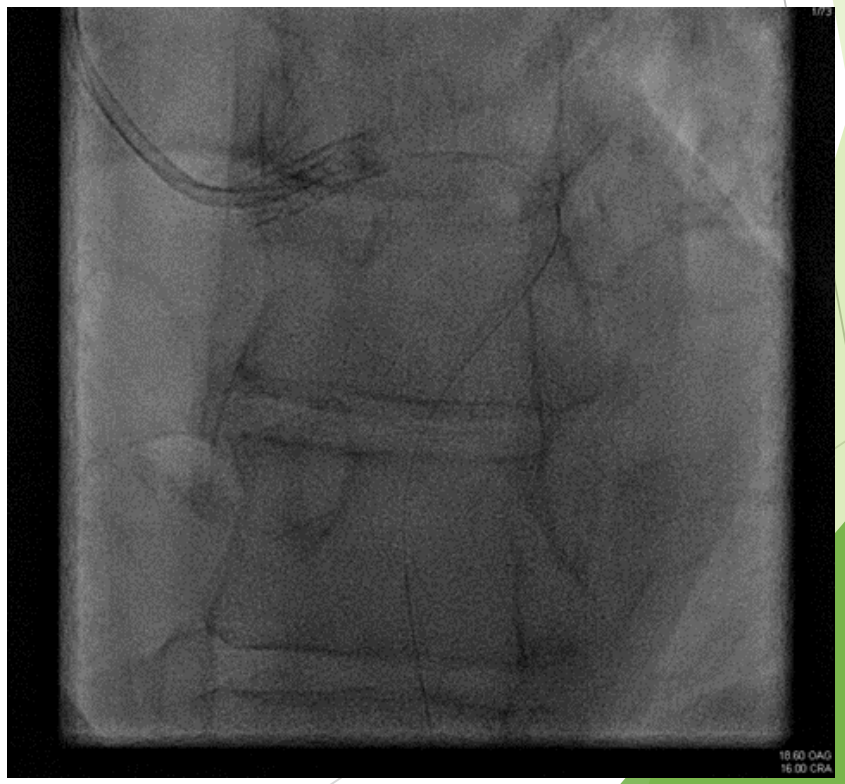




Follow up

- Patient remained symptom free during her 6 months FU
- Follow up angiogram showed patent coronary arteries with mild stenosis at distal stent
- IVUS showed well apposed stent





Discussion

- ACS caused by LM thrombus is associated with very high in hospital mortality rate, up to 77%
- No consensus on the best treatment
- Direct stenting has been showed to prevent no reflow phenomenon
- In our patient, the unique location of the thrombus and size of the vessel allowed us to think outside of the box, merging peripheral vascular intervention with coronary intervention
- Important to know the tools available to us
  - “normal” tools such as IVUS, thrombectomy devices, filter wires
  - Alternatives with peripheral stents or IR catheters