



Retrograde PCI to CTO LAD and RCA

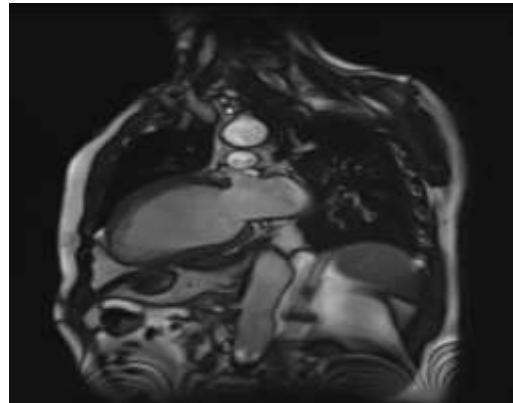
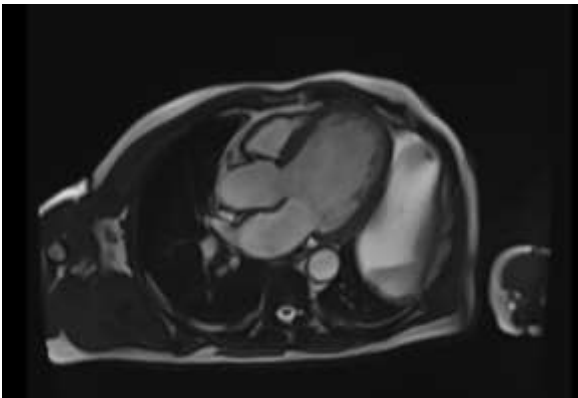
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Assistant lecturer, Kasr Al Ainy medical school

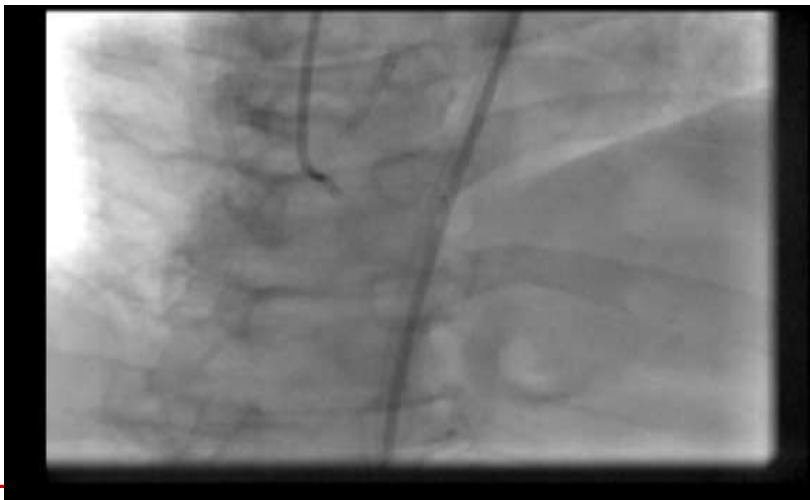
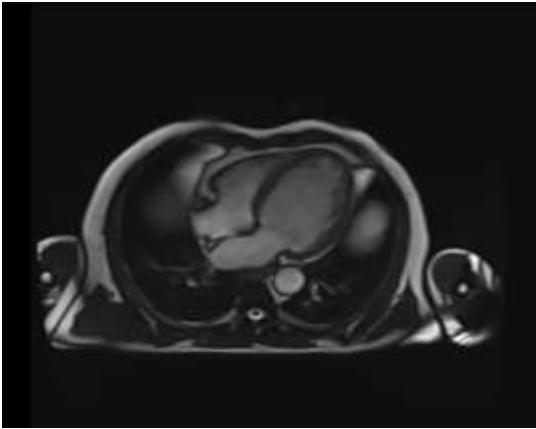
- Team:
 - Dr. Ahmed Mohammed El Guindy.
 - Dr. Hesham Baha
- Scrub nurses:
 - Shimaa Mohammed
 - Ehab el sayed
- Technician:
 - Osman ahmed



Clinical Picture

- 62 years old male patient.
- S/P: PCI to RCA in 2011.
- ACS in 2015.
- On presentation to AHC (1/2017), exertional anginal chest pain CCS III, associated with Dyspnea NYHA III.
- Echocardiography: Impaired LVEF of 25%, with multiple akinetic segments .
- CMR: no LGE.
- CA → multi- vessel CAD
- Heart team discussion → CABG , but the patient refused, so PCI was planned.





Analysis of angiographic data

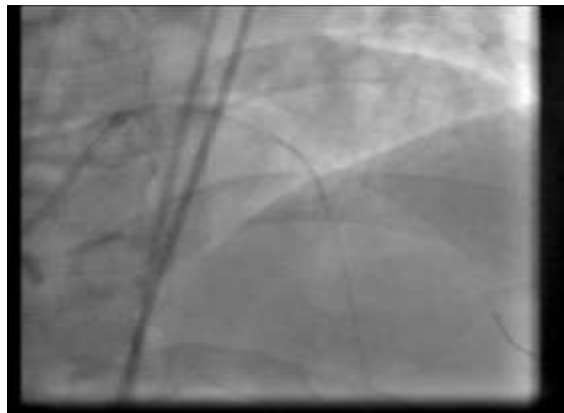
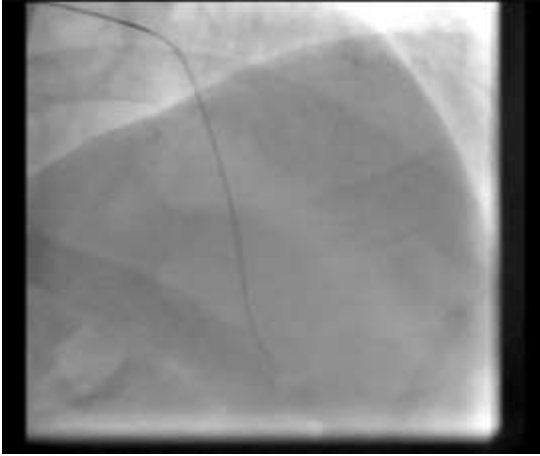
- CTO LAD in its mid segment supplied by collaterals from the RCA
- CTO RCA in its distal segment.

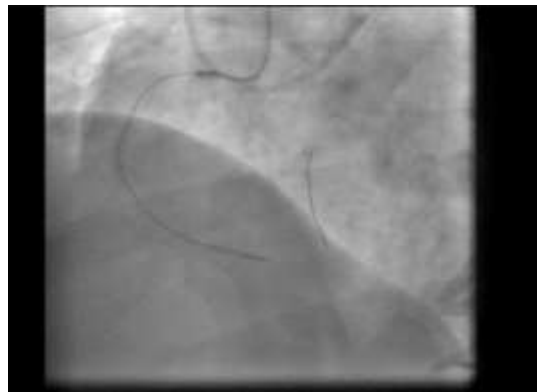
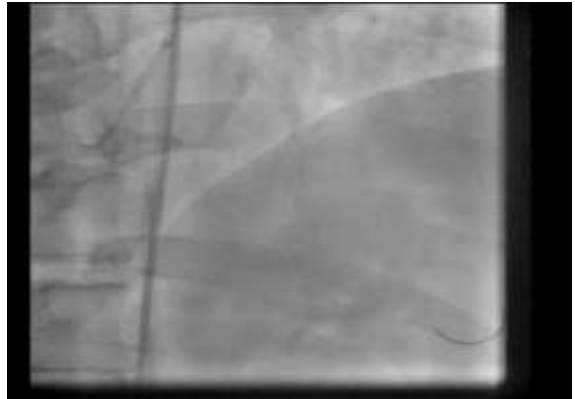
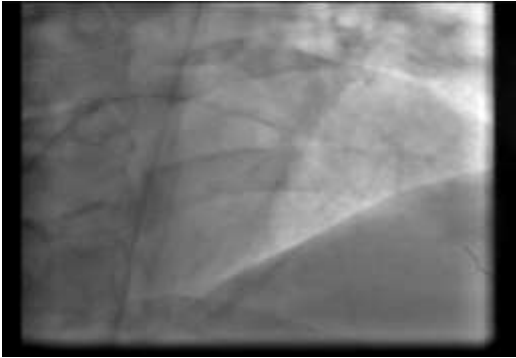


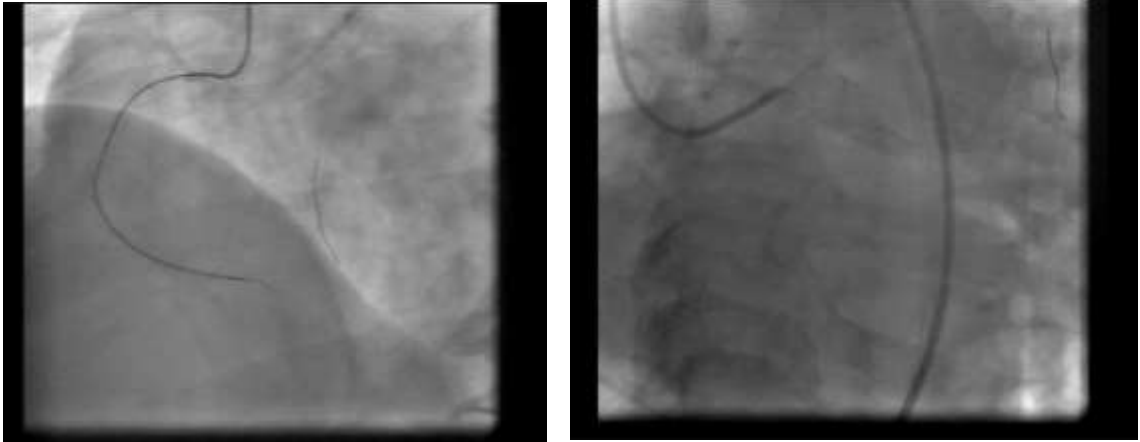
Strategy

- PCI to CTO LAD by **antegrade wire escalation technique**, using the RCA for retrograde injection.
- PCI to CTO RCA by **antegrade wire escalation technique**, using the left coronary system for retrograde injection





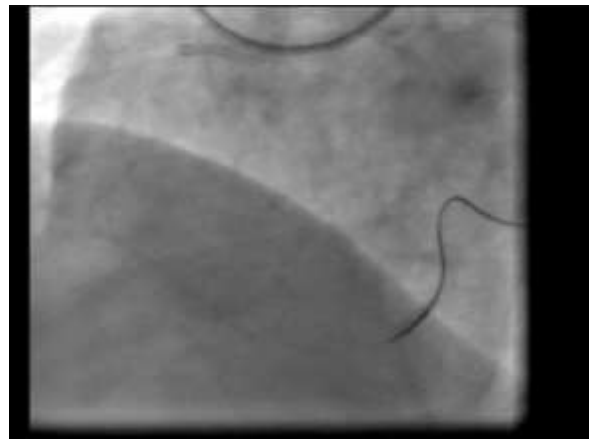
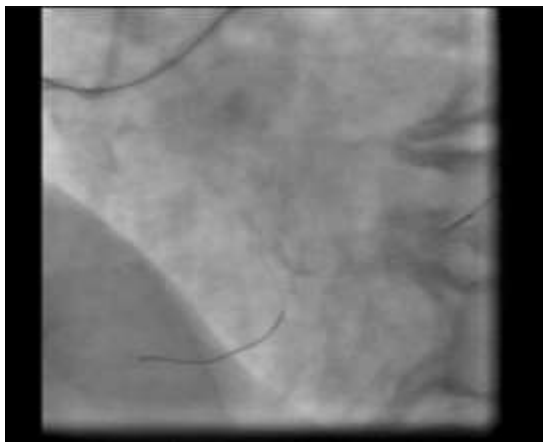
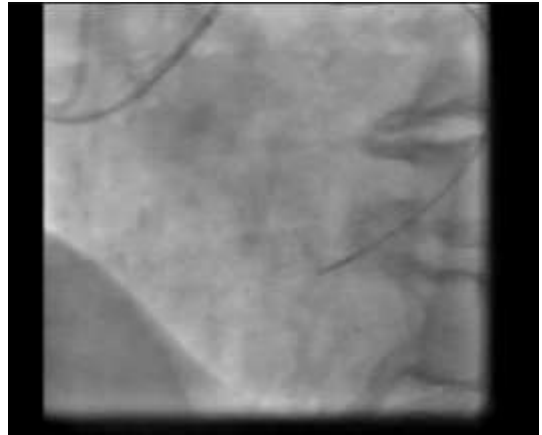
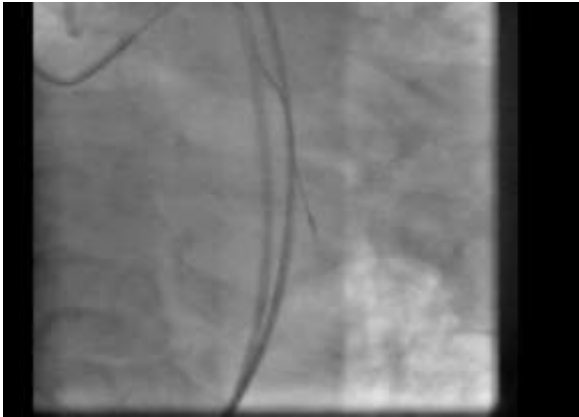


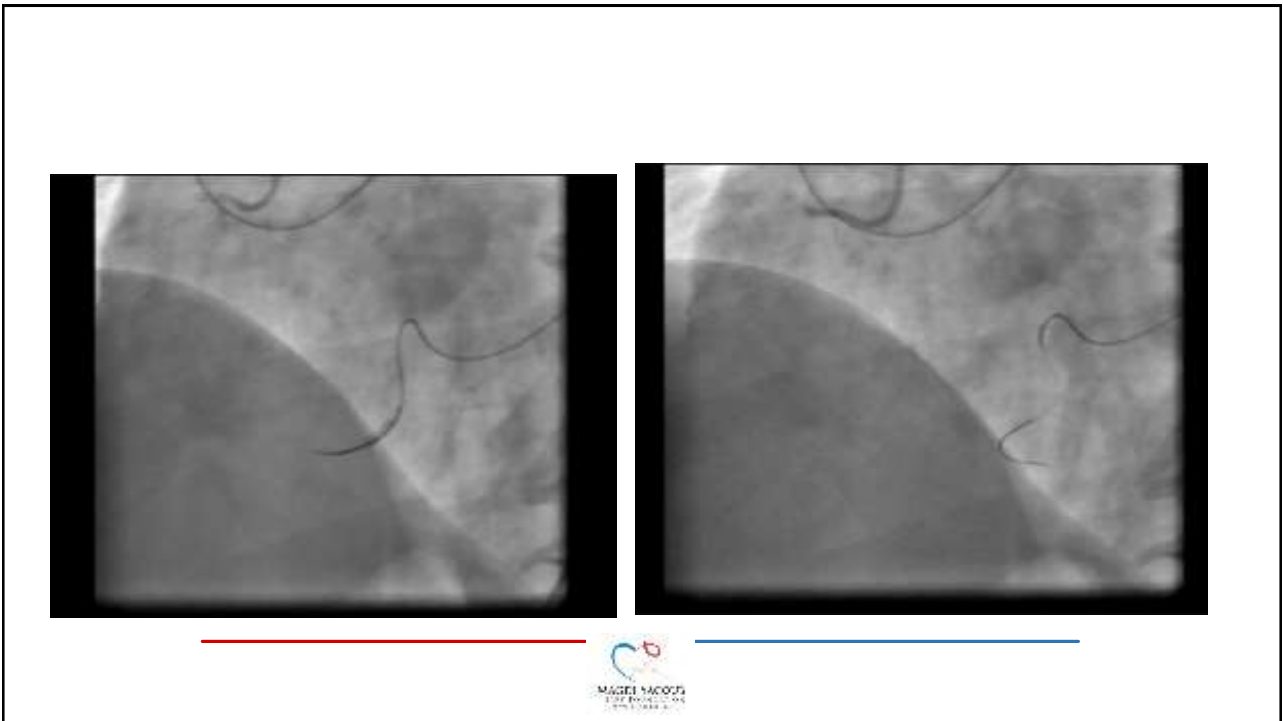
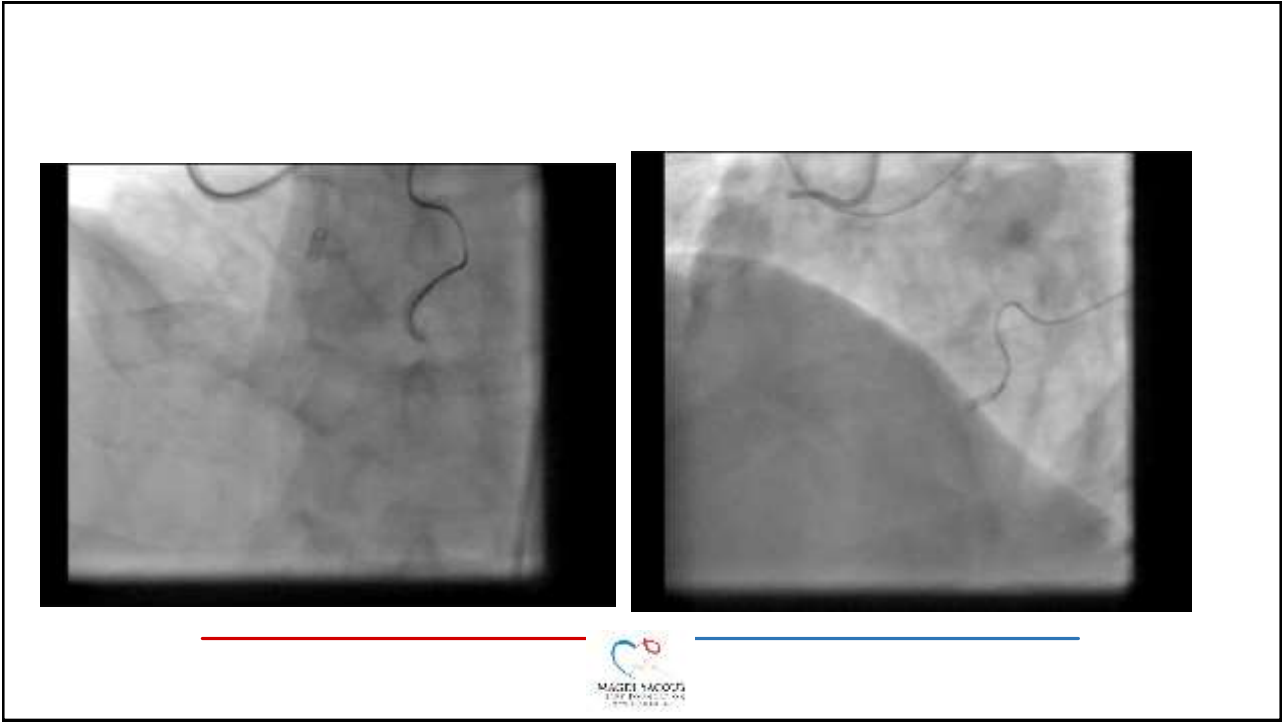


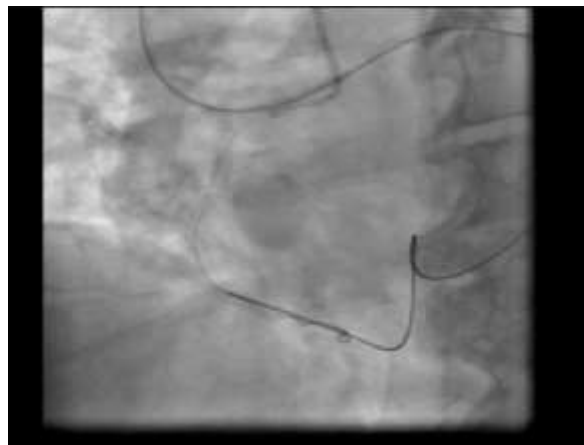
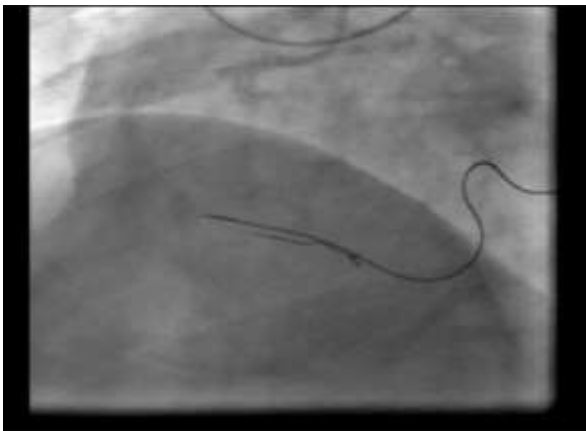
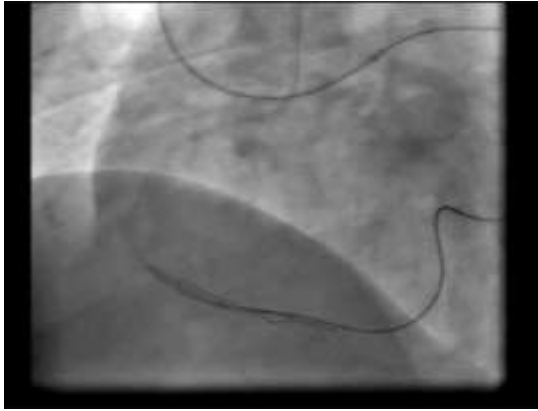
Modification of the Strategy

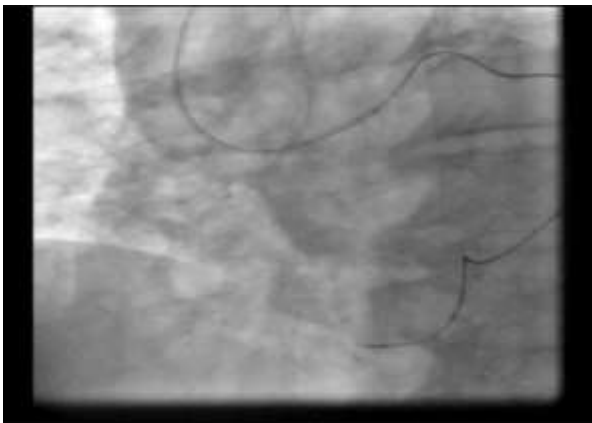
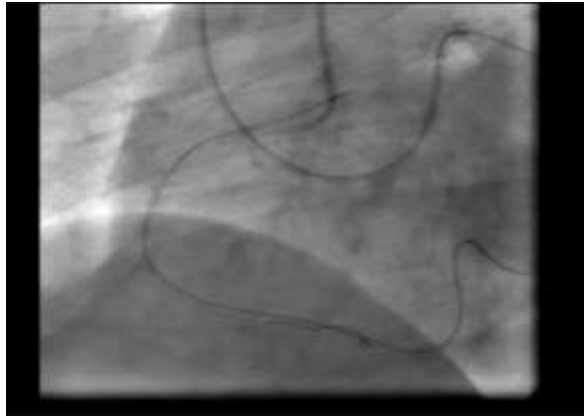
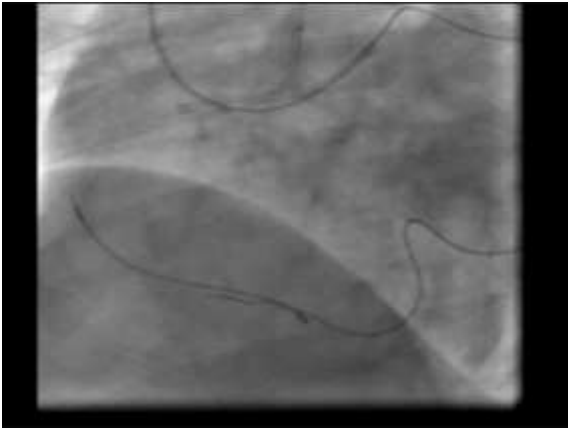
- PCI to CTO RCA by retrograde wire escalation technique, through the LCX artery.
- If failed shift to dissection re-entry.

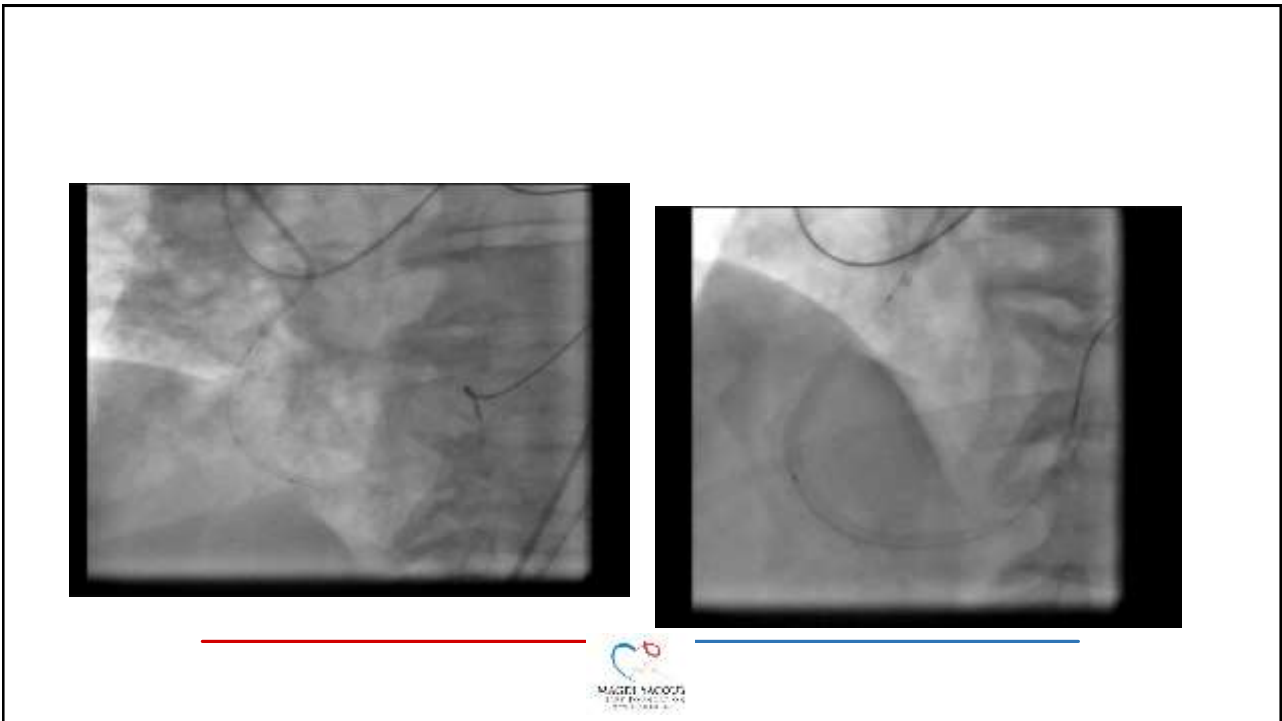
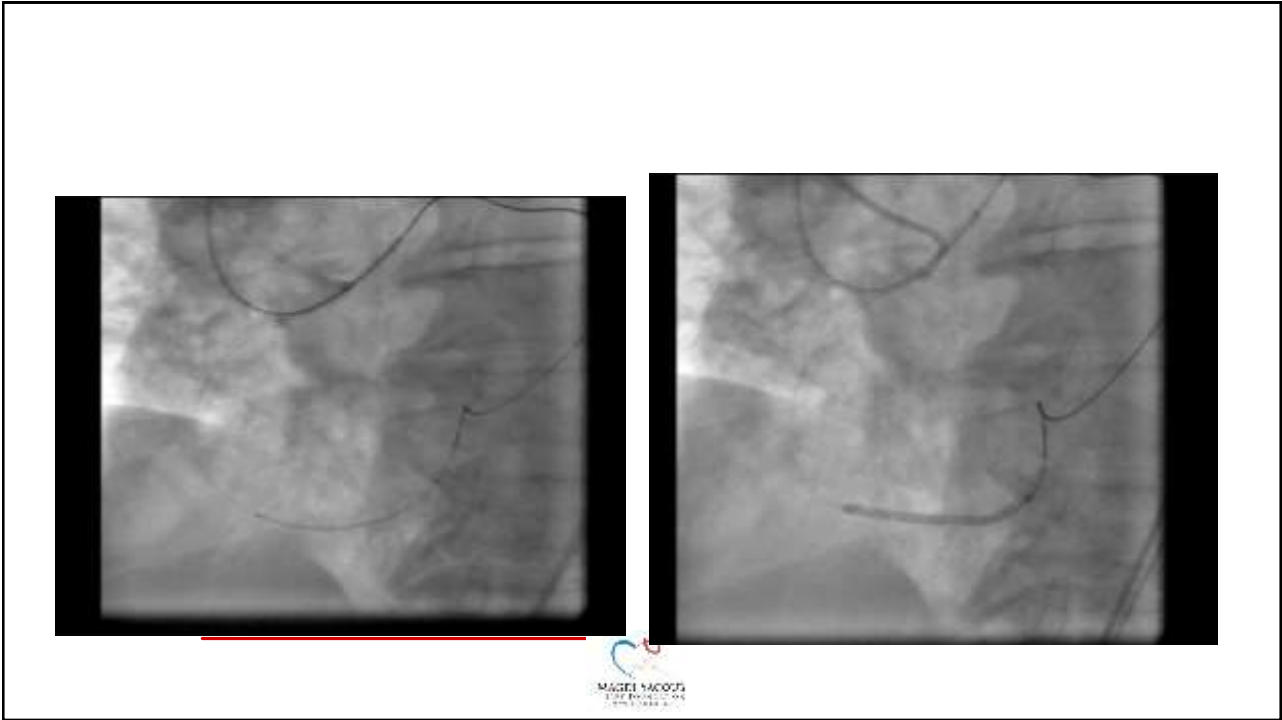


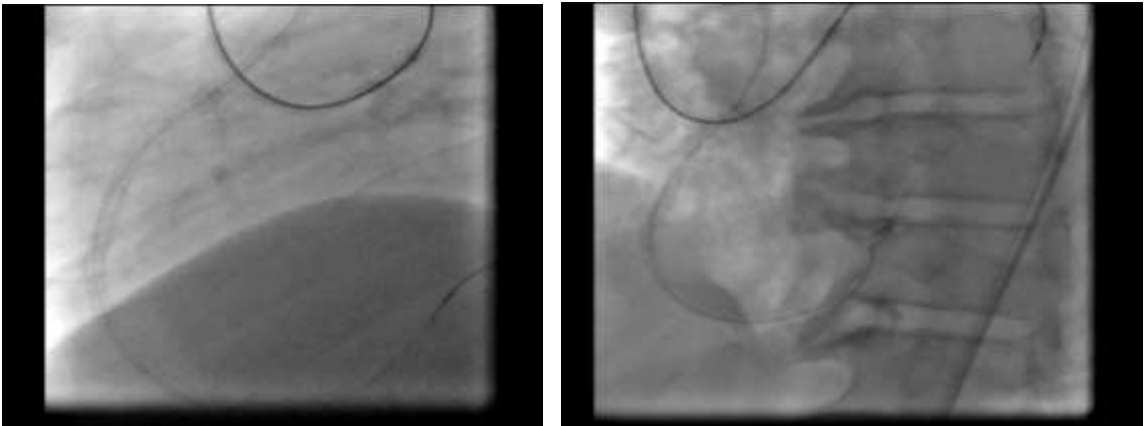
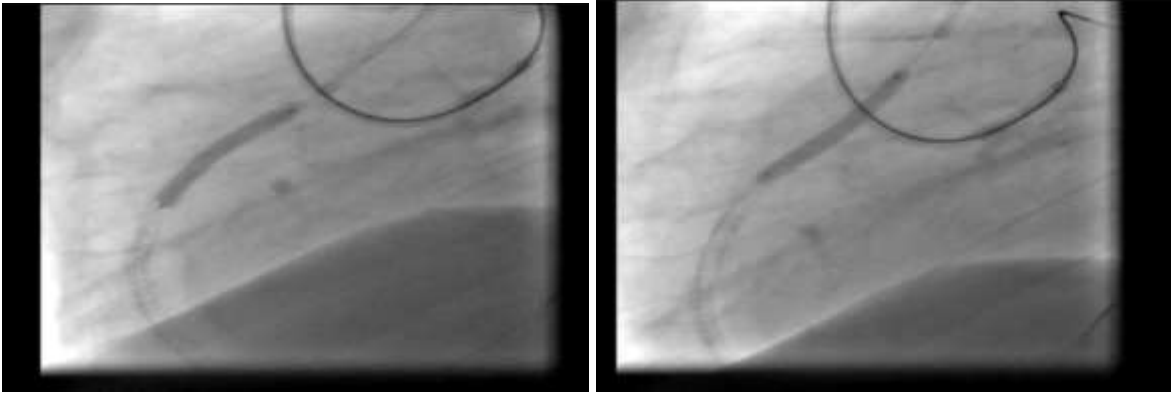


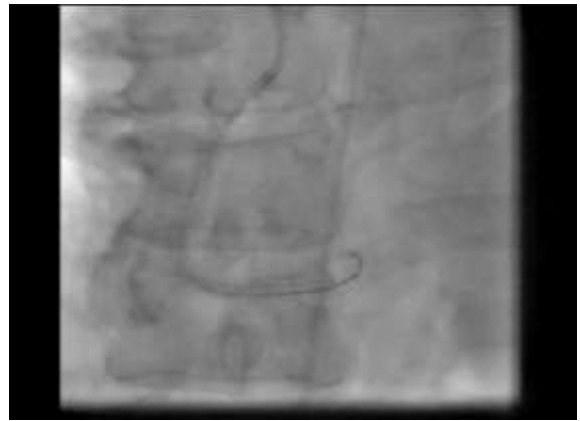
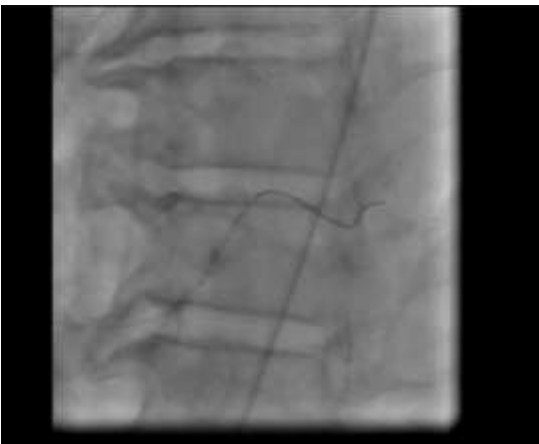
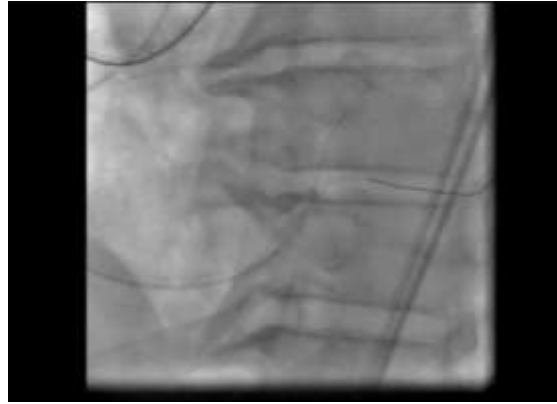
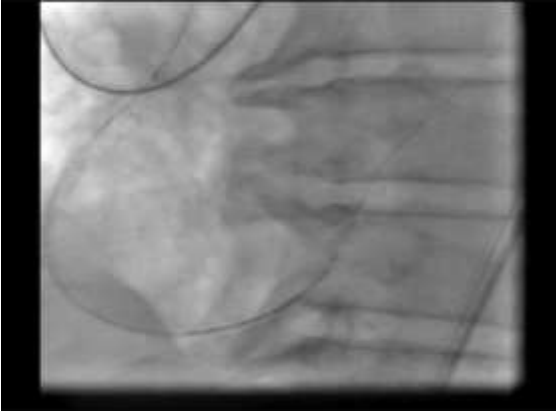


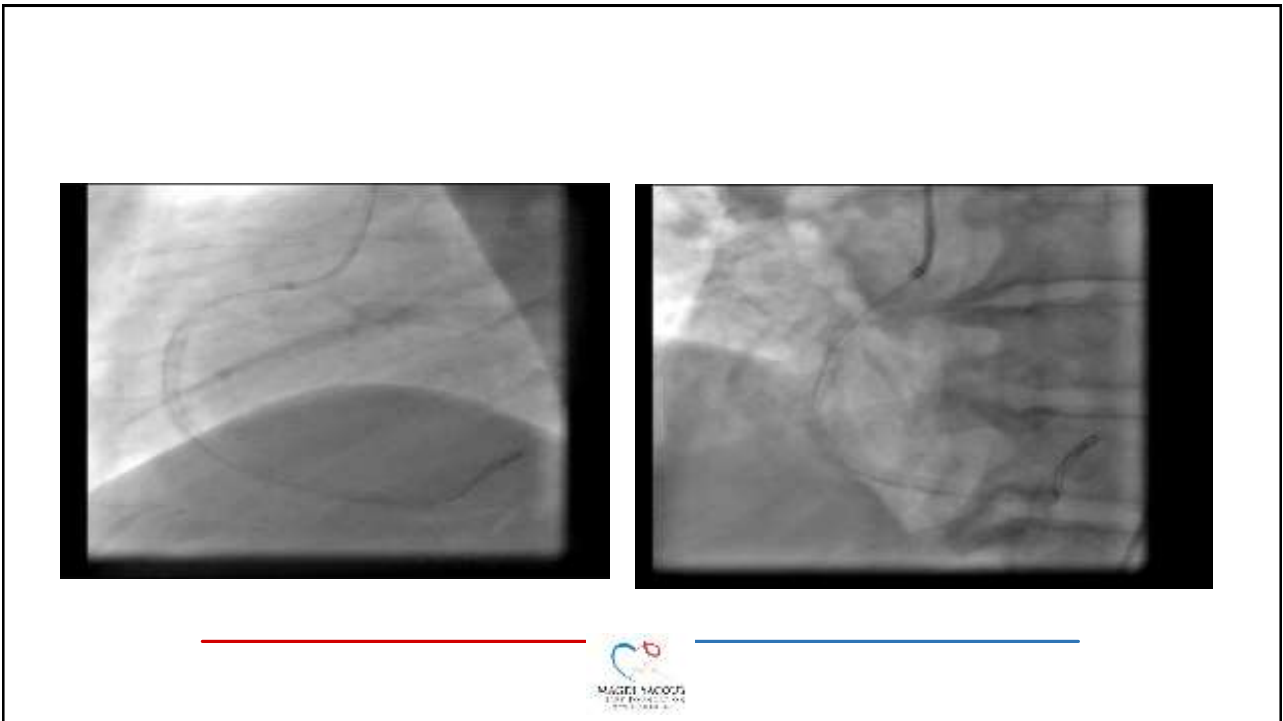












Take home message

- Always have a strategy, try to stick to it ,but be flexible when difficulties occur.



Thank you

