

Japanese Doll's

ICSM @ TCTAP 2023

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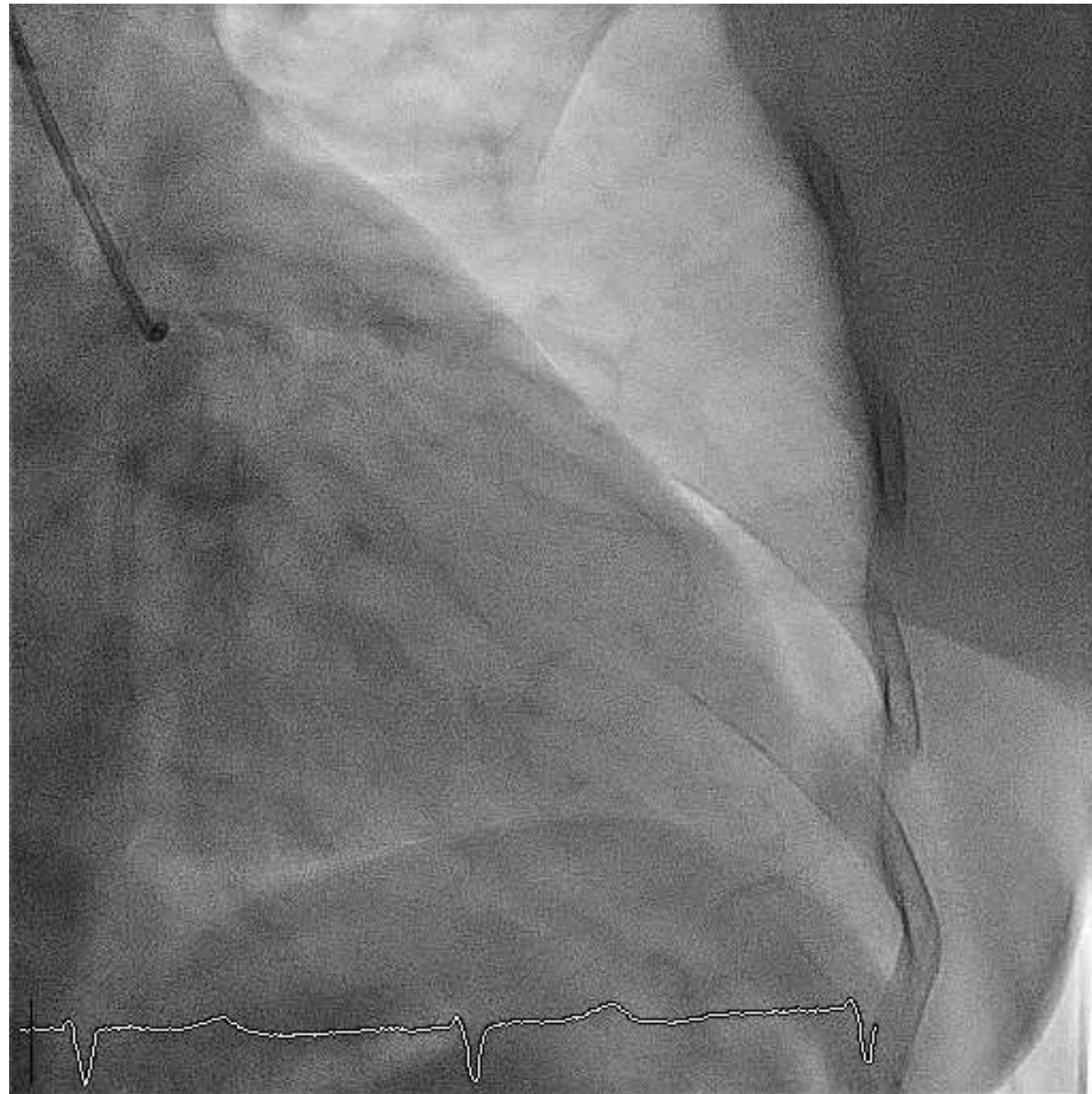
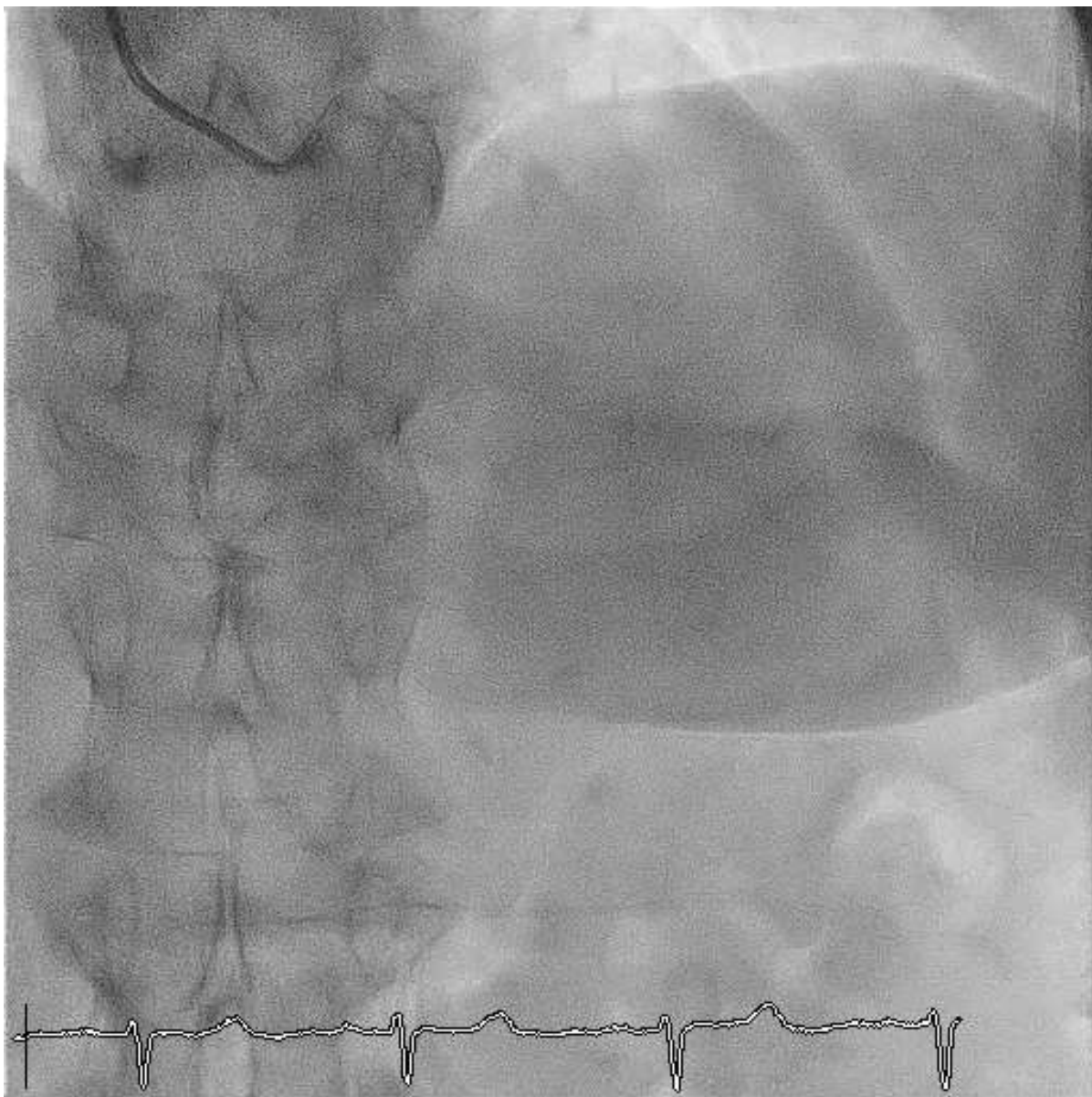
History

- 70 year old lady
- Past medical history:
 - 1) Hypertension
 - 2) Diabetes mellitus
 - 3) Ischemic Heart Disease
- PCI to mid RCA in 2008
Stented with PROKINETIK (BMS) 2.5 mm x 20mm

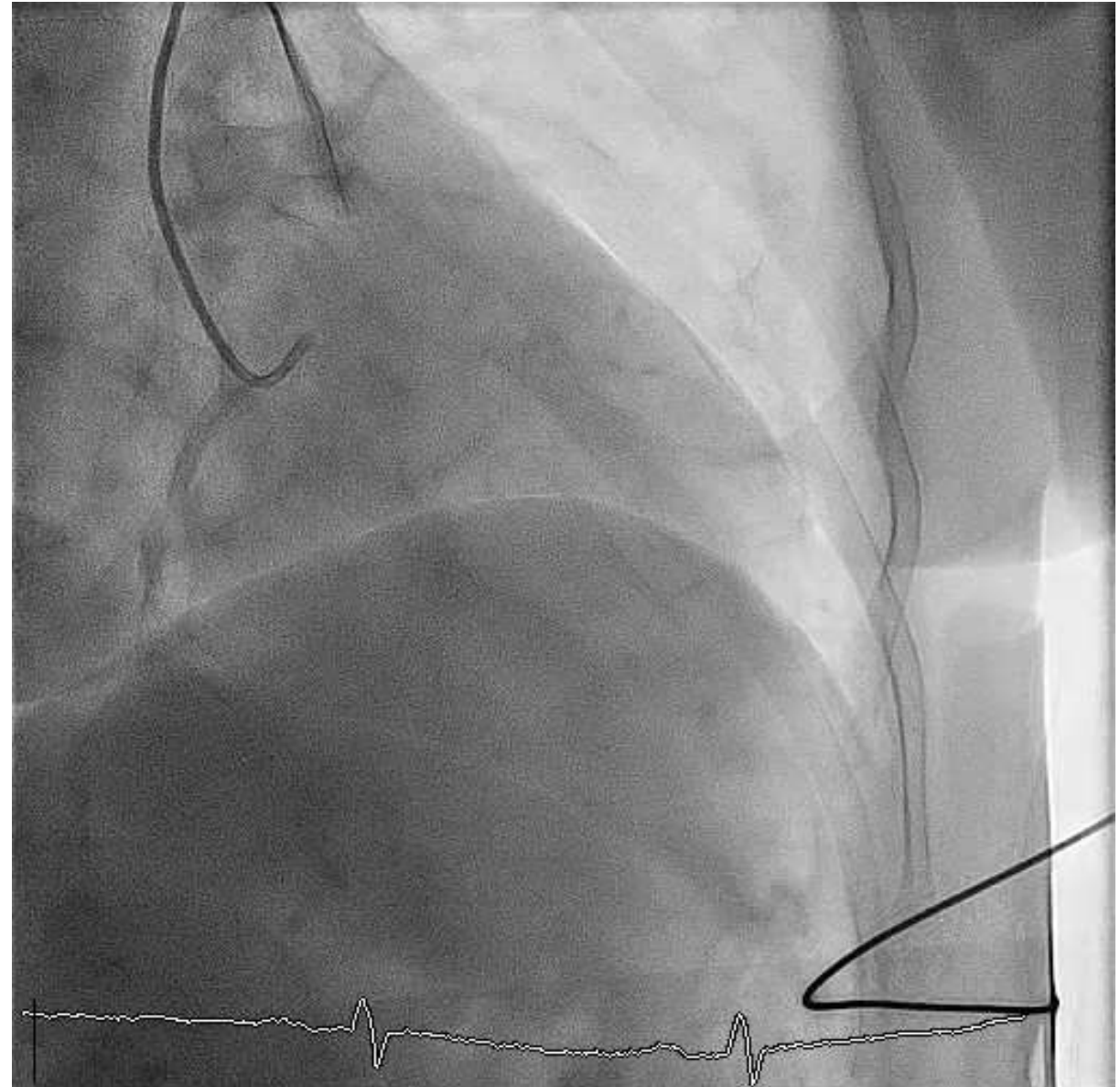
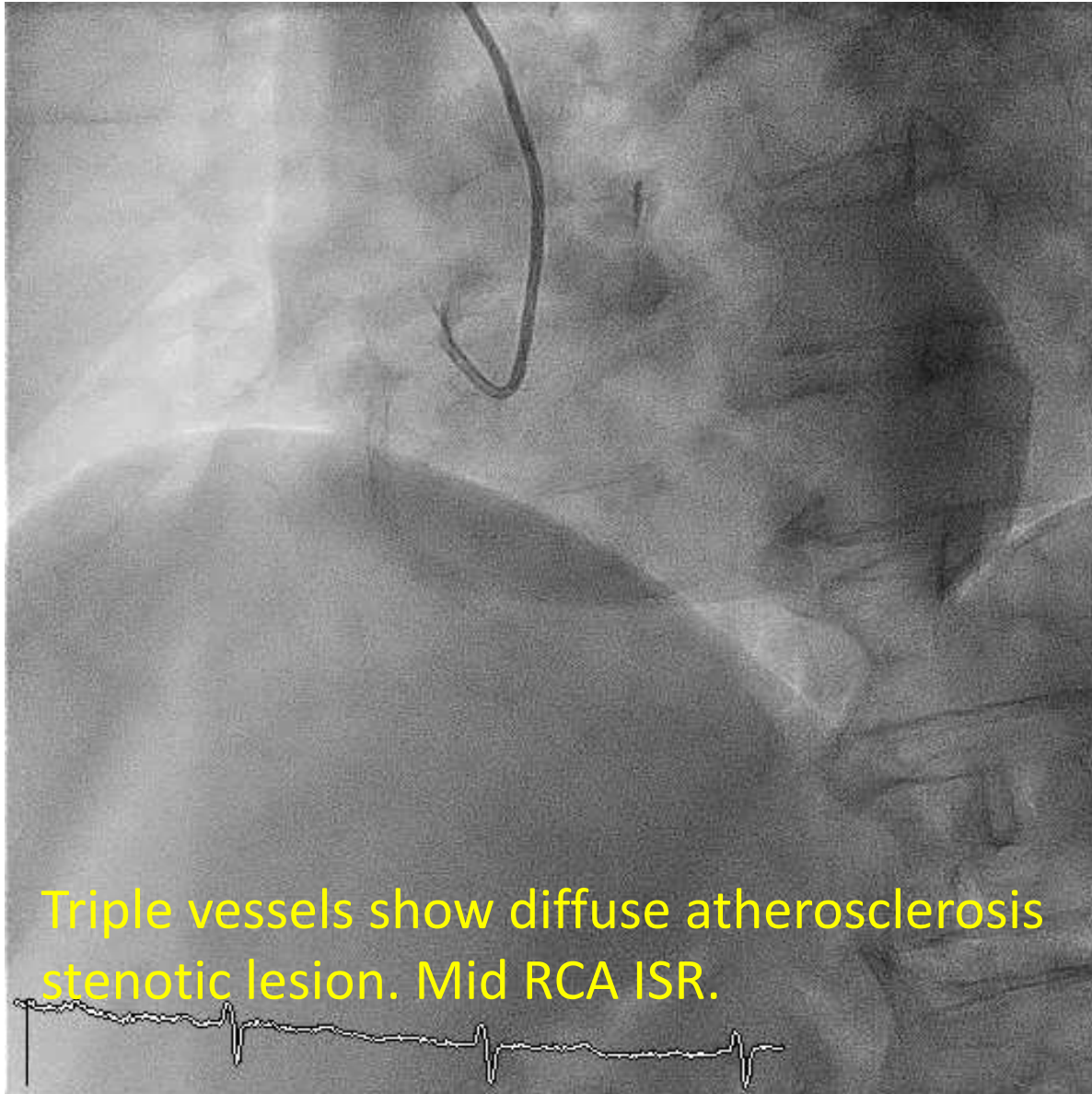
- History of admission for unstable angina 1 month ago.
- ECG: ST depression at II, aVF, V4-V6



Diagnostic Angiogram (Left)



Diagnostic Angiogram (Right)



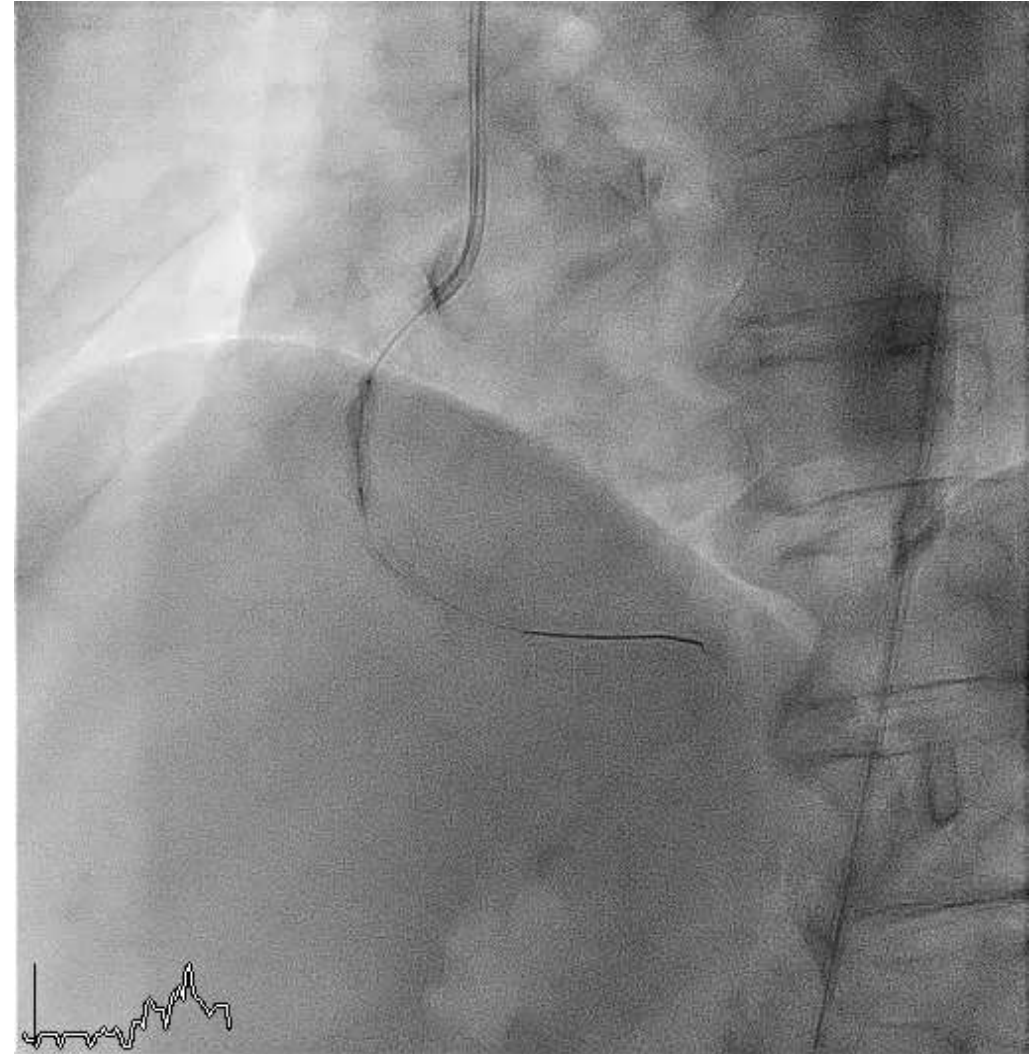
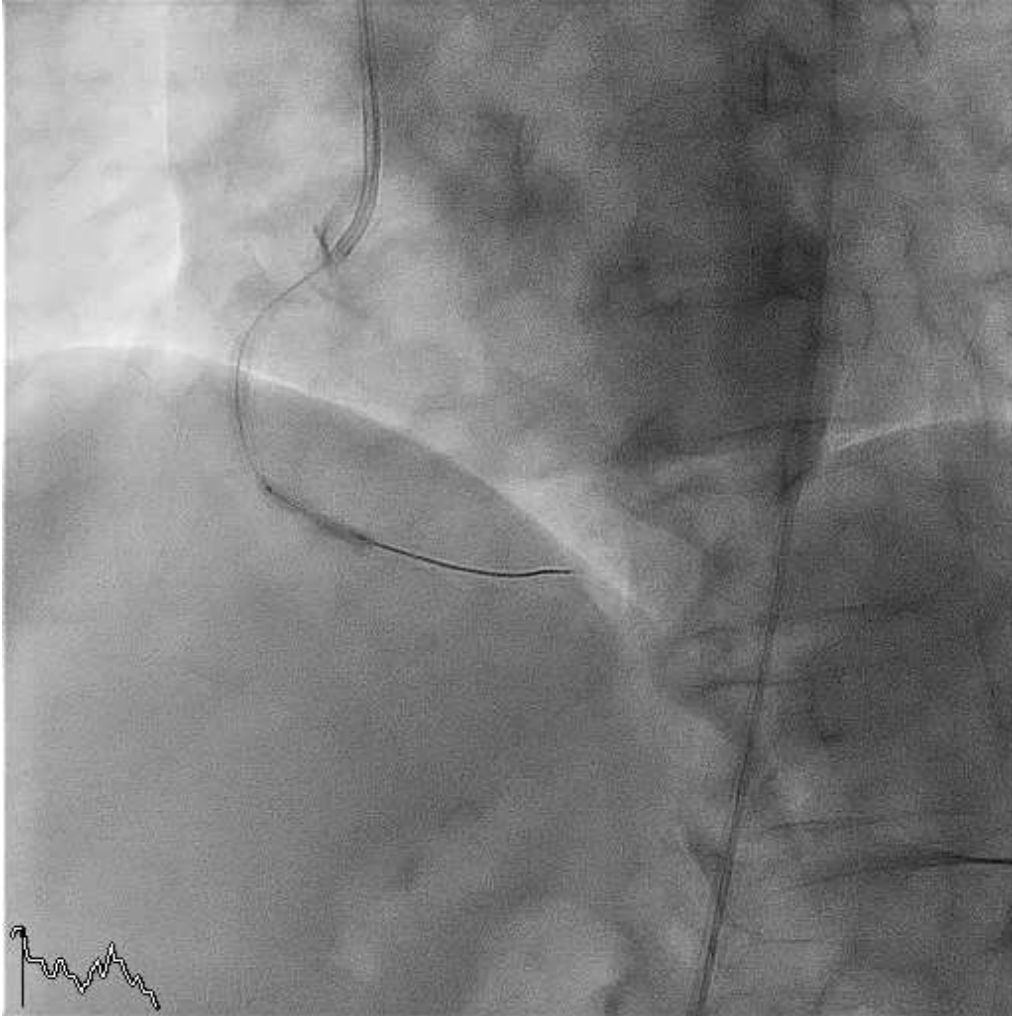
Diagnosis

- The diagnosis is triple vessel disease with syntax score of **29**.
- The patient refused bypass surgery when discussed on table.

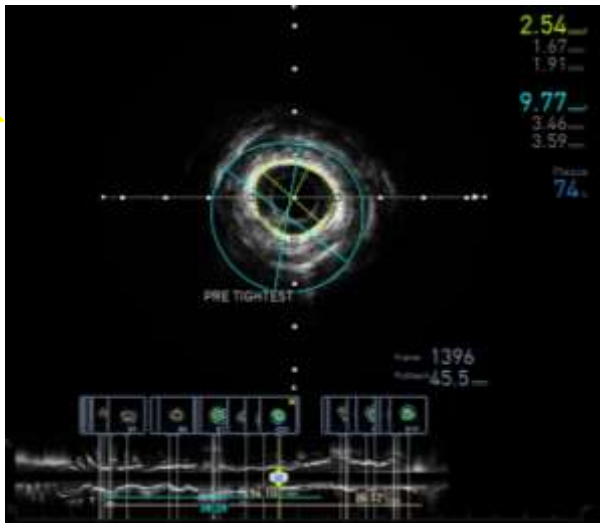
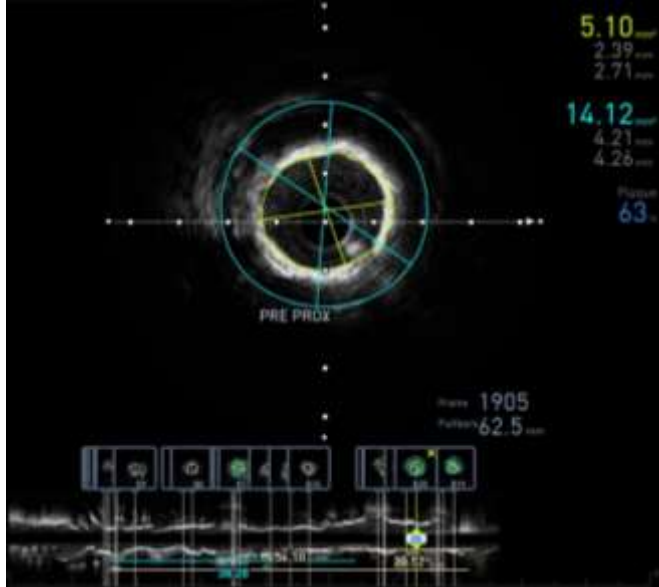
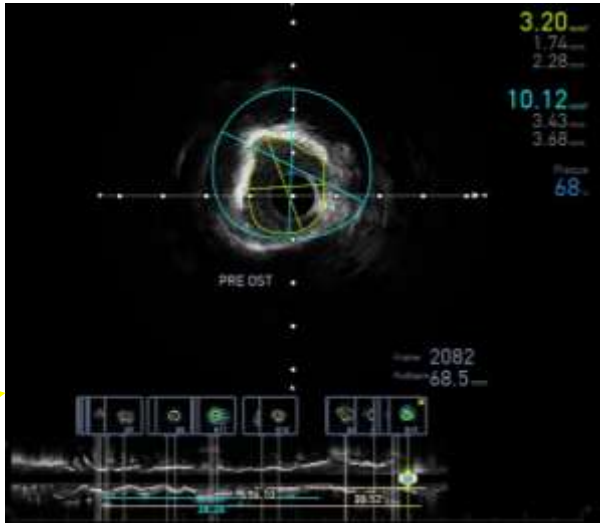
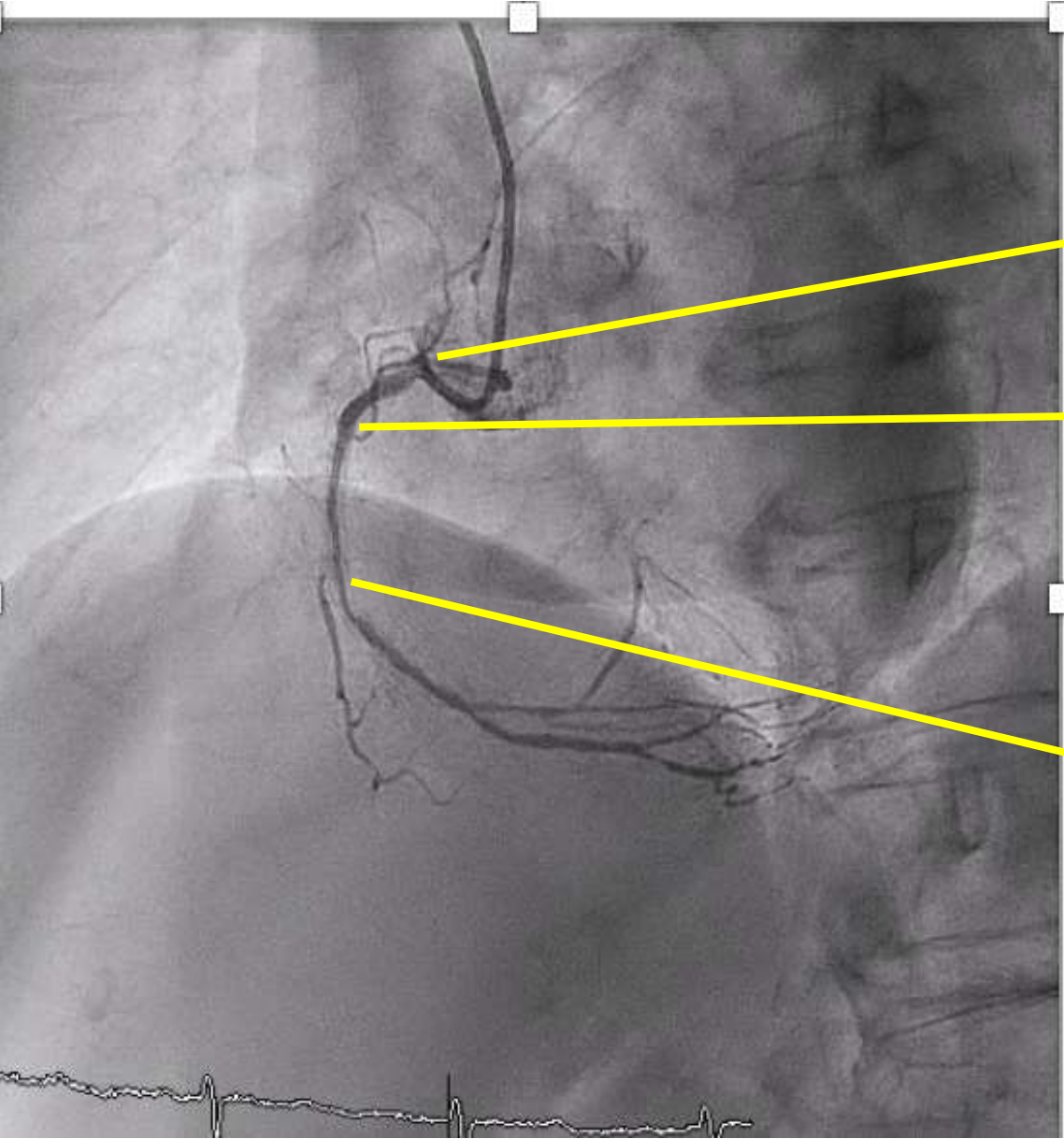
Strategy

- IVUS
- Non compliant balloon
- May use atherectomy
- 2 DCB

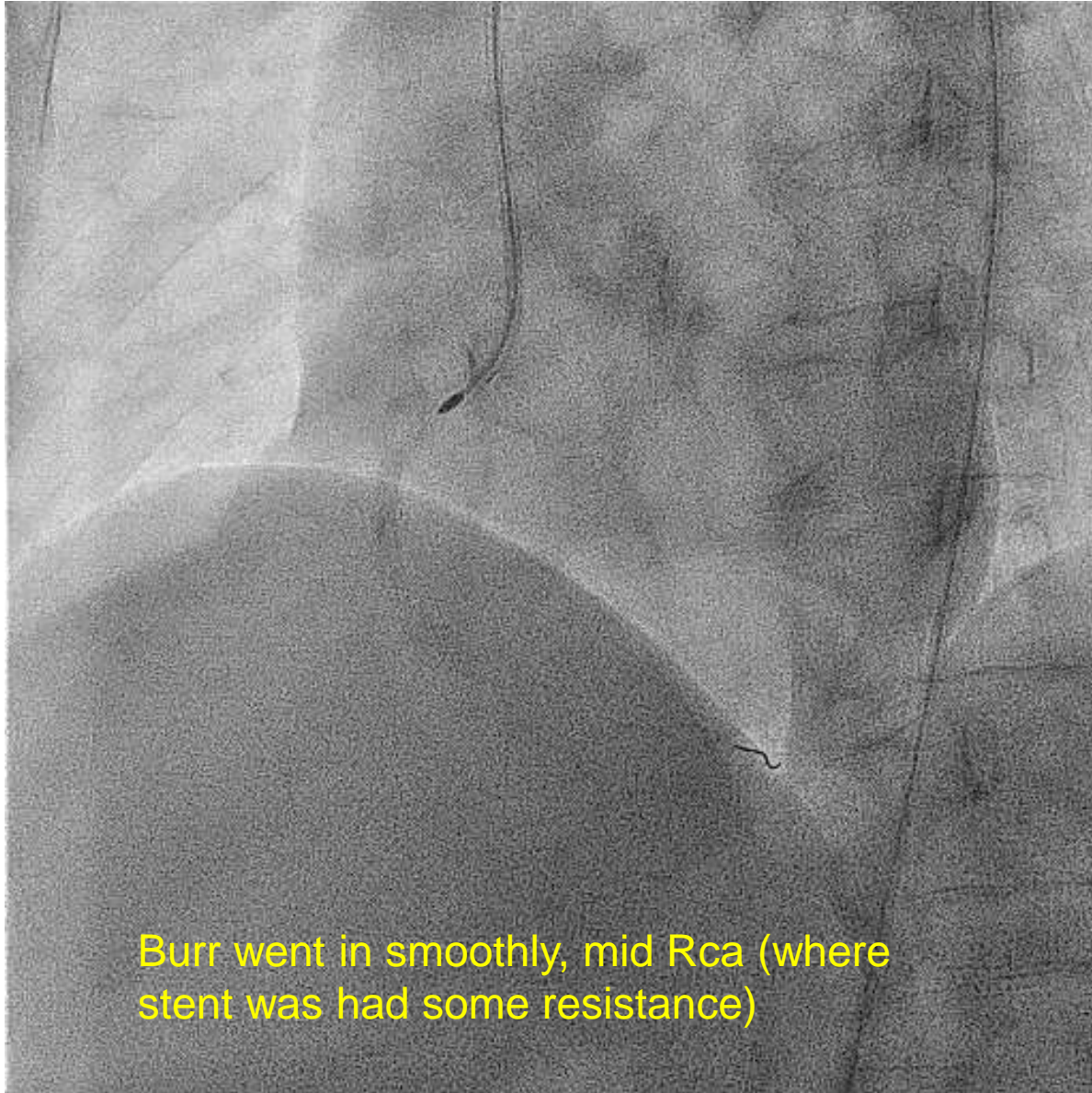
Predilate distal to proximal stent NC balloon 2.0x15mm (12 atm)



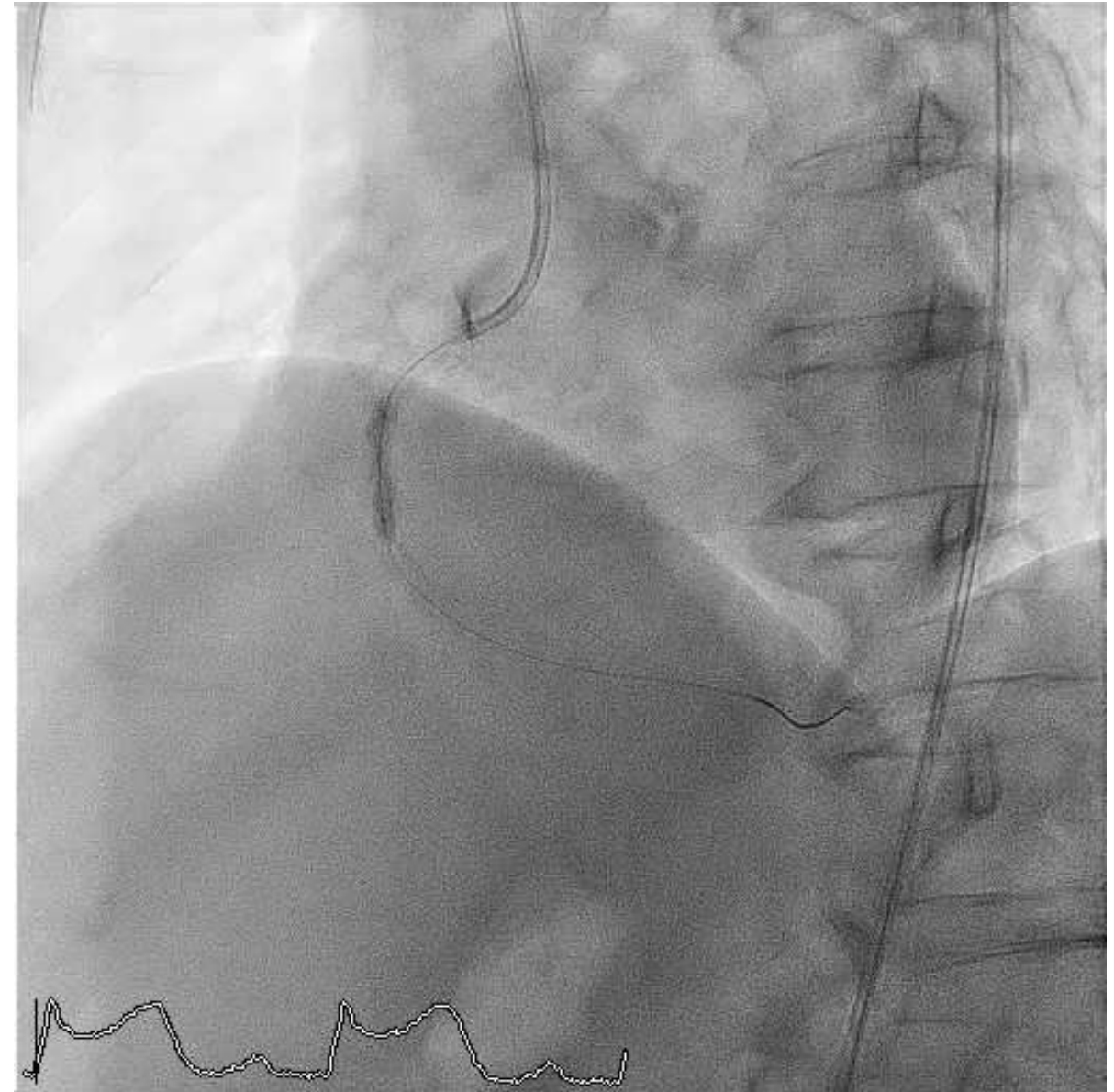
IVUS



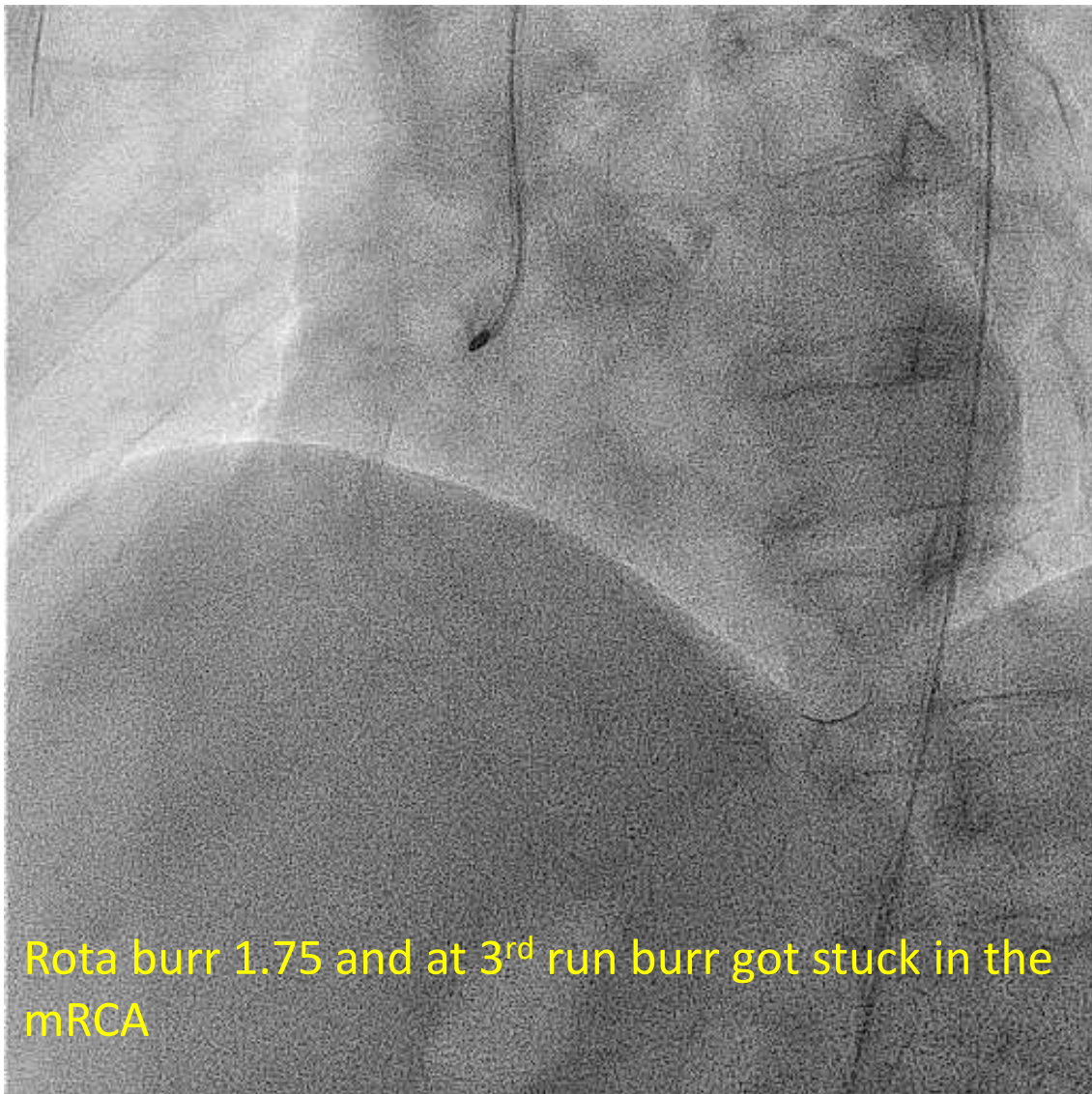
Rotablation for calcified plaque



NC 3.5x15mm unable to expand fully with high pressure



In view that balloon was unable to fully expand with high pressure at p-mrca, further Rota planned.

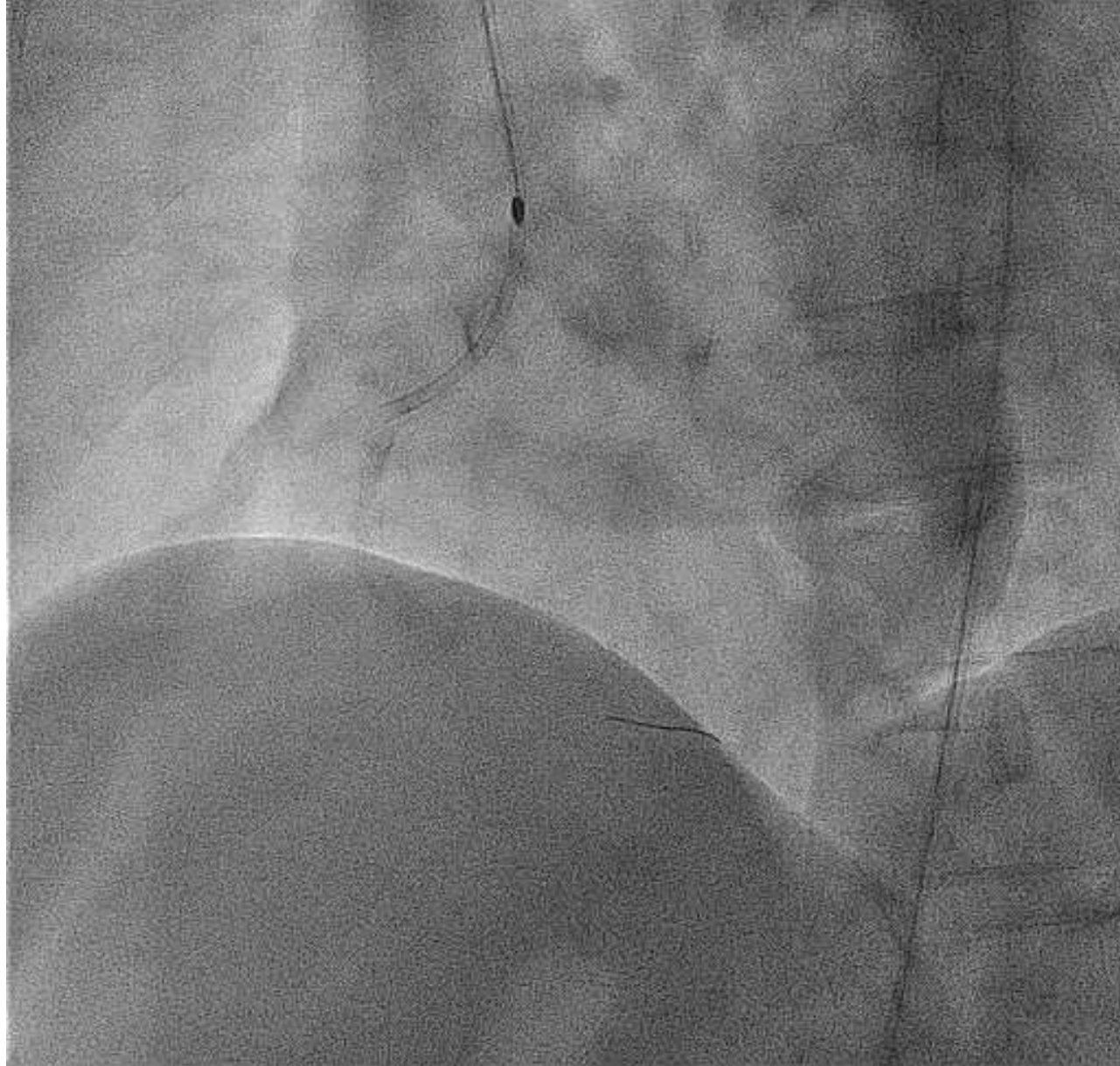


Rota burr 1.75 and at 3rd run burr got stuck in the mRCA

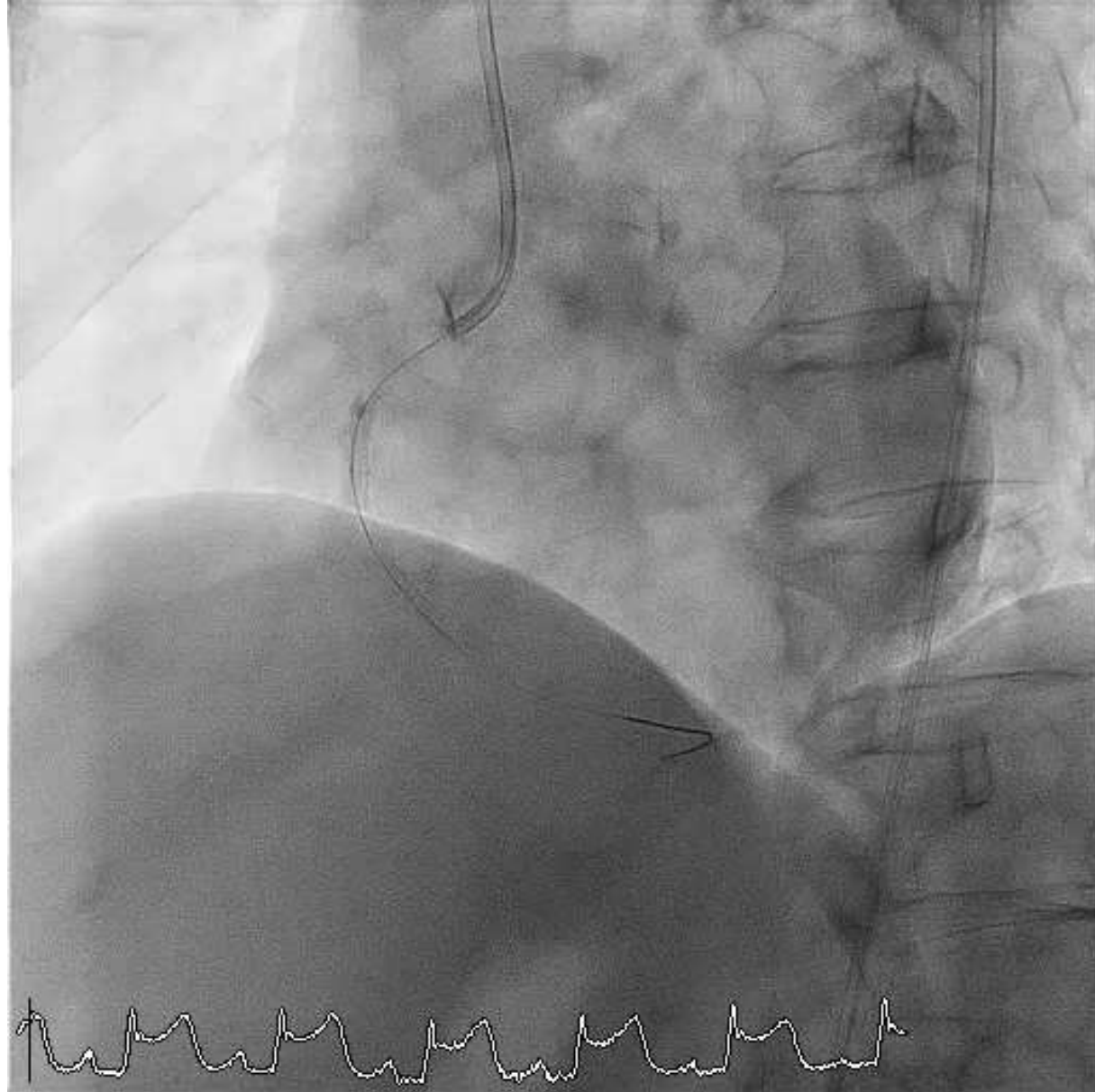
On Cardiac Monitor

ST elevation seen in the inferior leads and patient started complaining of chest pain.

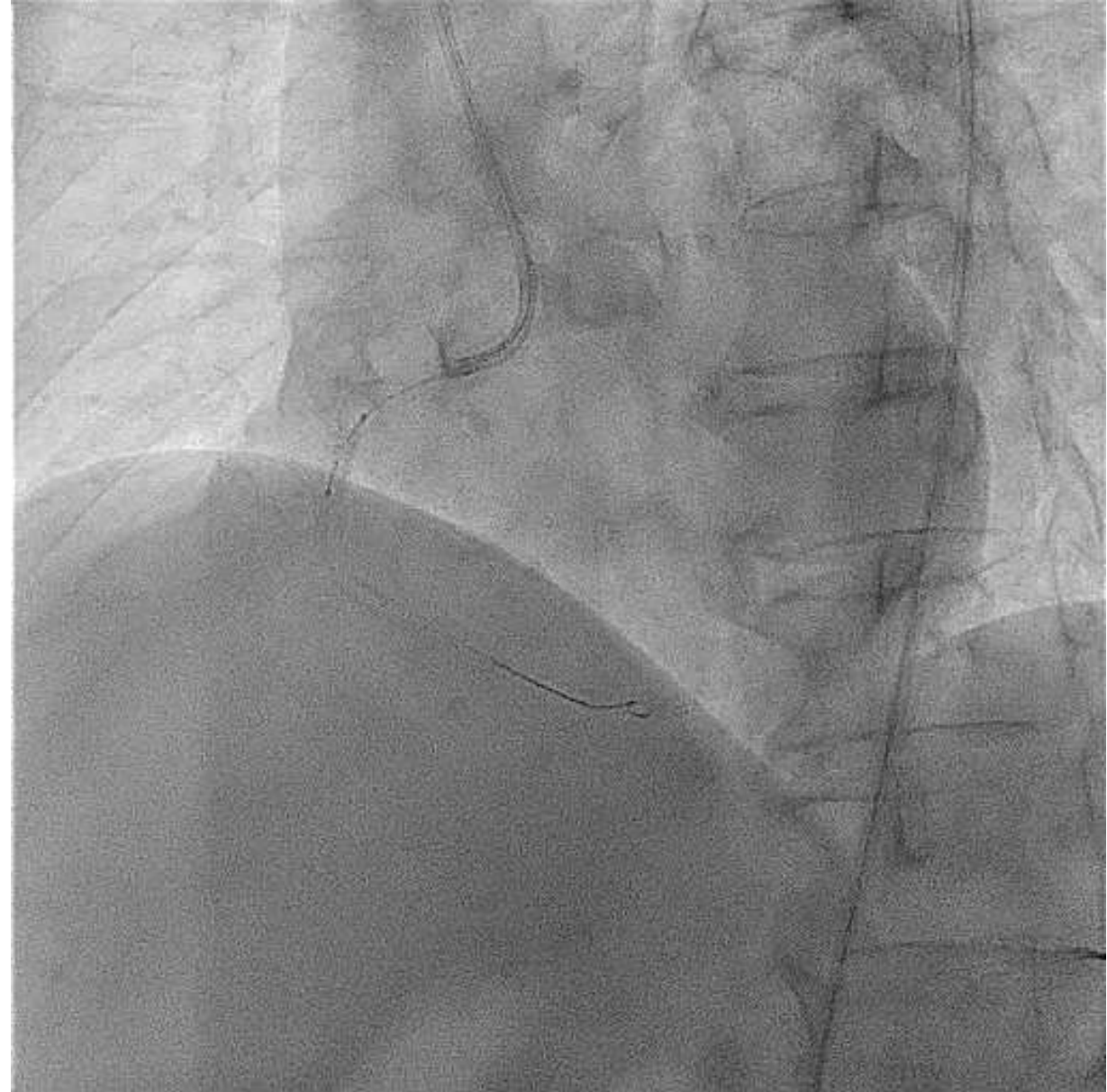
Deep Seeding guide and extracted the burr



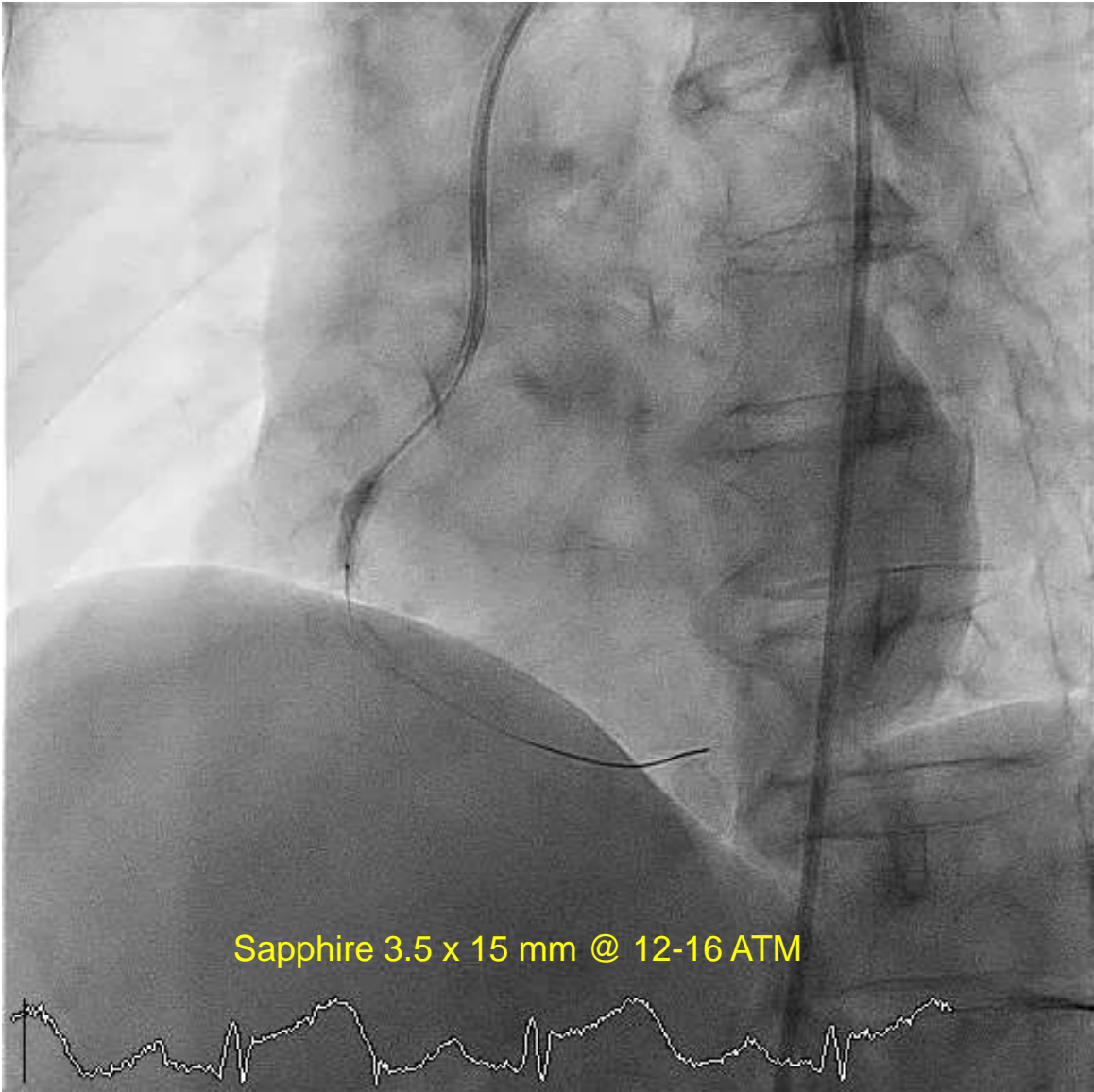
Flow after Rota extracted



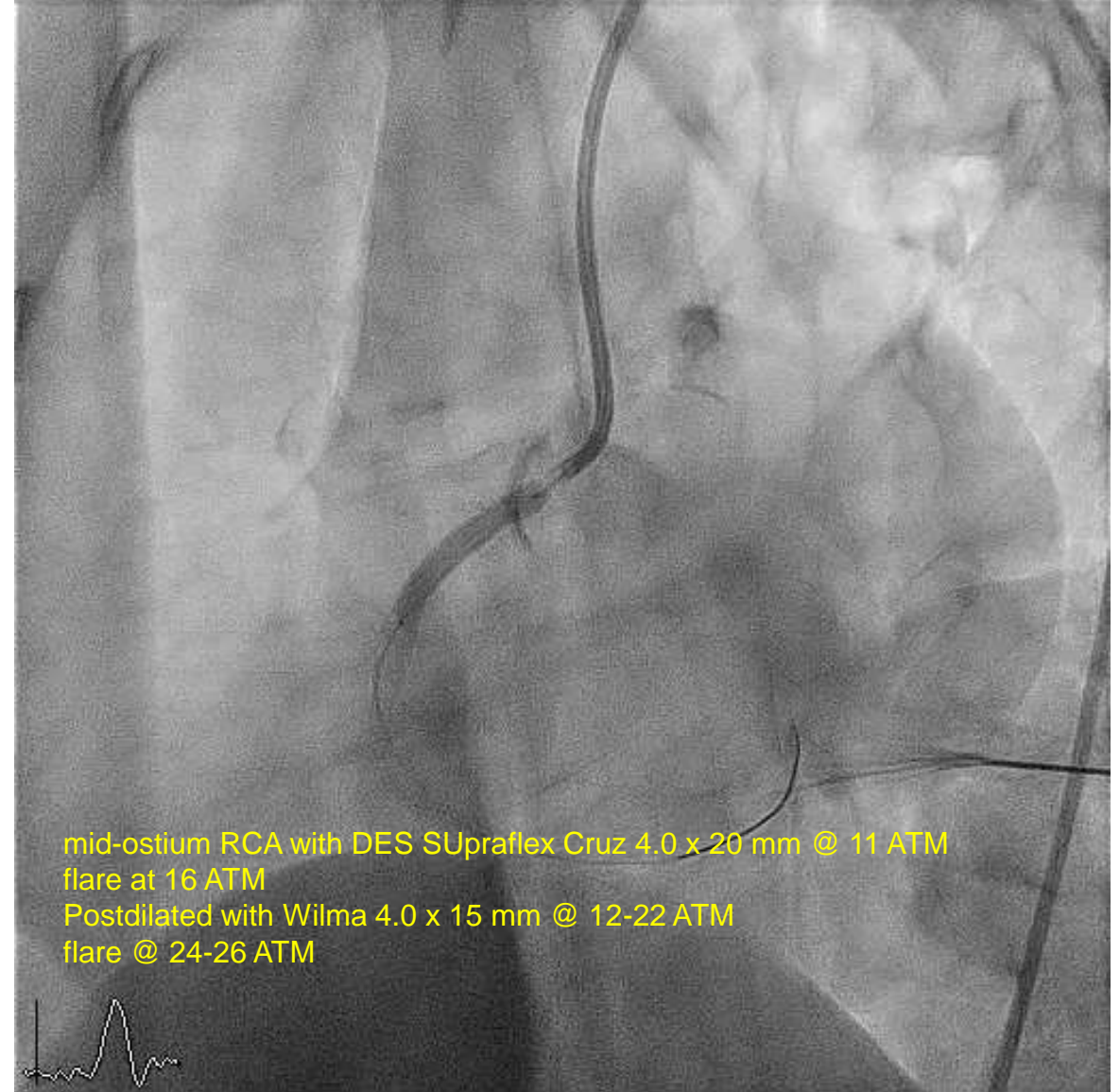
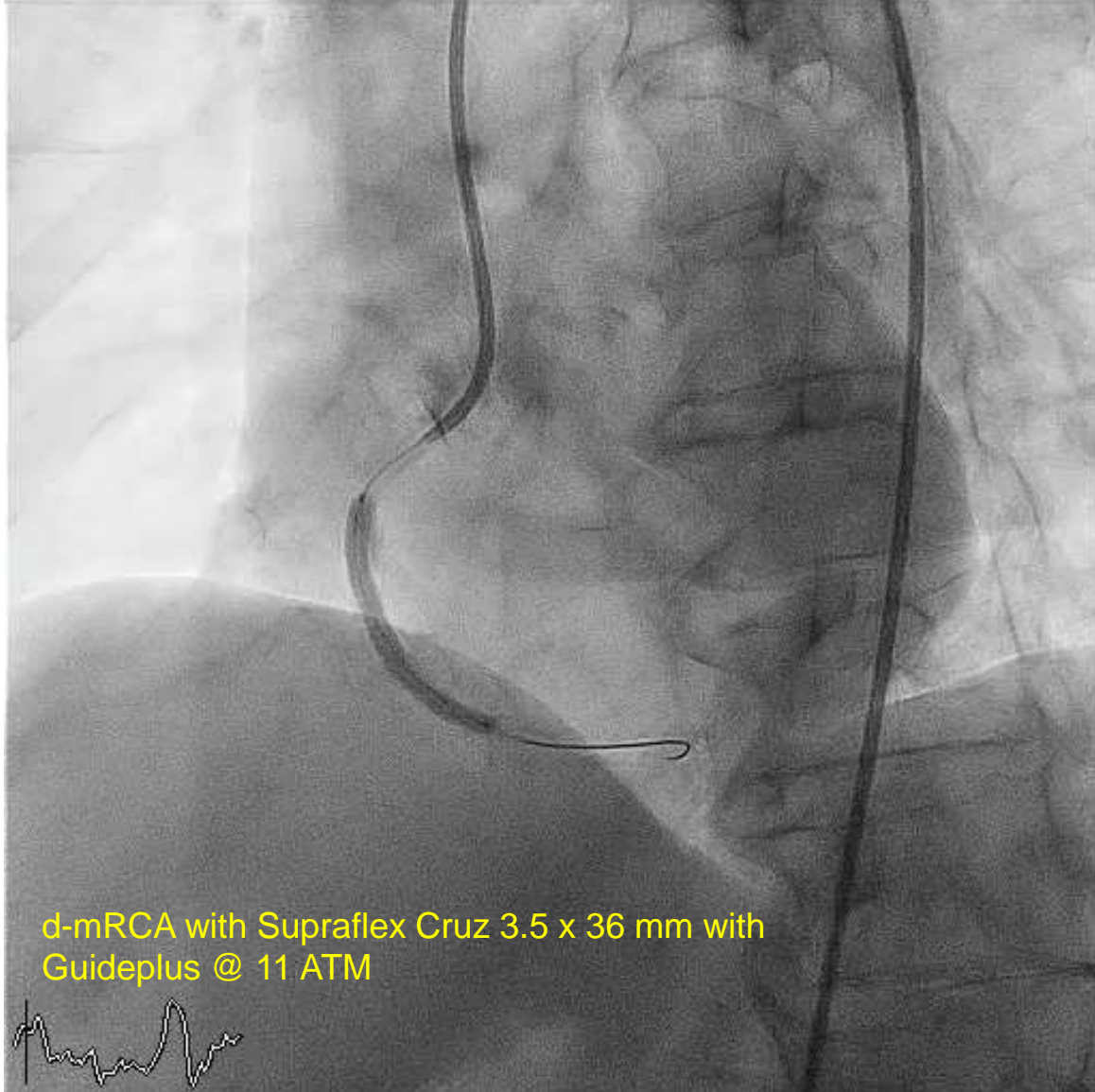
Angiogram with IVL



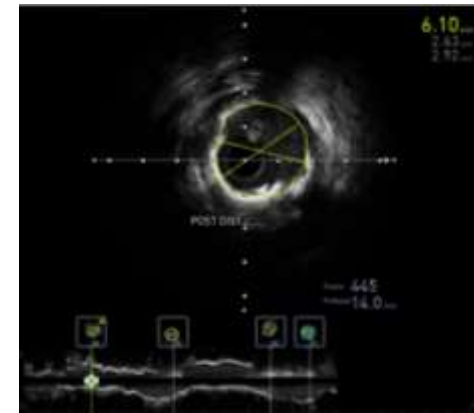
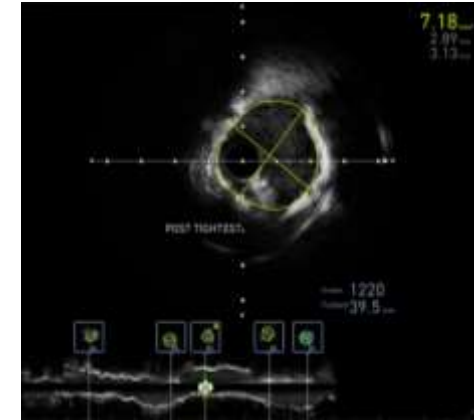
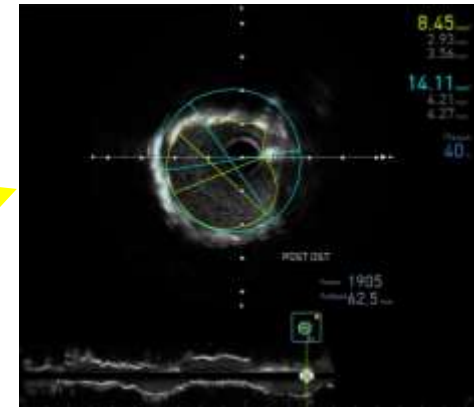
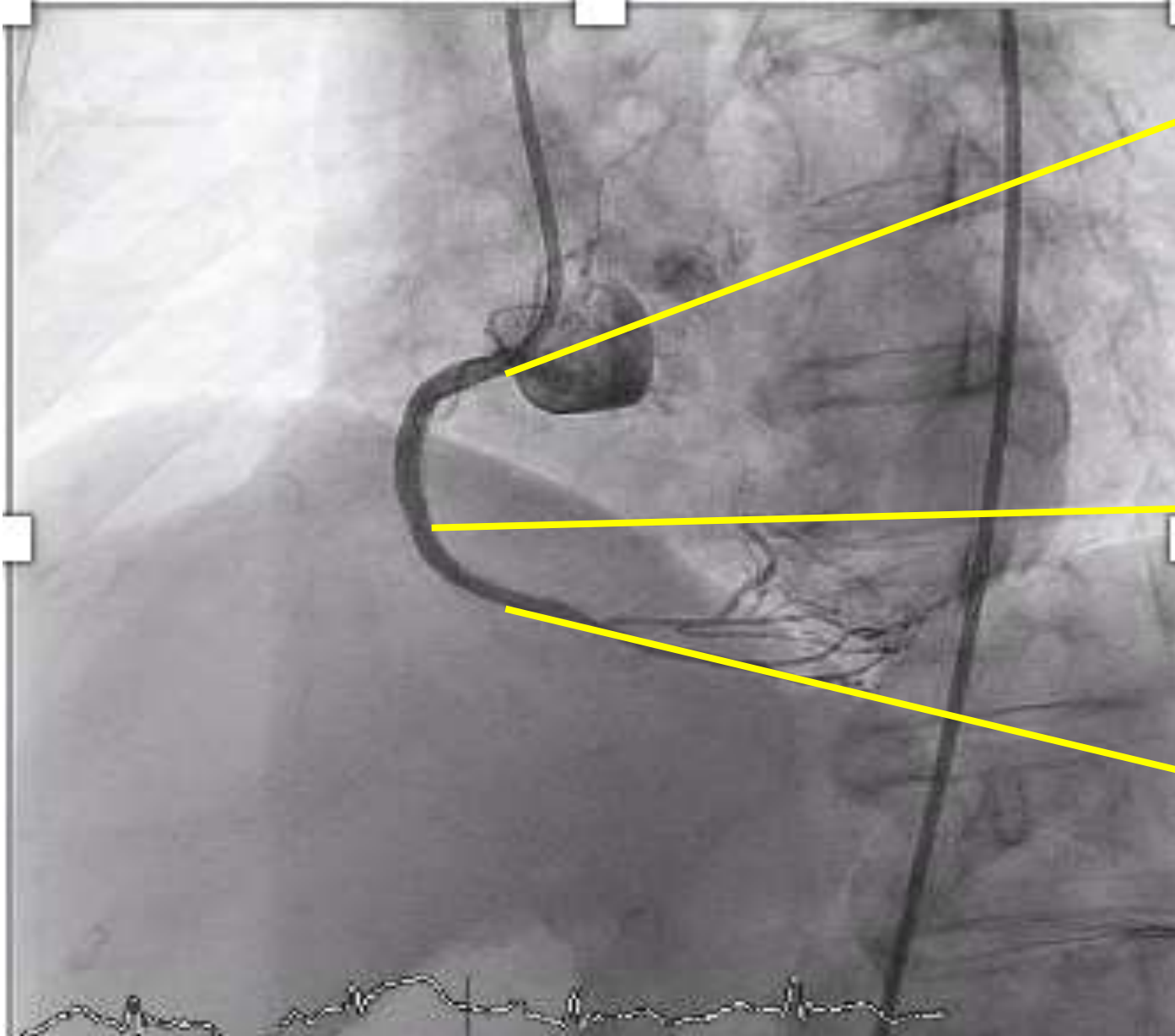
Further predilate after IVL



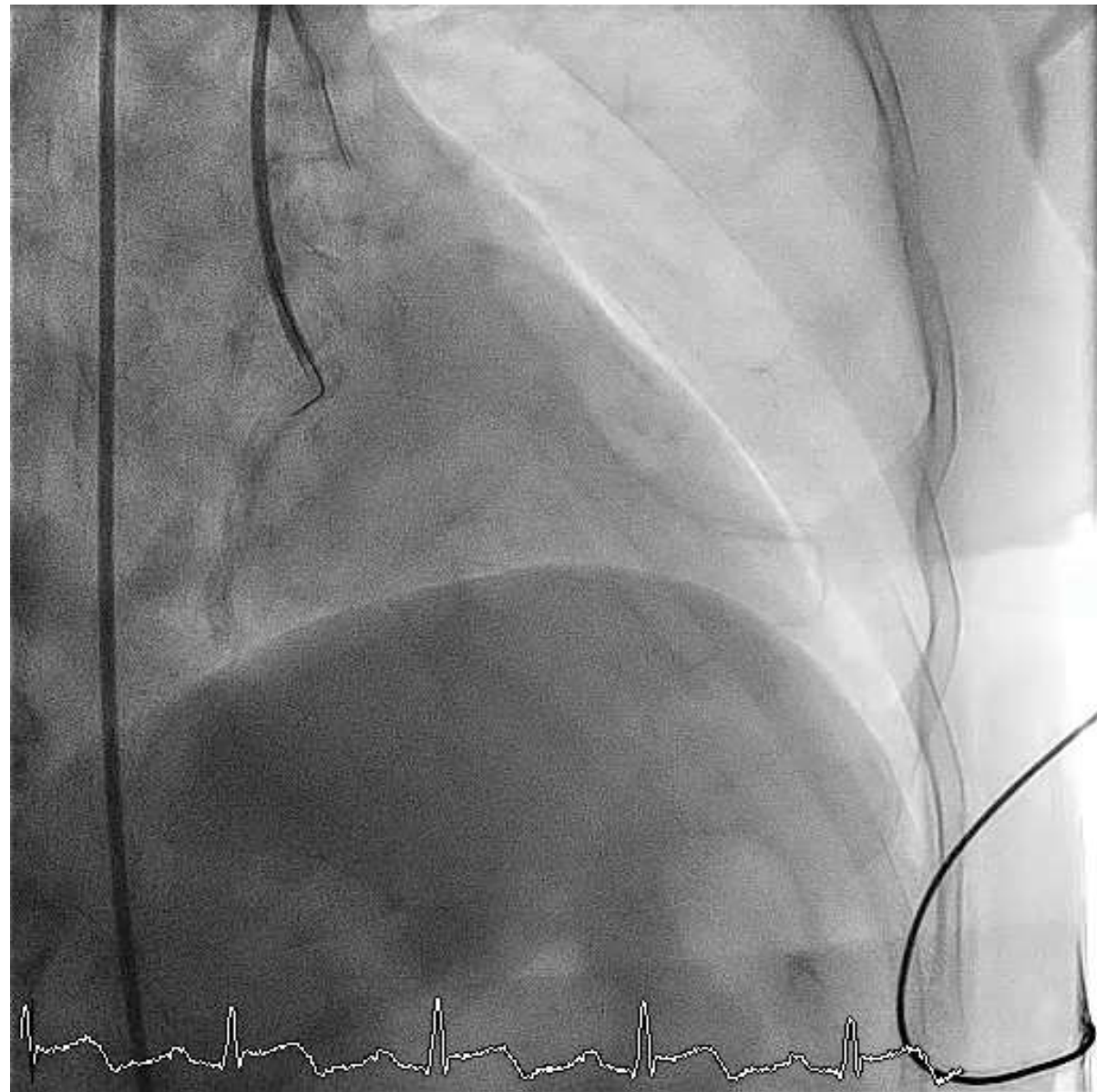
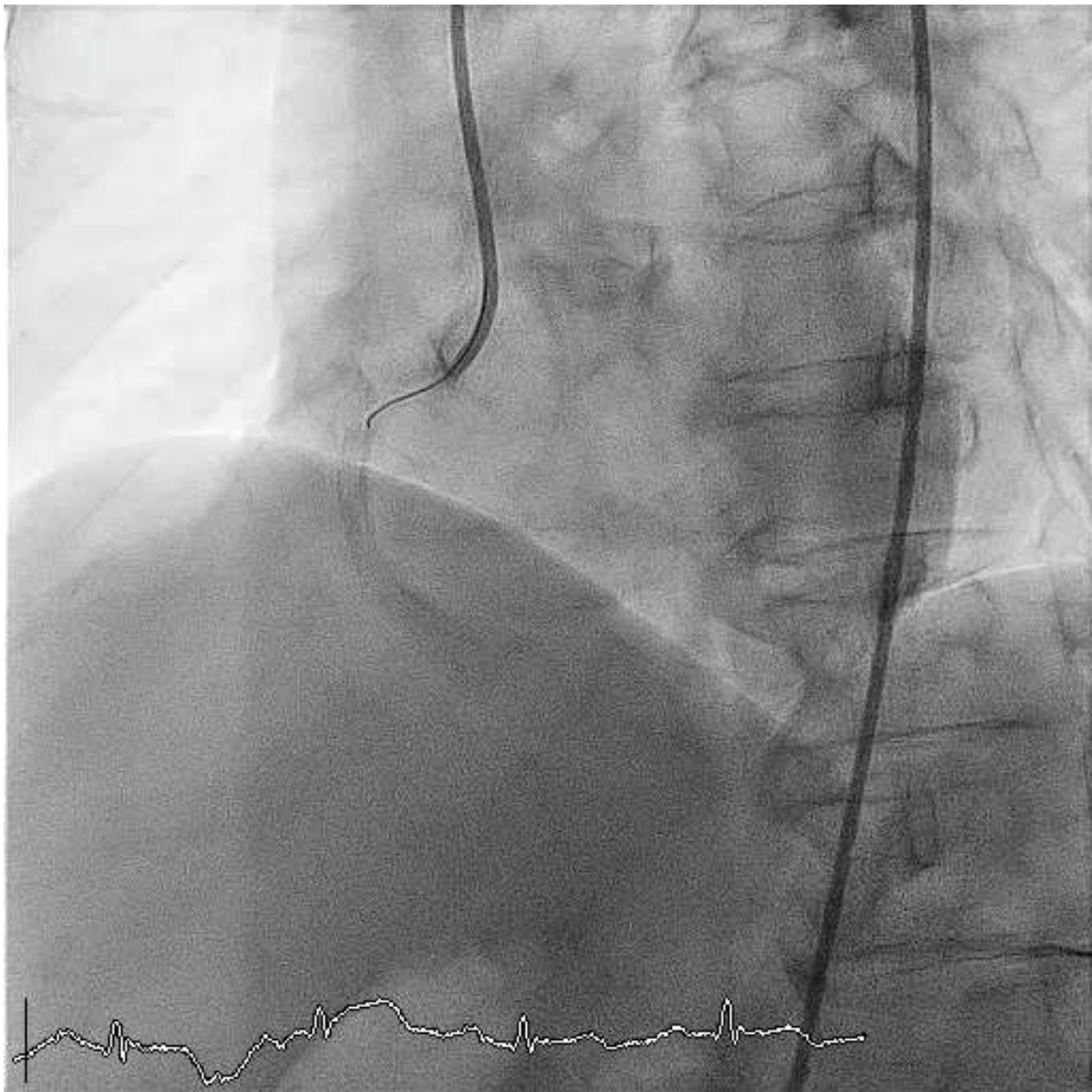
Angiogram with stent balloon expanded (pre and mid)



Final IVUS



Final Angiogram

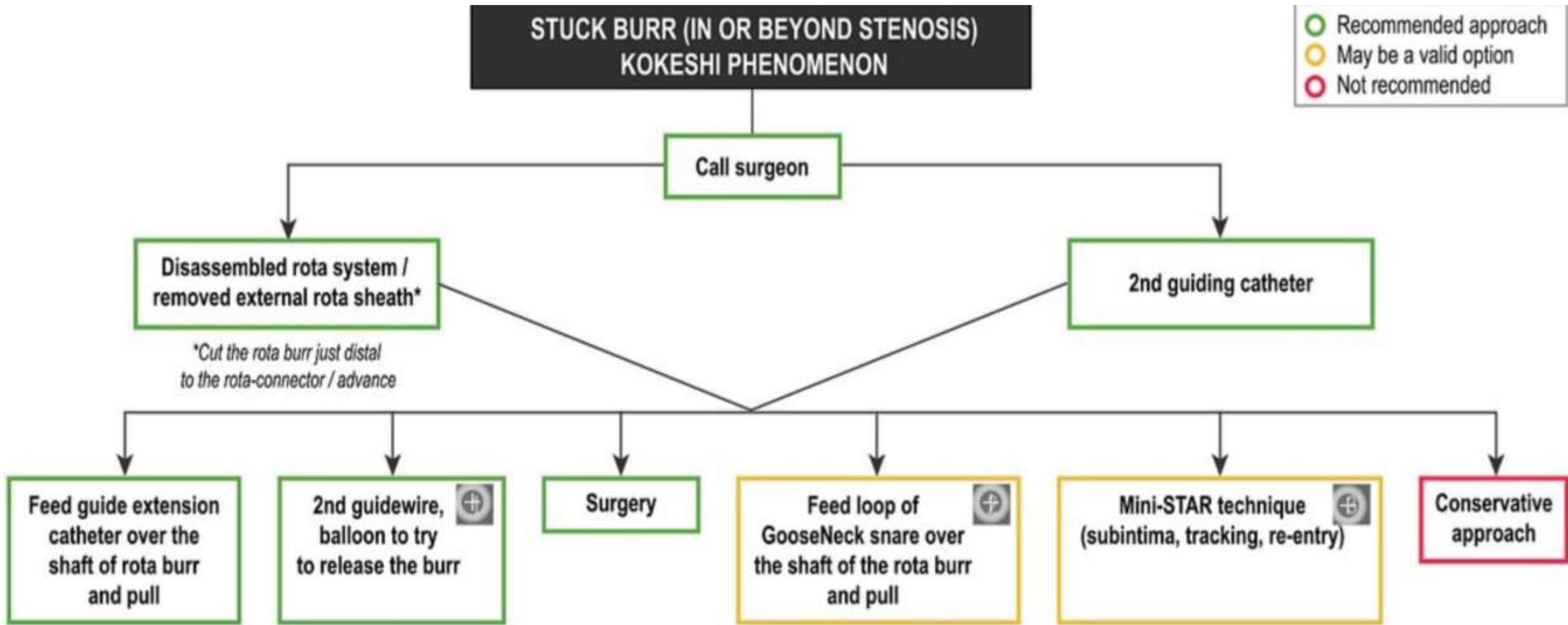


Discussion

- Kokeshi phenomenon is a stuck rota burr in a heavily calcified coronary artery during rotablation.
- named after a Japanese wooden doll, which has a large head-to-body ratio.



Algorithm



Conclusion and take home message

- Entrapment of a Rota burr is a rare but serious complication
- Calcification is the enemy.
- Always make sure your equipments are functioning before proceeding with case.

References

- *Coronary stuck burr (in or beyond the stenosis): Kokeshi phenomenon.* (n.d.). [Www.pcronline.com](http://www.pcronline.com). Retrieved April 24, 2023, from <https://www.pcronline.com/Cases-resources-images/Complications/Implant-loss/Coronary-embolised-devices/Rotablator/Stuck-burr>
- *Case study: Entrapment of rota burr.* (n.d.). [Www.pcronline.com](http://www.pcronline.com). Retrieved April 24, 2023, from <https://www.pcronline.com/Cases-resources-images/Complications/Implant-loss/Coronary-embolised-devices/Rotablator/Stuck-burr/Case-library/Case-study-Entrapment-of-rota-burr>