My toughest r-CART in an ostial RCA CTO
The expensive toll to pay

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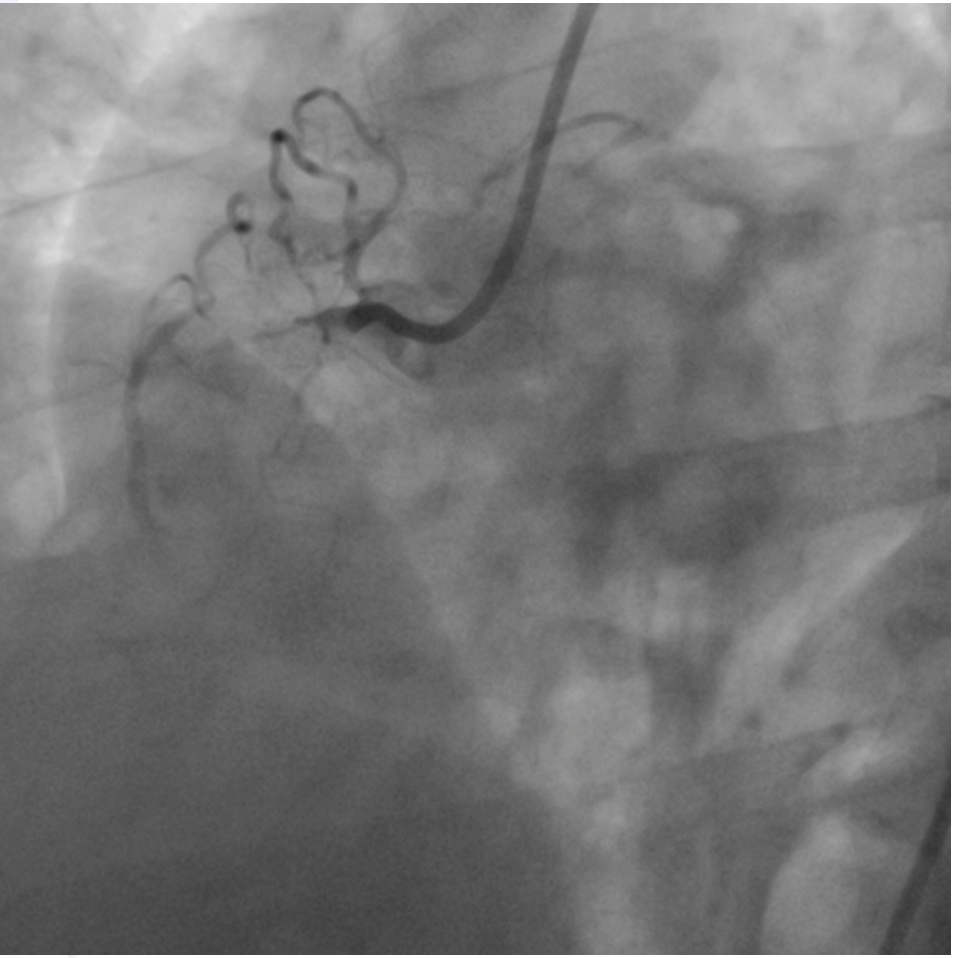
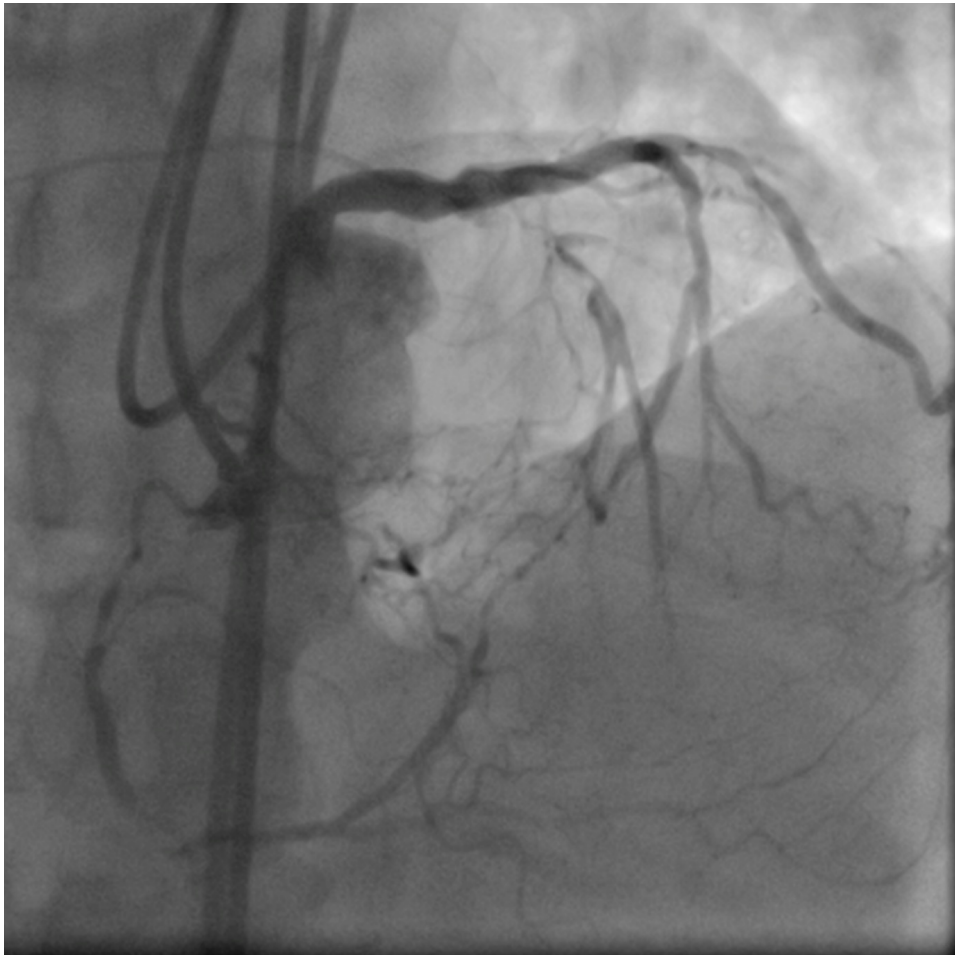
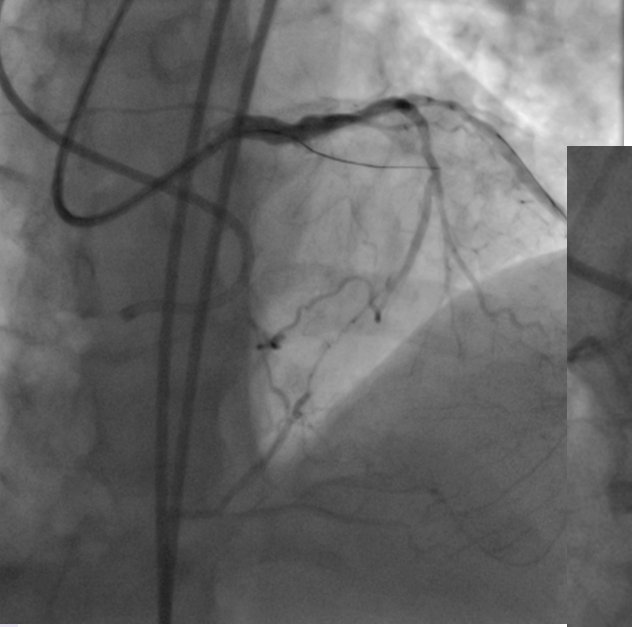
A 73Y gentleman, DM, HTN, IHD, previous MI 2 years ago, EF 35-40%
CAG => LAD CTO, RCA short segment CTO
After counselling for surgery, patient refused, planned for staged PCI

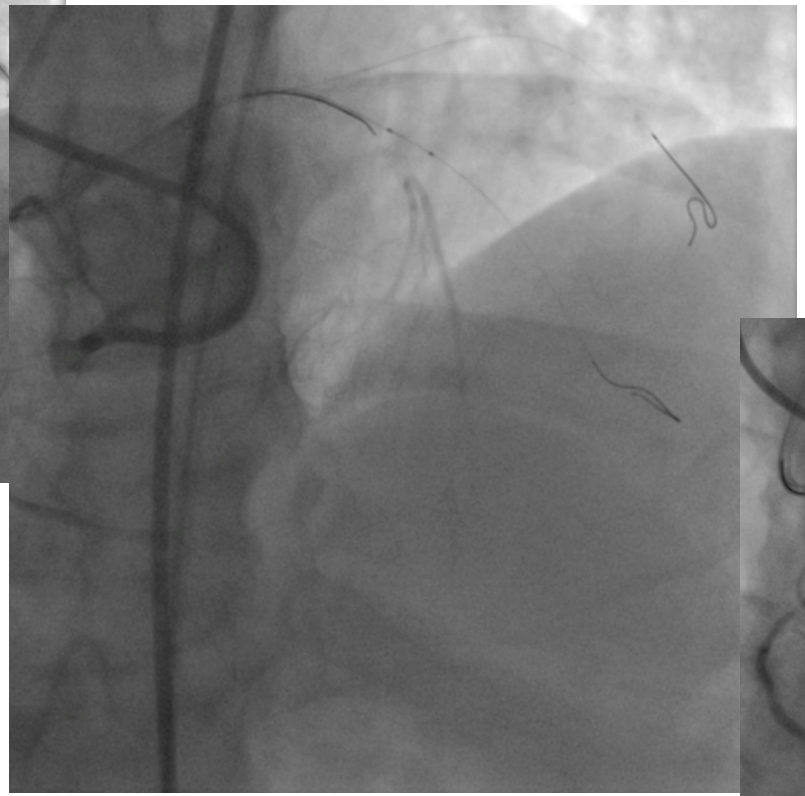




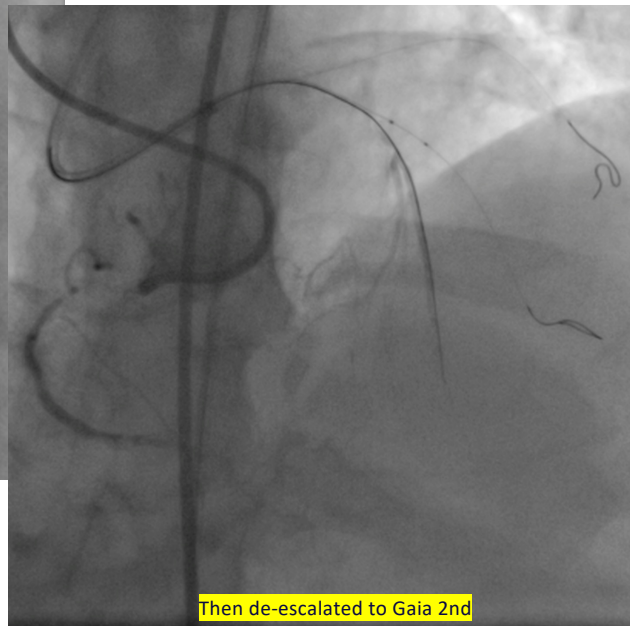


Fielder XT-A, Turnpike LP

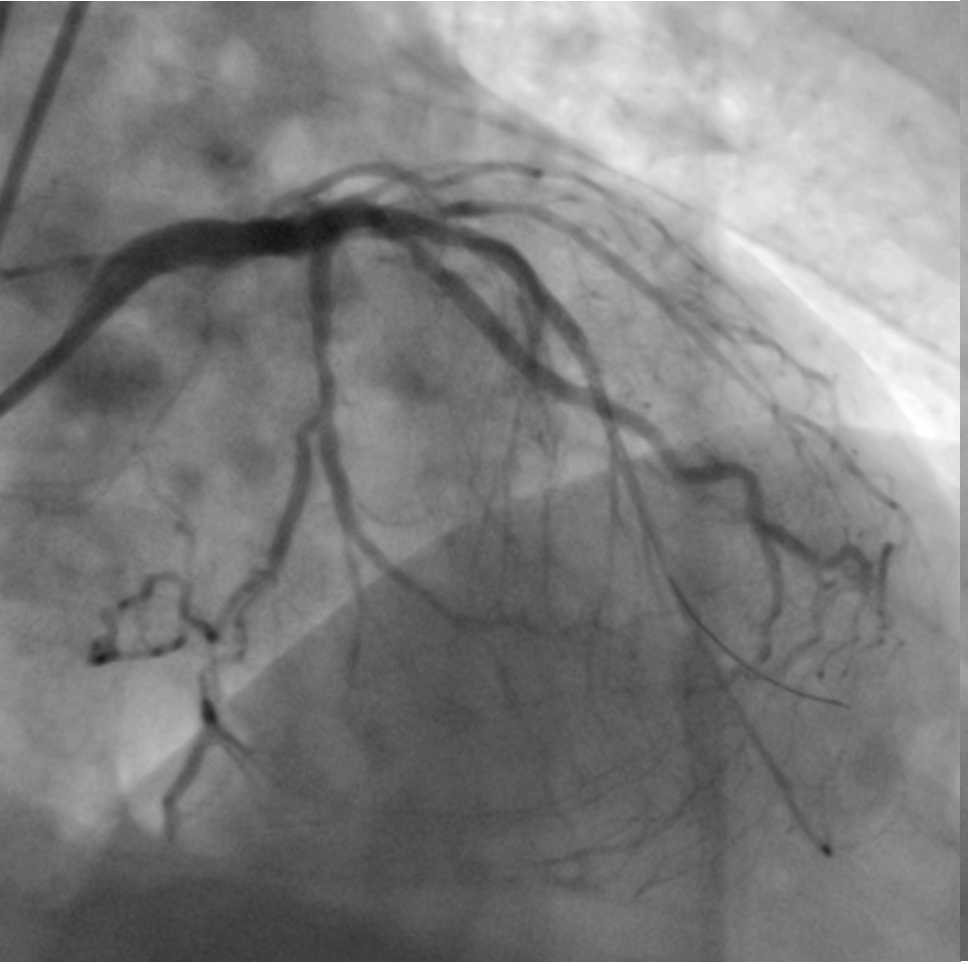
Advanced into the early Diagonal rising from CTO body

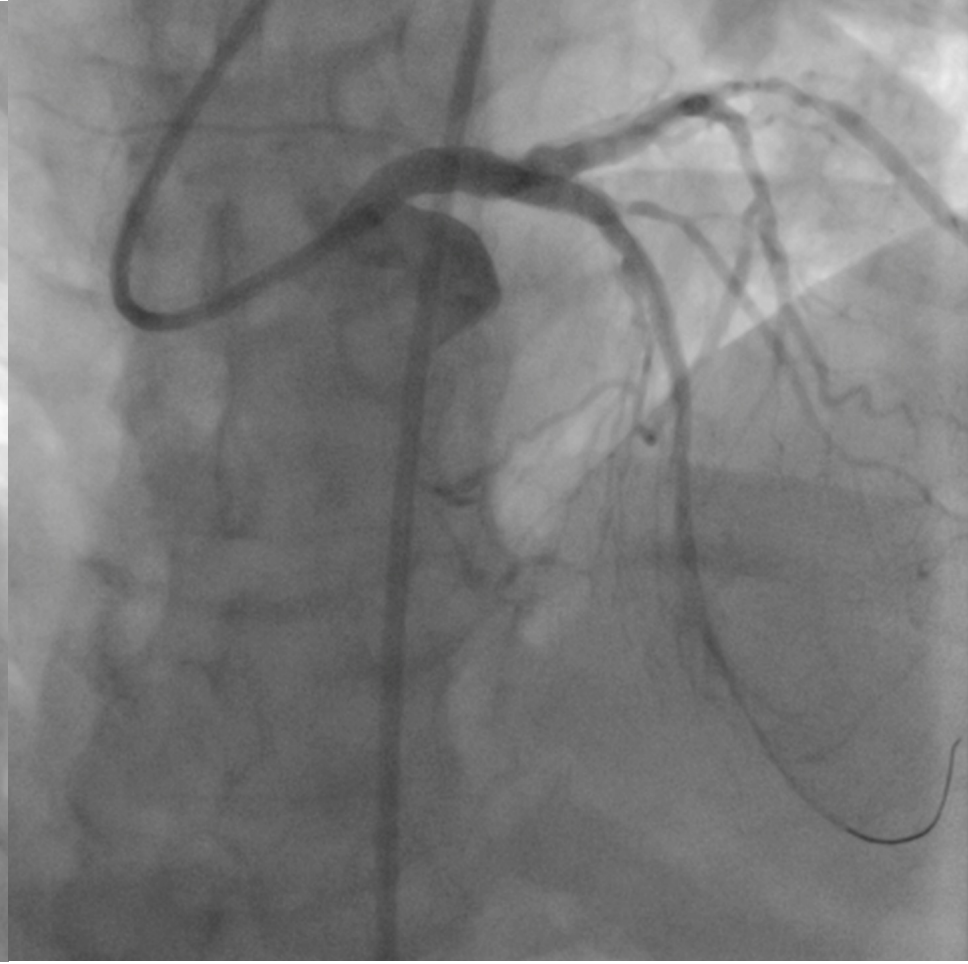


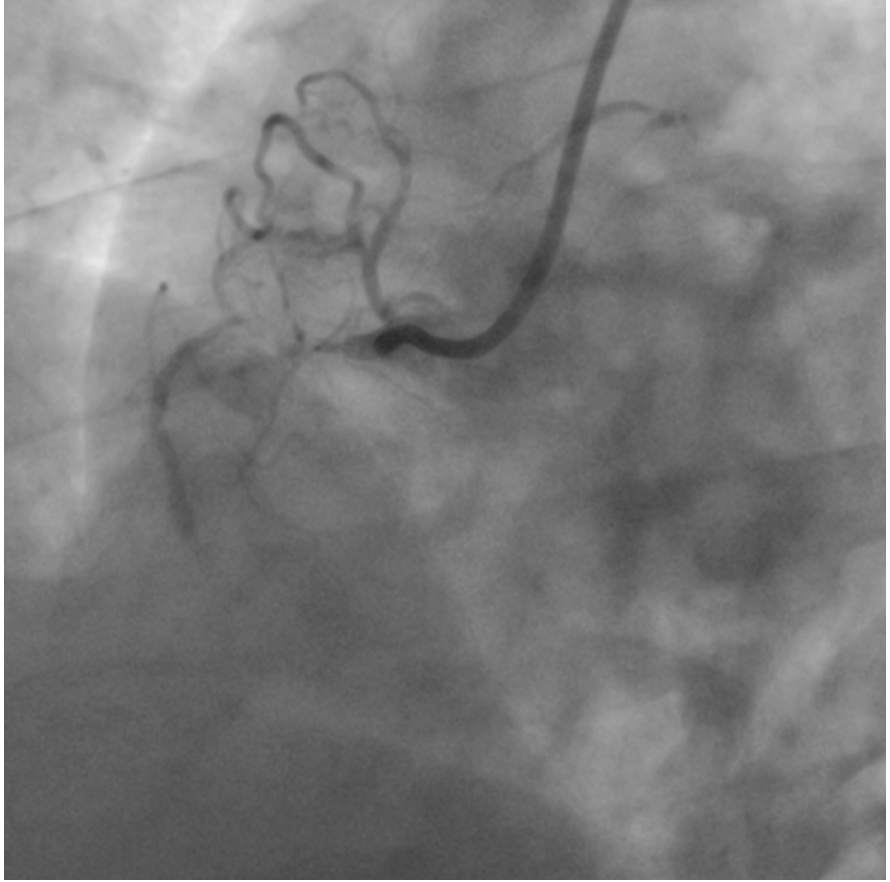
Exchanged to a workhorse wire
then a Twin pass, puncturing LAD by CP12

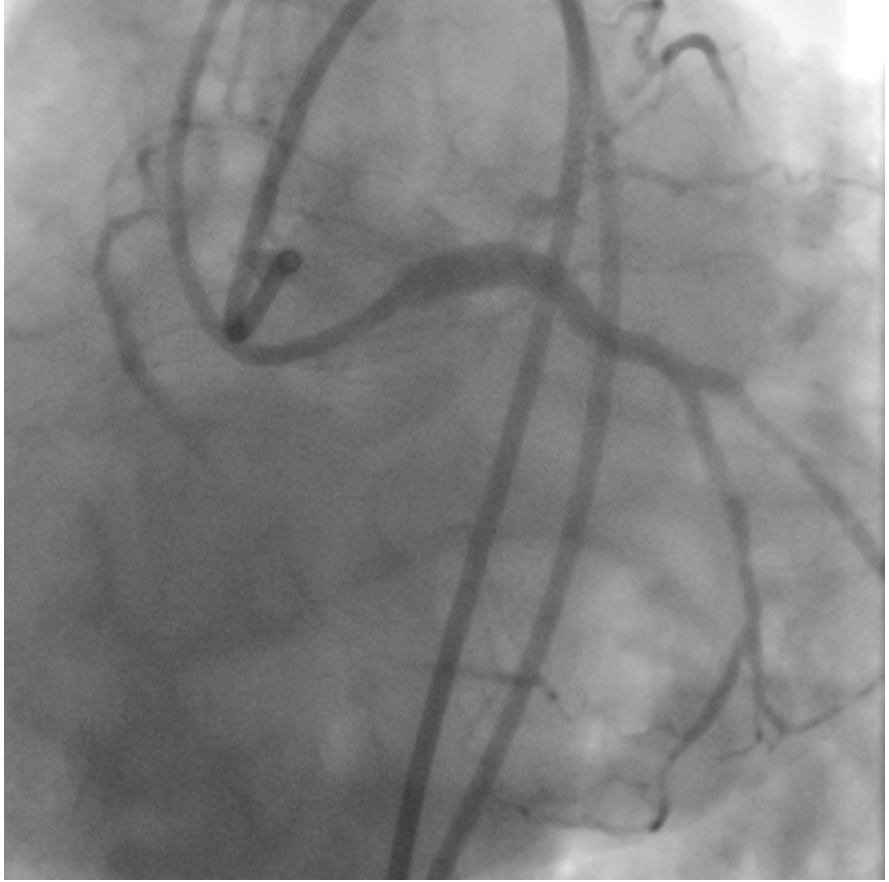


Then de-escalated to Gaia 2nd









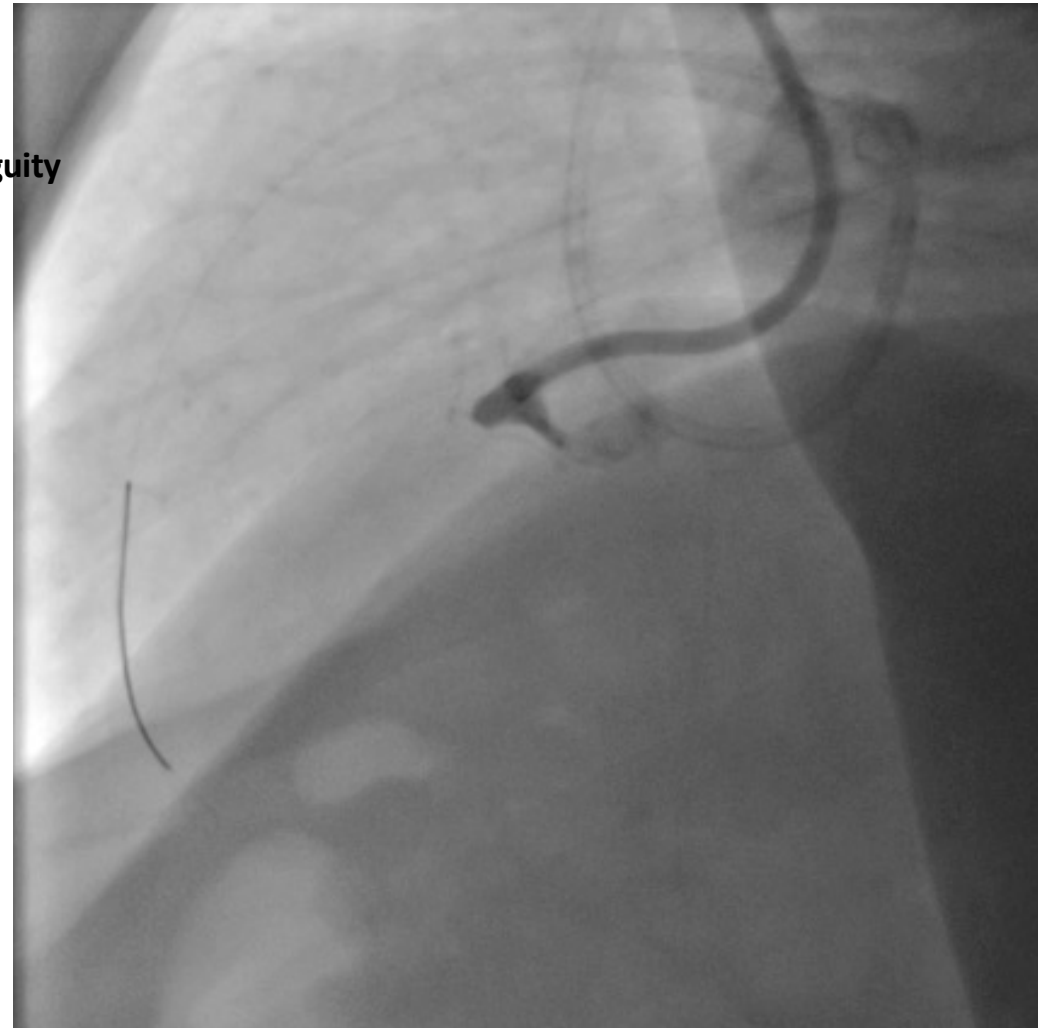
Obviously, my today's story is not the LAD
It is the RCA CTO, which **though short**, but it spoke of **very complex curvature**
Px and Ds caps were dancing in **different directions and different planes**

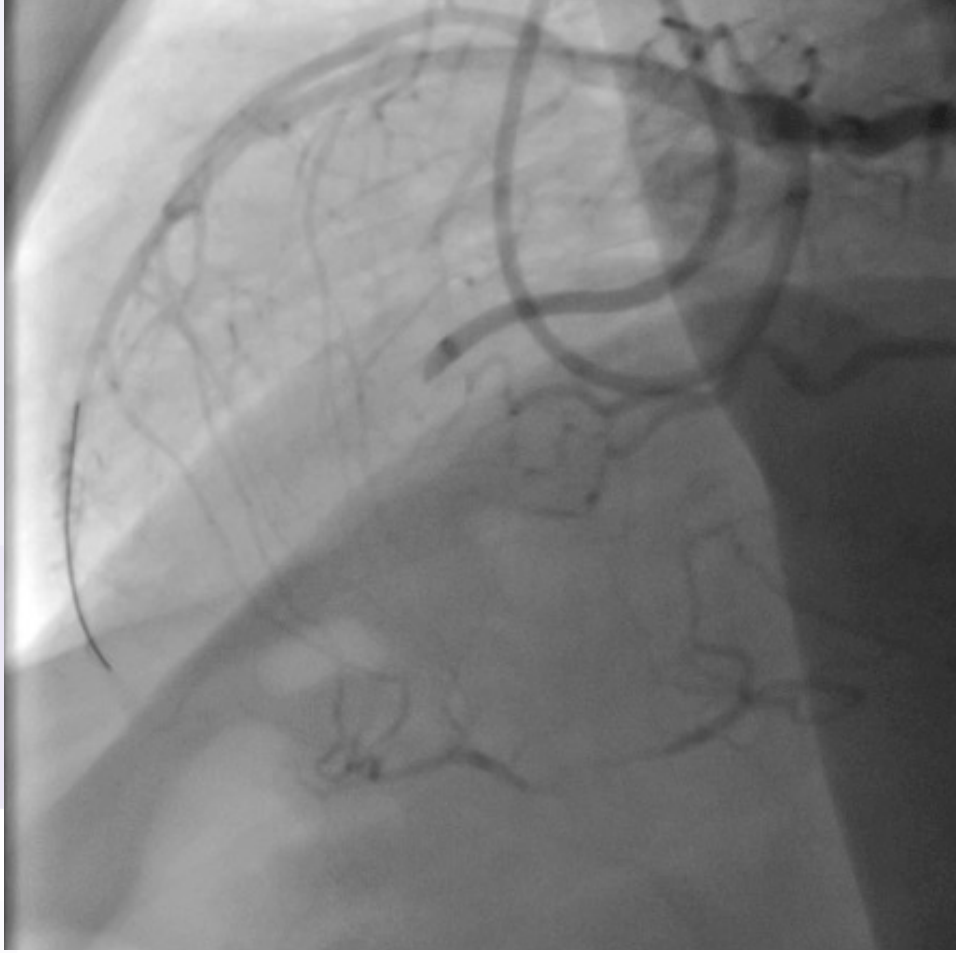
We were planning to proceed to the RCA in 2-3months planning for AWE, if not, knuckle to defeat course ambiguity then in the vertical part, we perform ADR

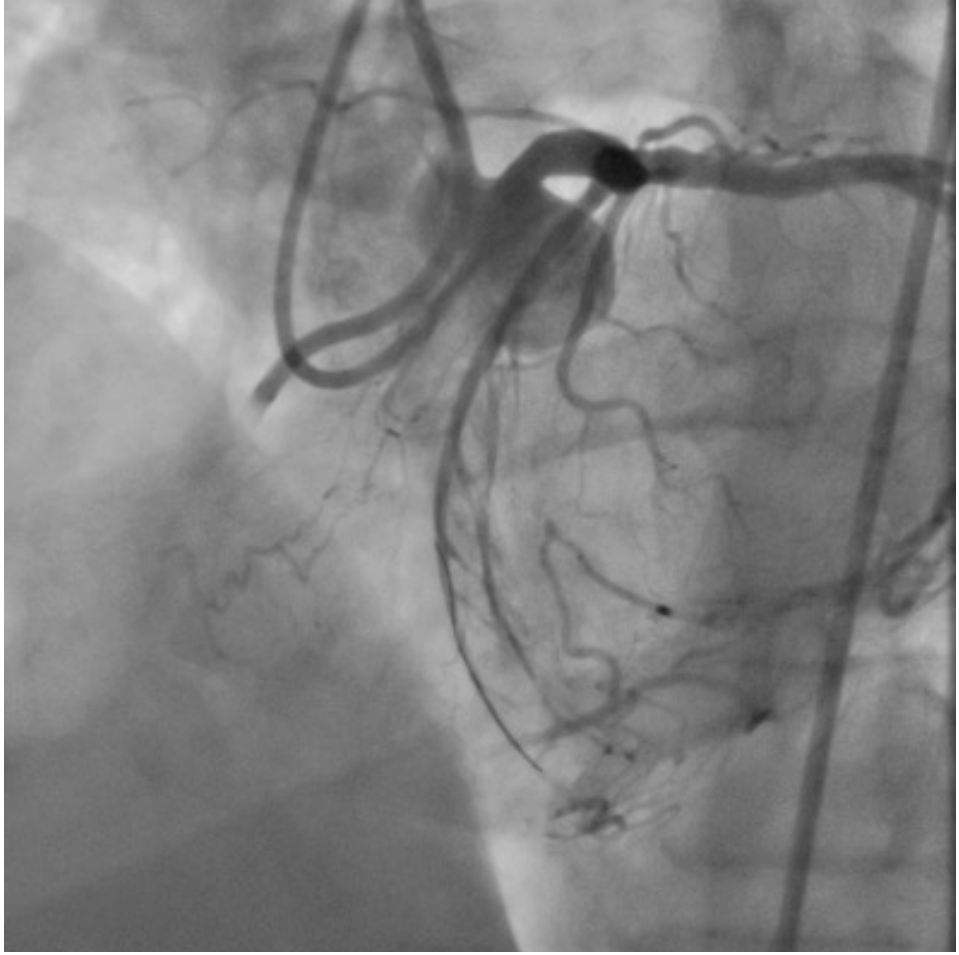
Yet, unfortunately the waiting time went longer
(the patient travelled, system reallocation, … etc)

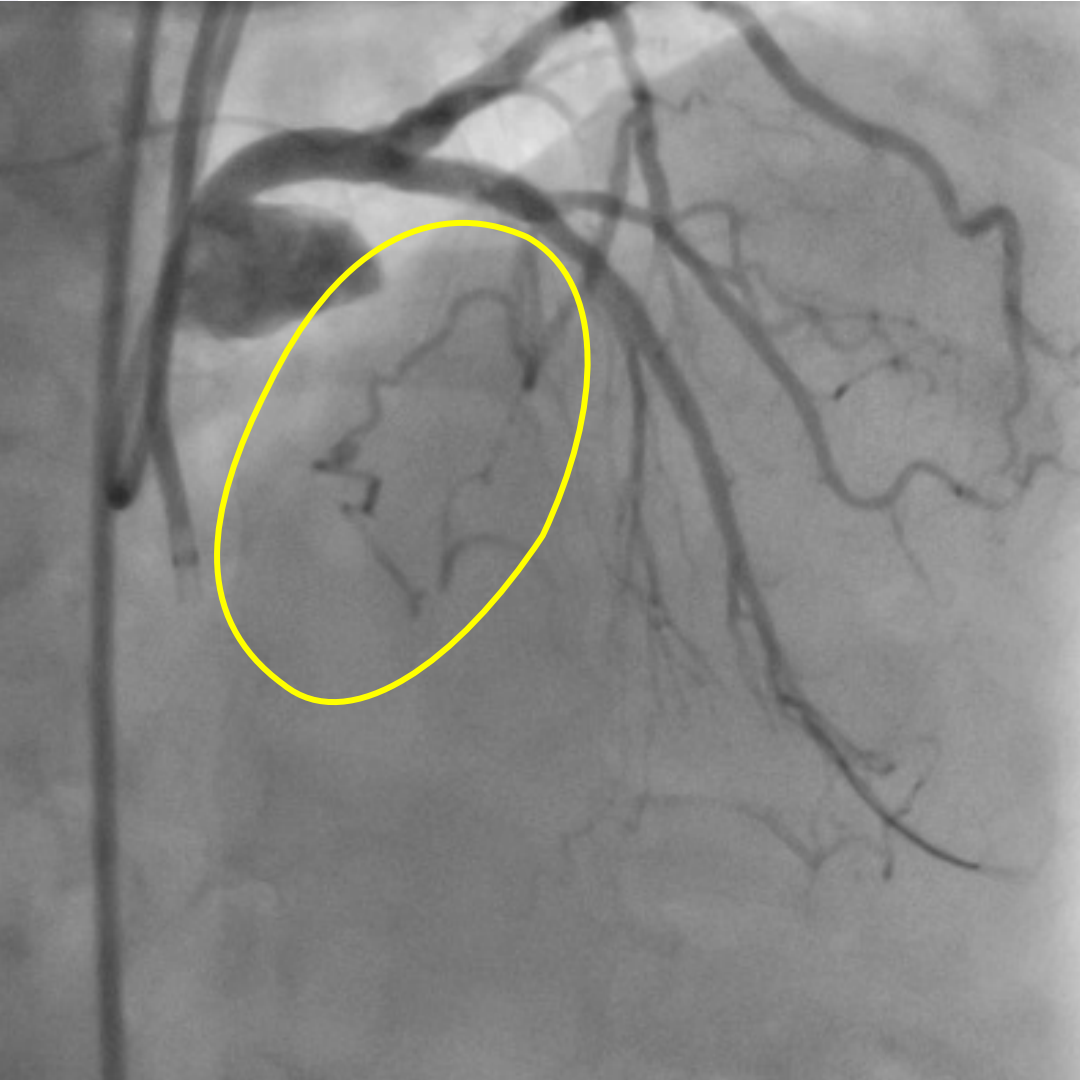
After almost a year, the CTO became aorto-ostial
!! Is this
the toll of time (disease progression),
or the toll of success (after PCI to LAD)

But certainly, it was a dear toll to pay





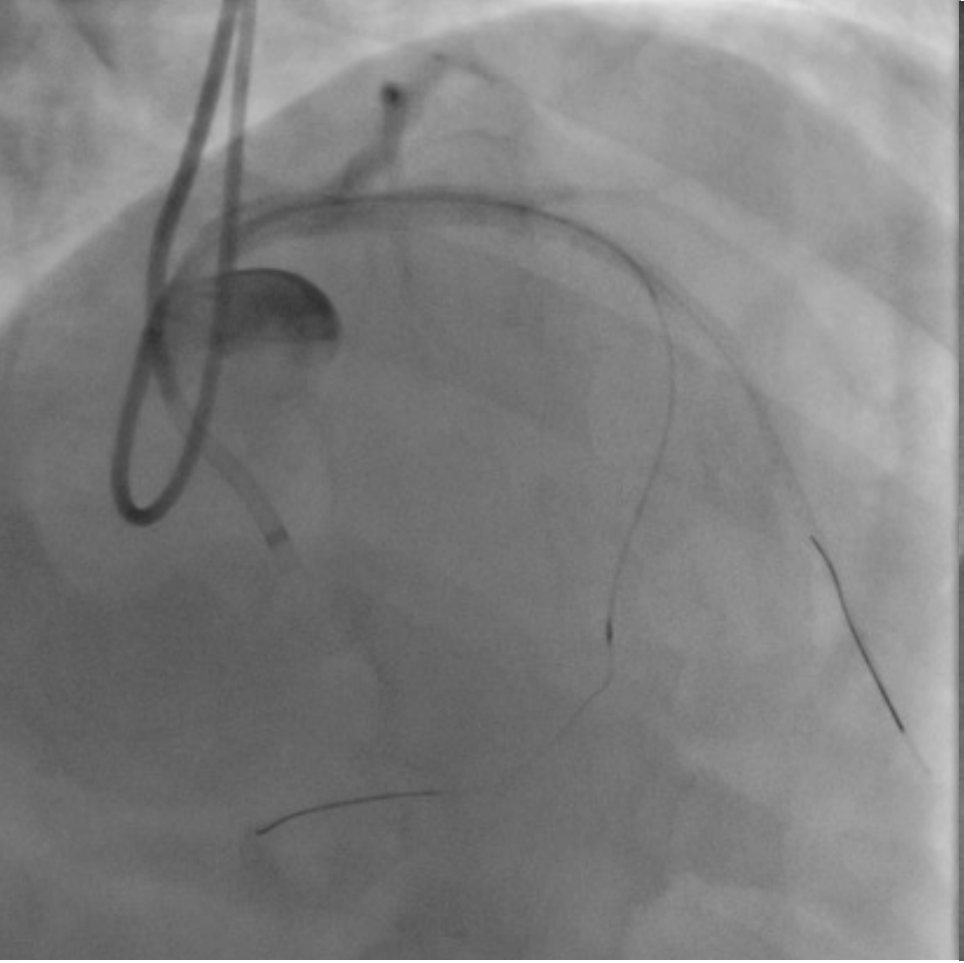




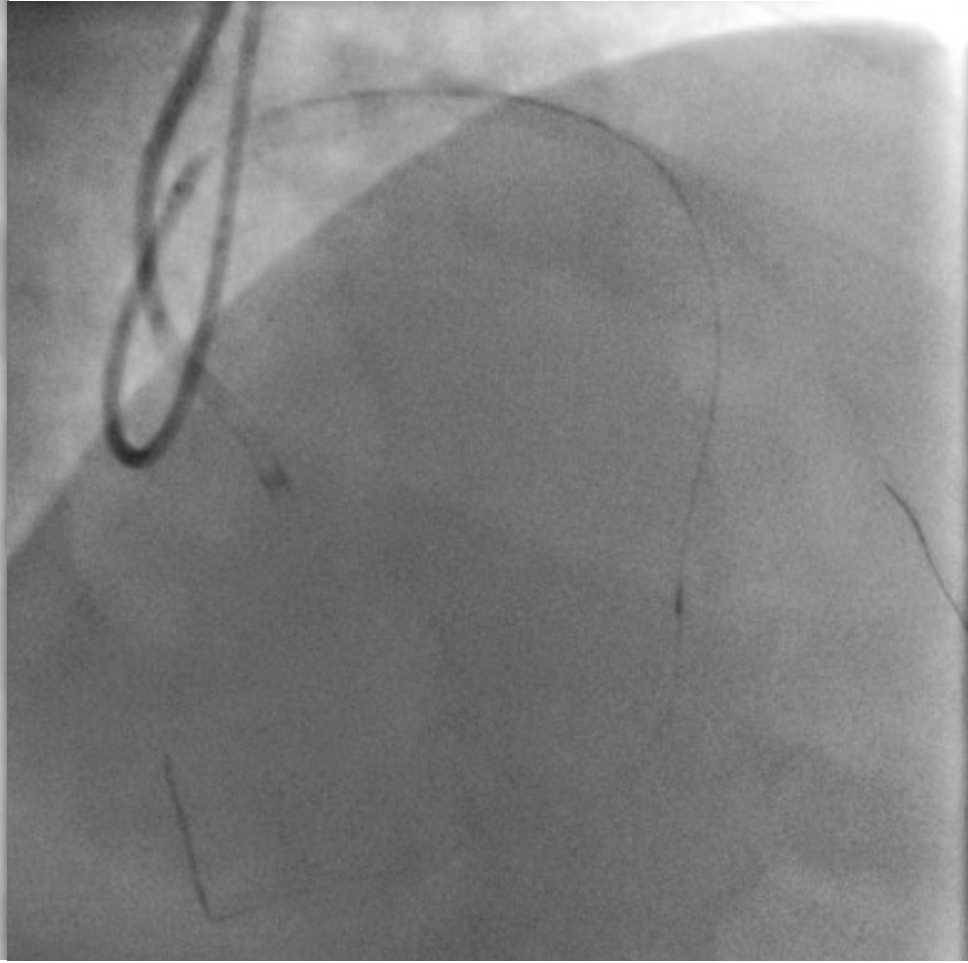
Presuming a **primary retrograde** case,

though the predominant filling is **epicardial Cx-to-PL**

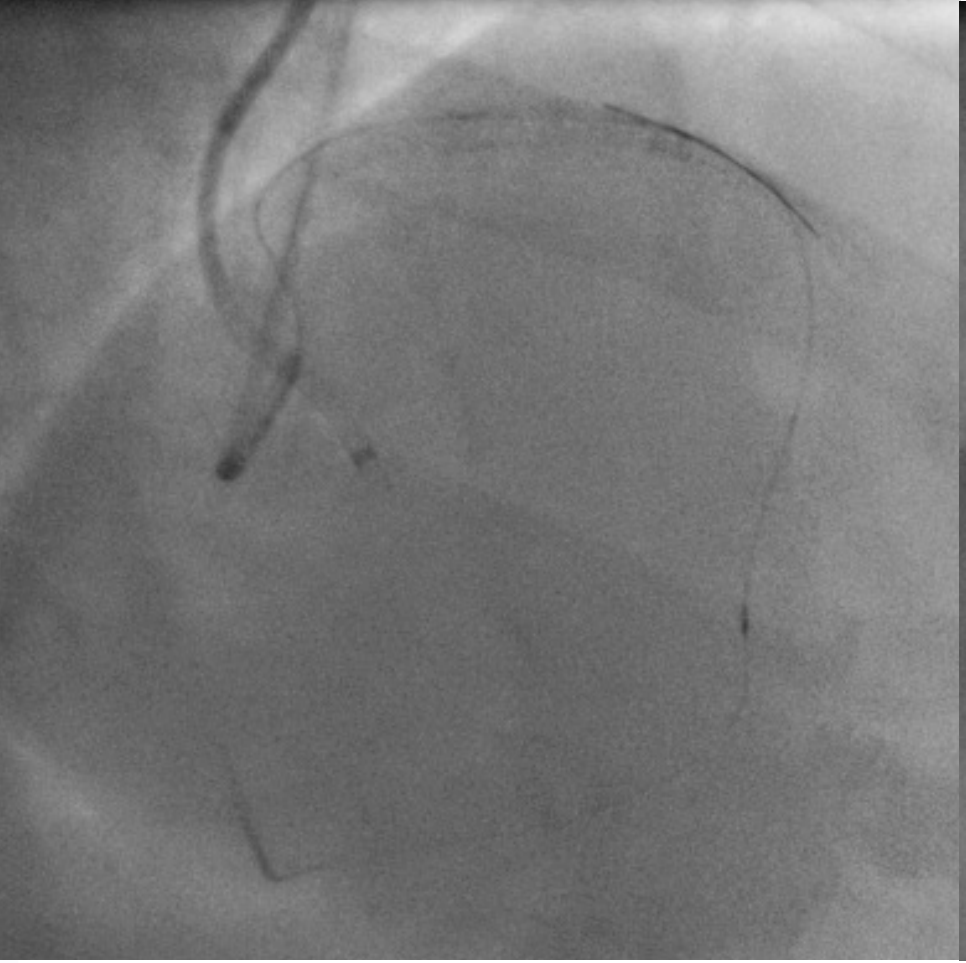
yet, planned for an **attempt of septal surfing**



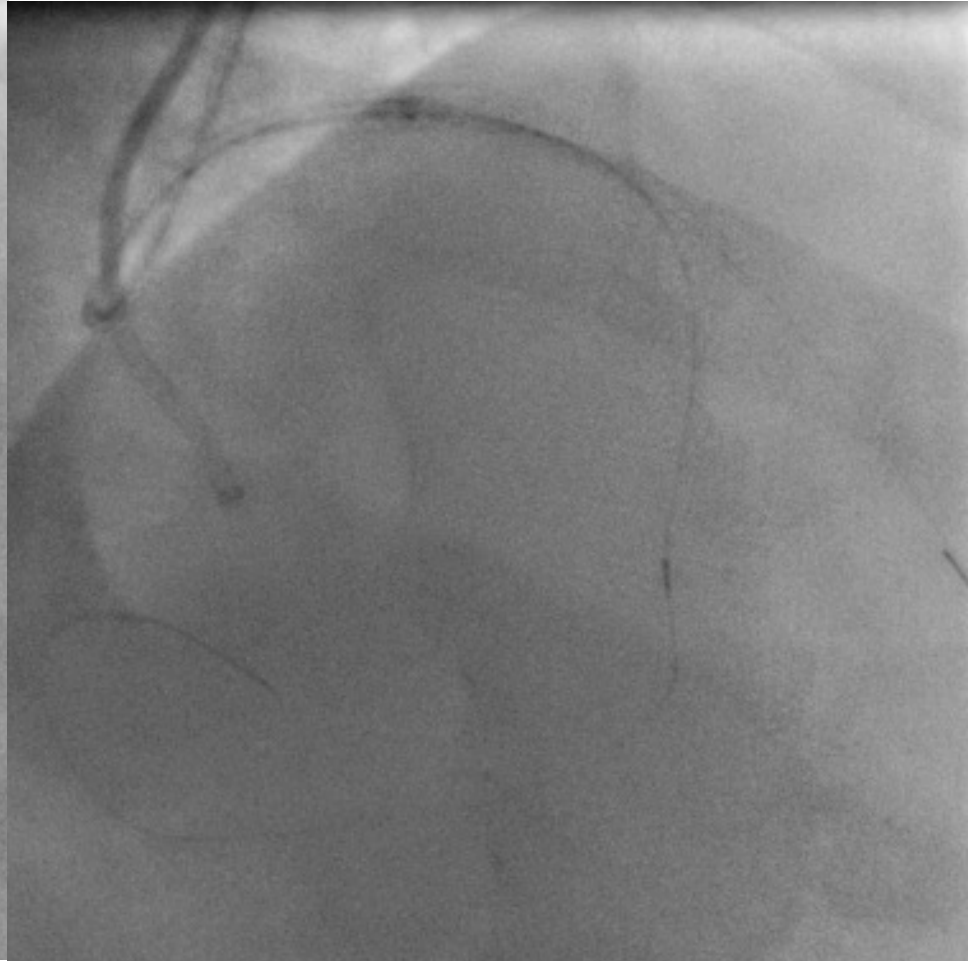
Sion black, Caravel 150cm



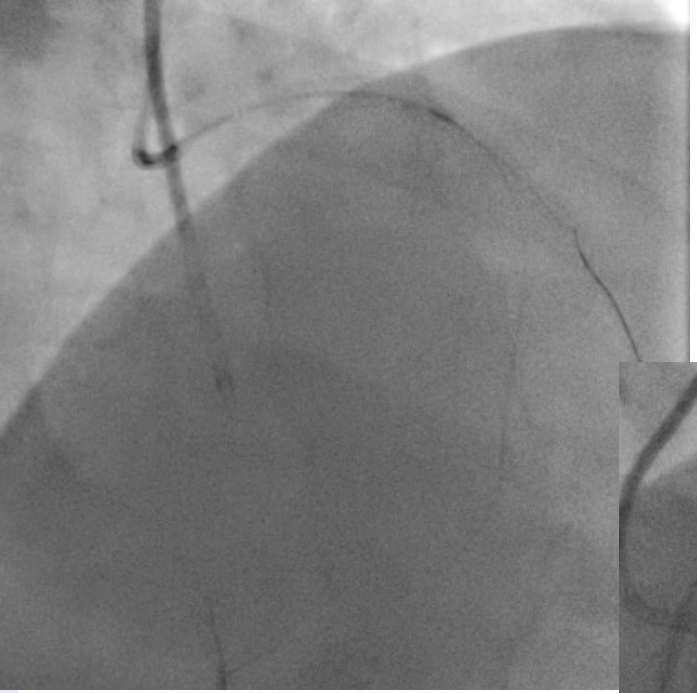
Sion black gained access to mid RCA



Advancing MC was impossible, disengaging the EBU

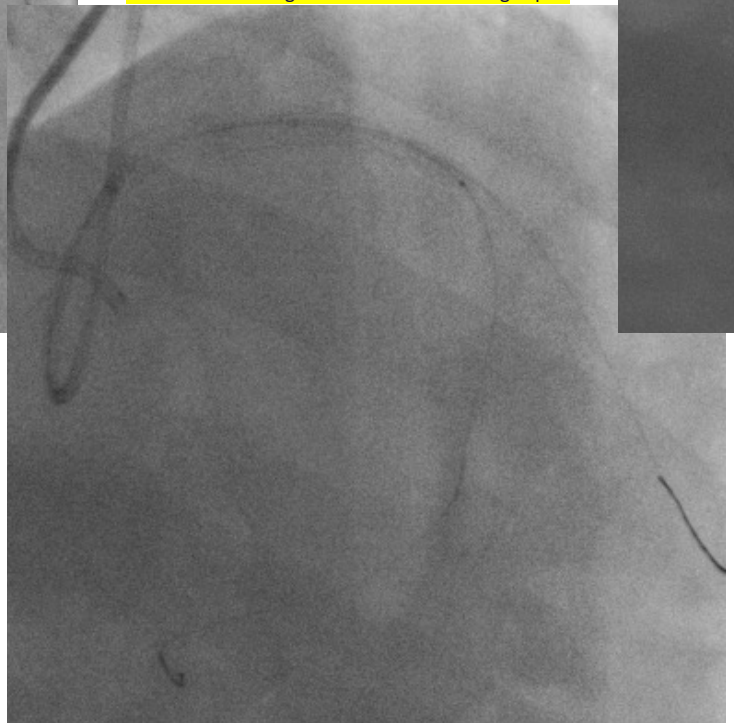


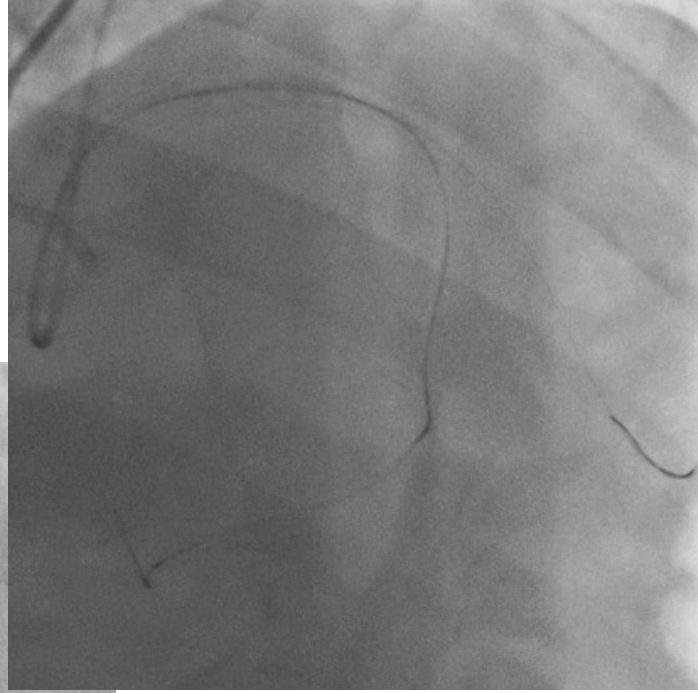
While attempting to take the MC out proved high-tension trapping at the LAD stent-struts



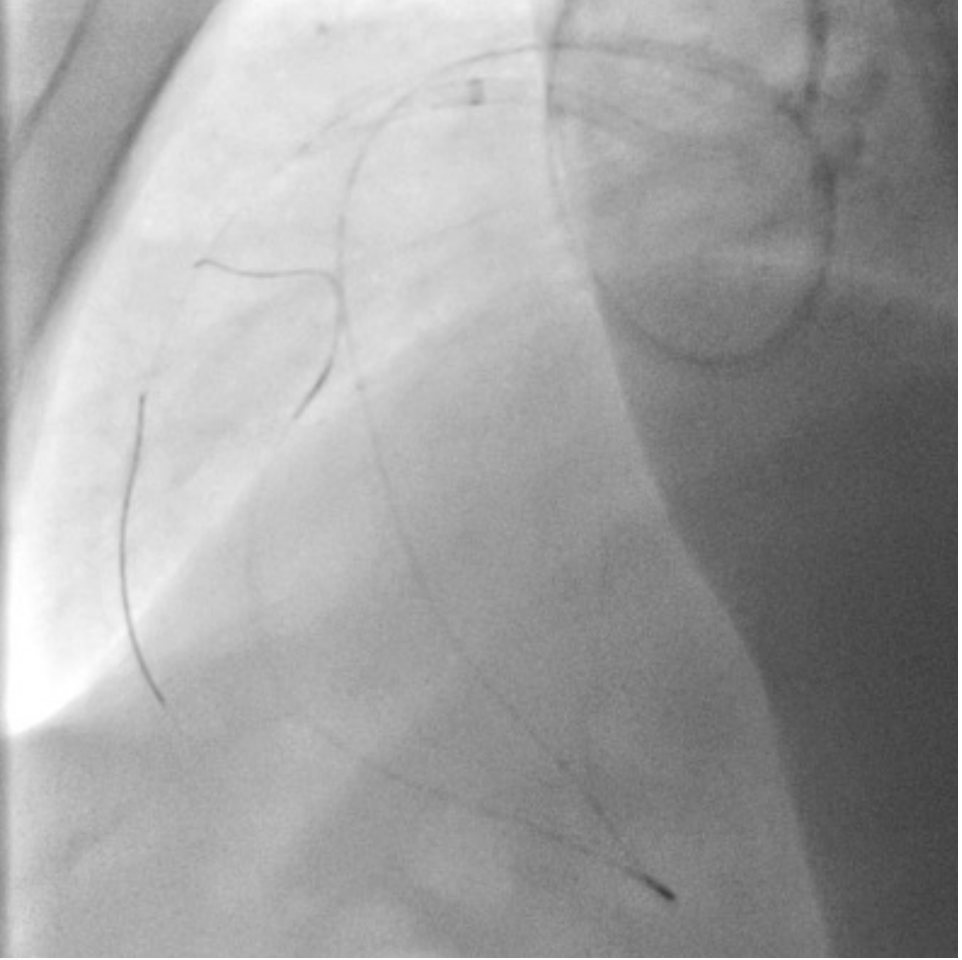
Removed the MC

Dilated the leading cell into the connecting septal

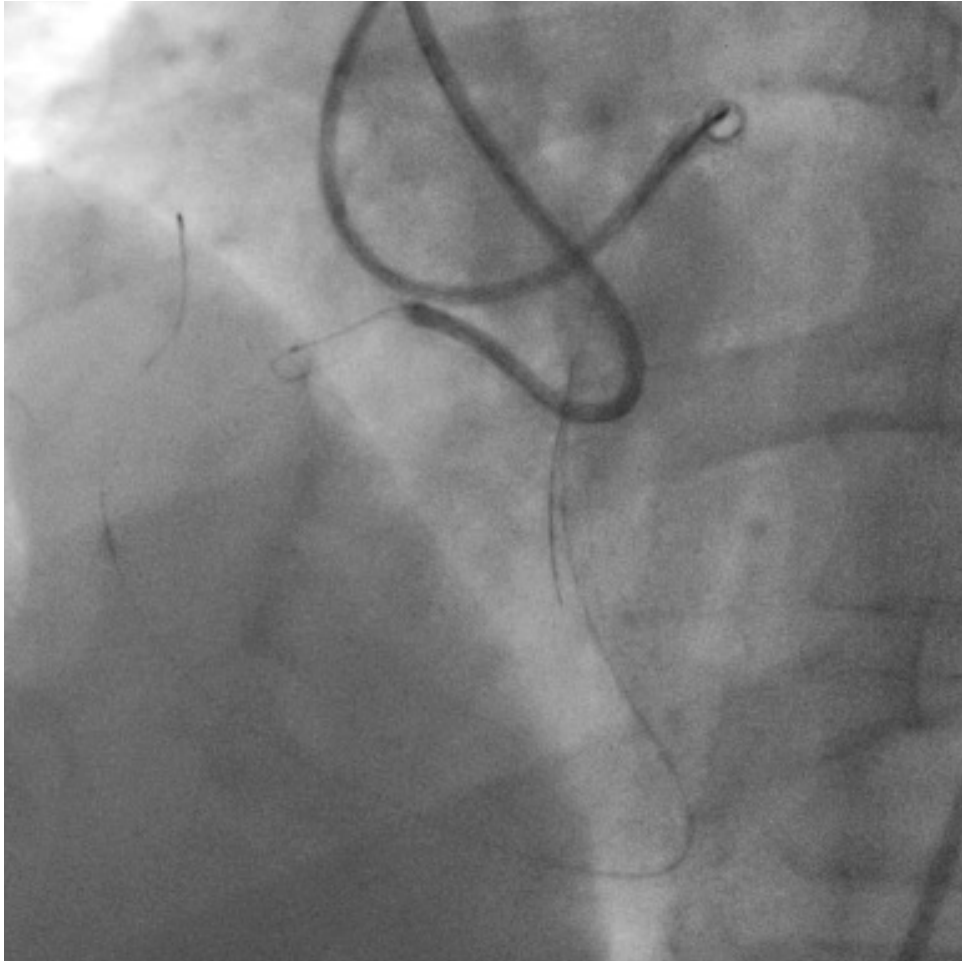




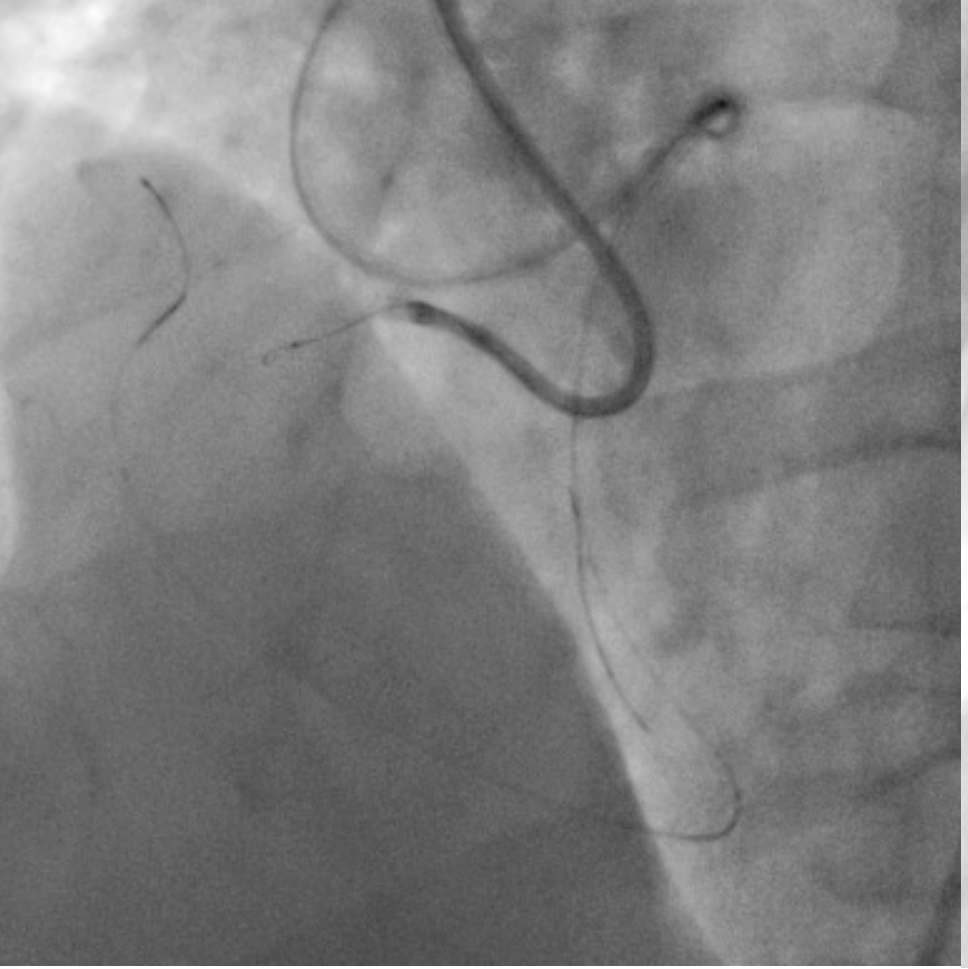
Then the MC advanced seemlessly



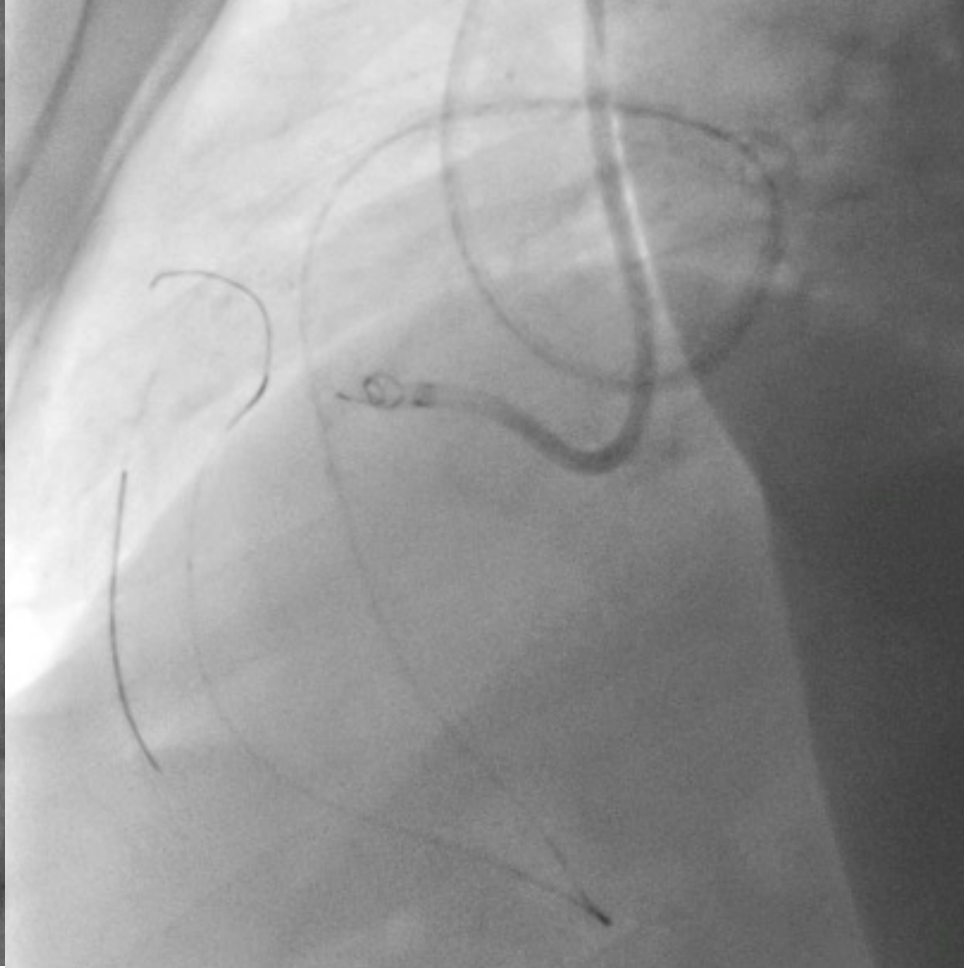
Appreciating the ambiguous difficult to understand course,
Escalated to Pilot 200, and still was wandering



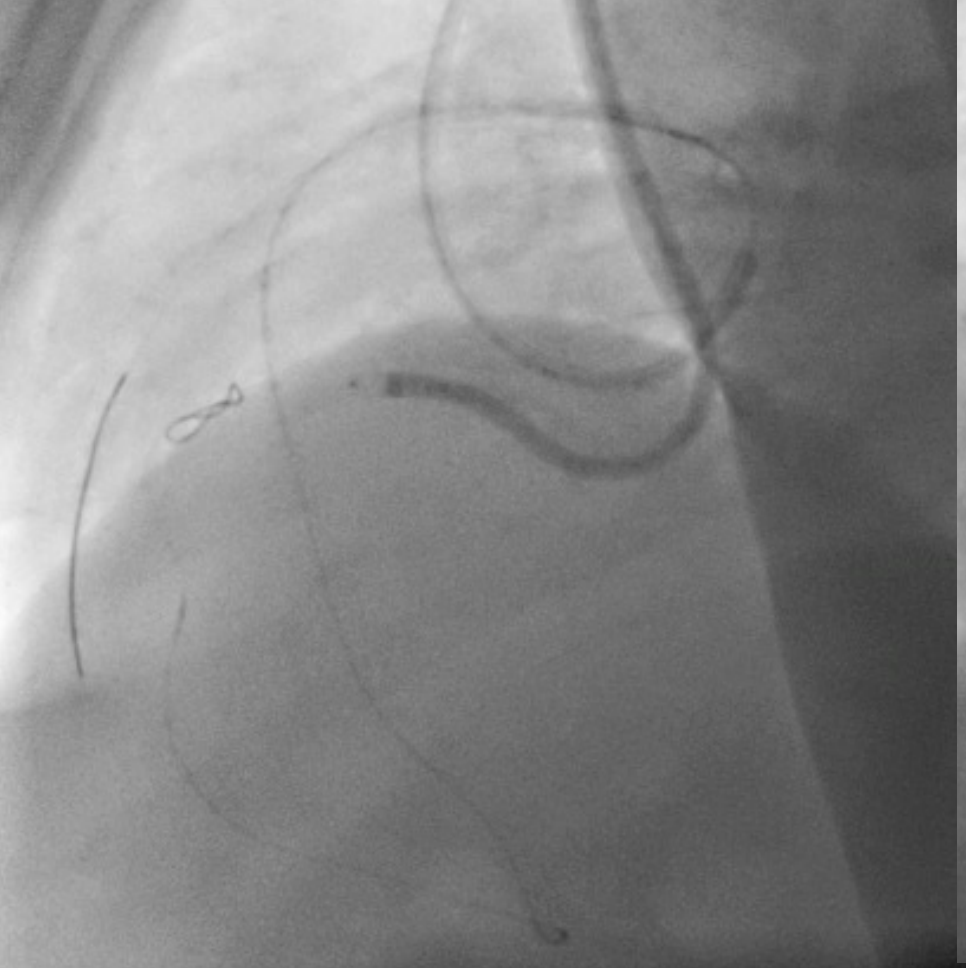
After preparing the antegrade gear (Pilot 200 & Navitian MC)
Manipulated the retrograde Pilot 200 until it tracked one of the cranial RCA branches



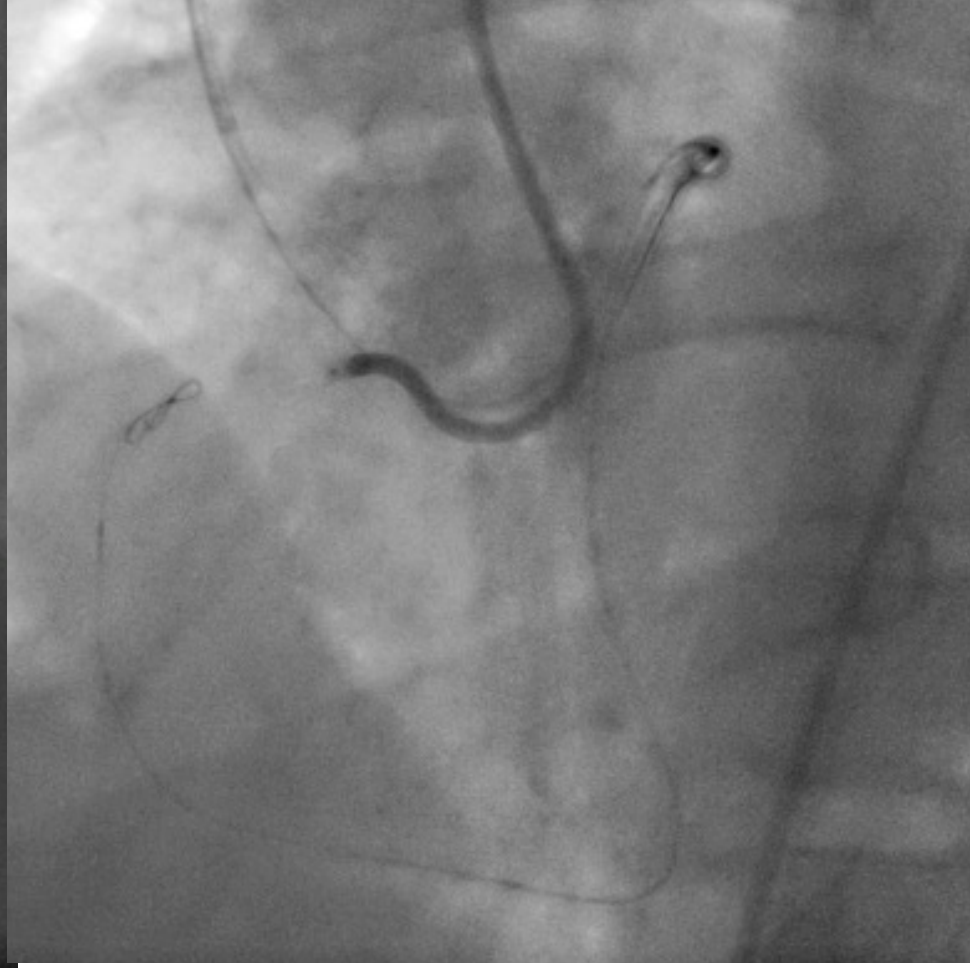
Manipulating the antegrade gear was not a piece of cake



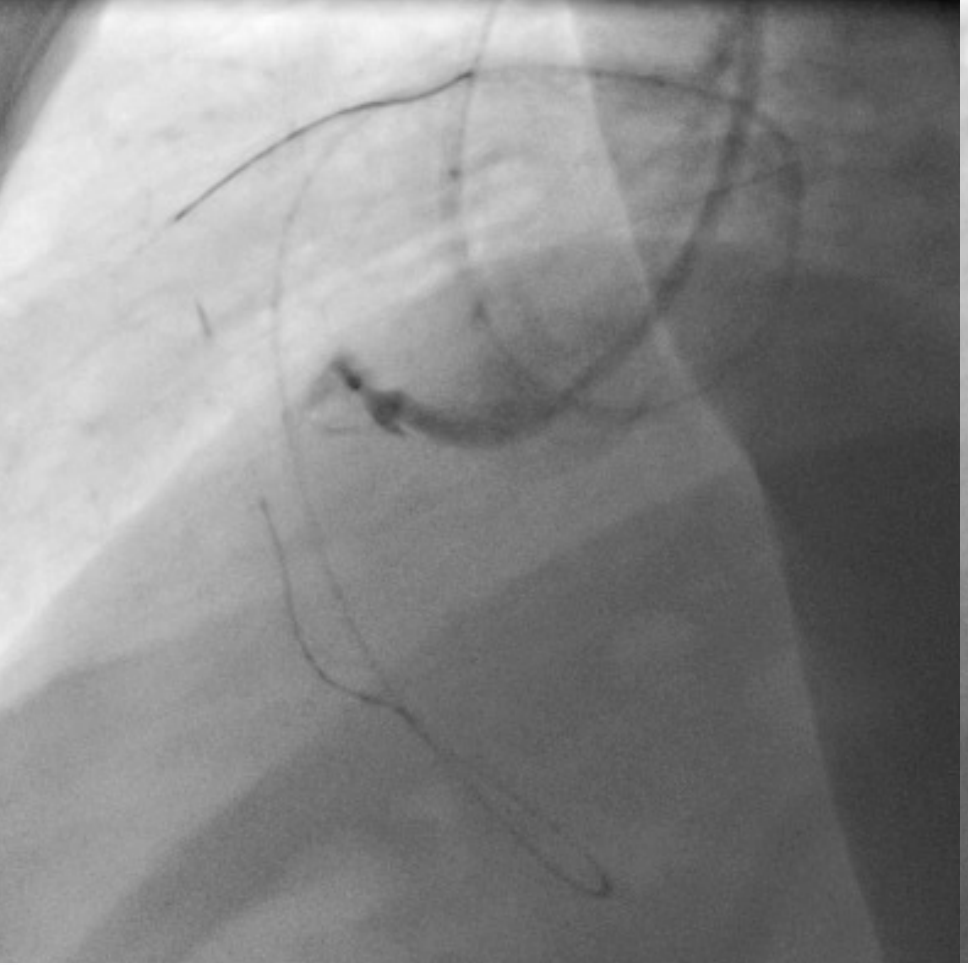
When hardly the wire looked cranially (the course of the RCA),
it ended with great disappointment



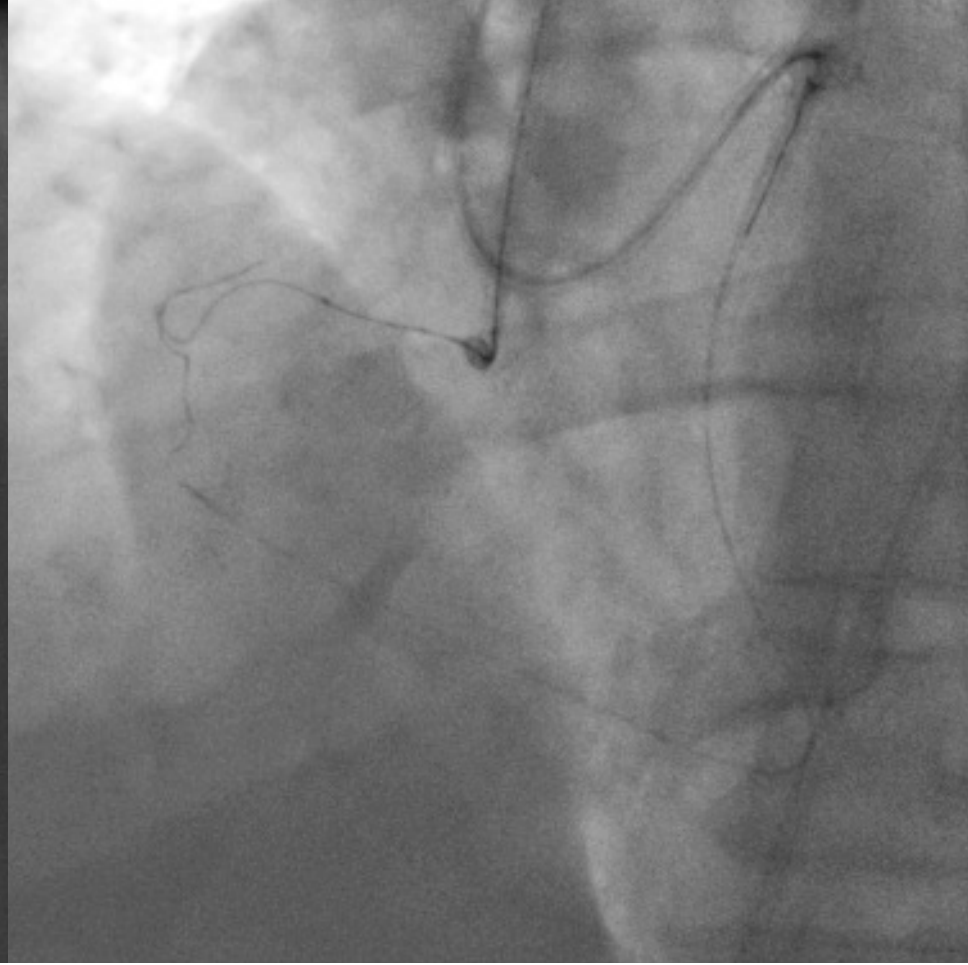
Back to the retrograde,
knuckling the retrograde Pilot 200 to track the RCA ambiguous course



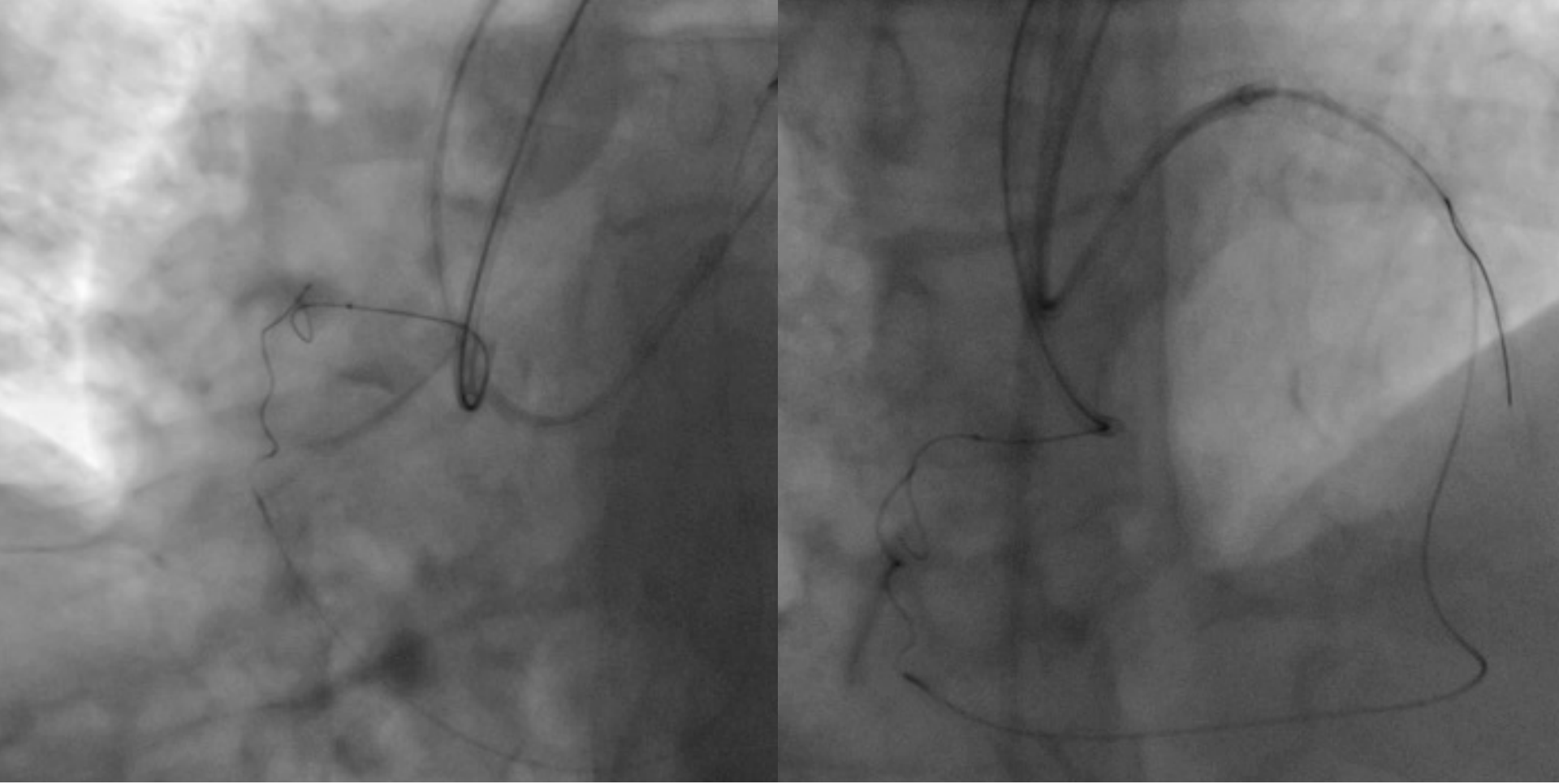
Yet, pushing the knuckle kicked the whole retrograde gear (EBU) backwards



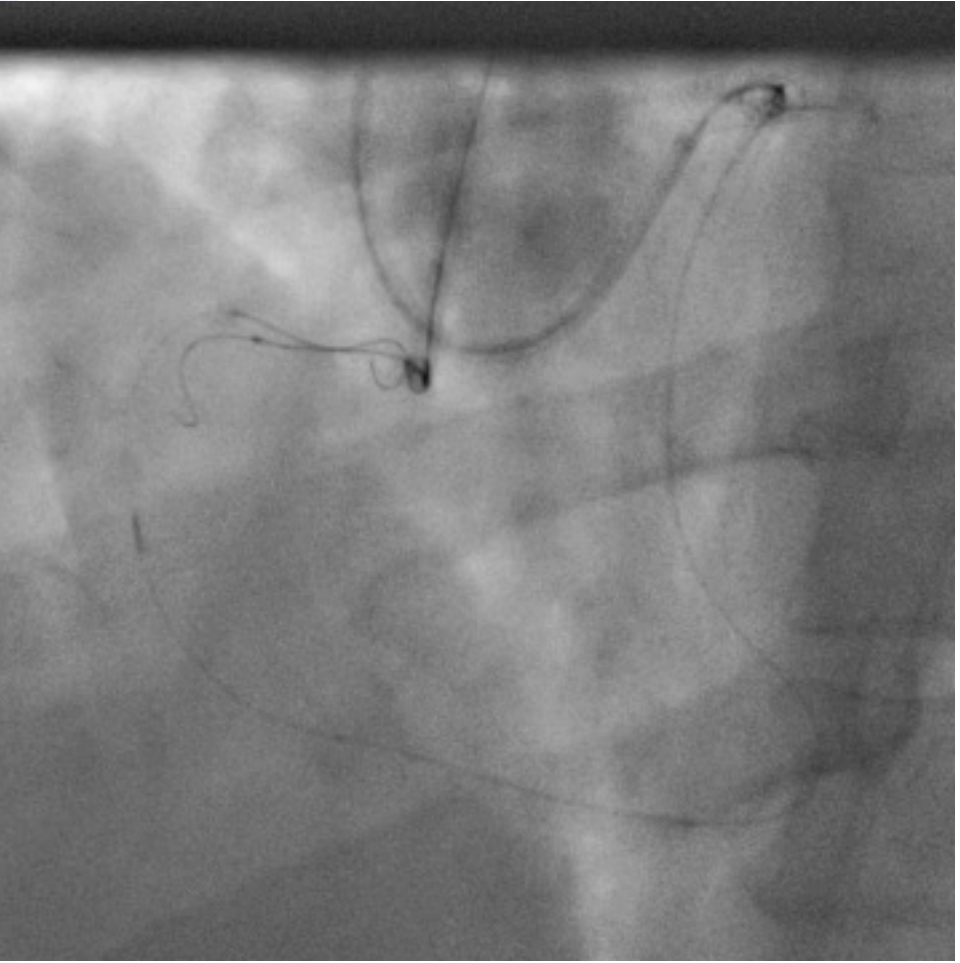
After changing to a JR, as bail-out, Carlino from the antegrade gear,
Aiming to modify the px cap and/or reveal the ambiguous course



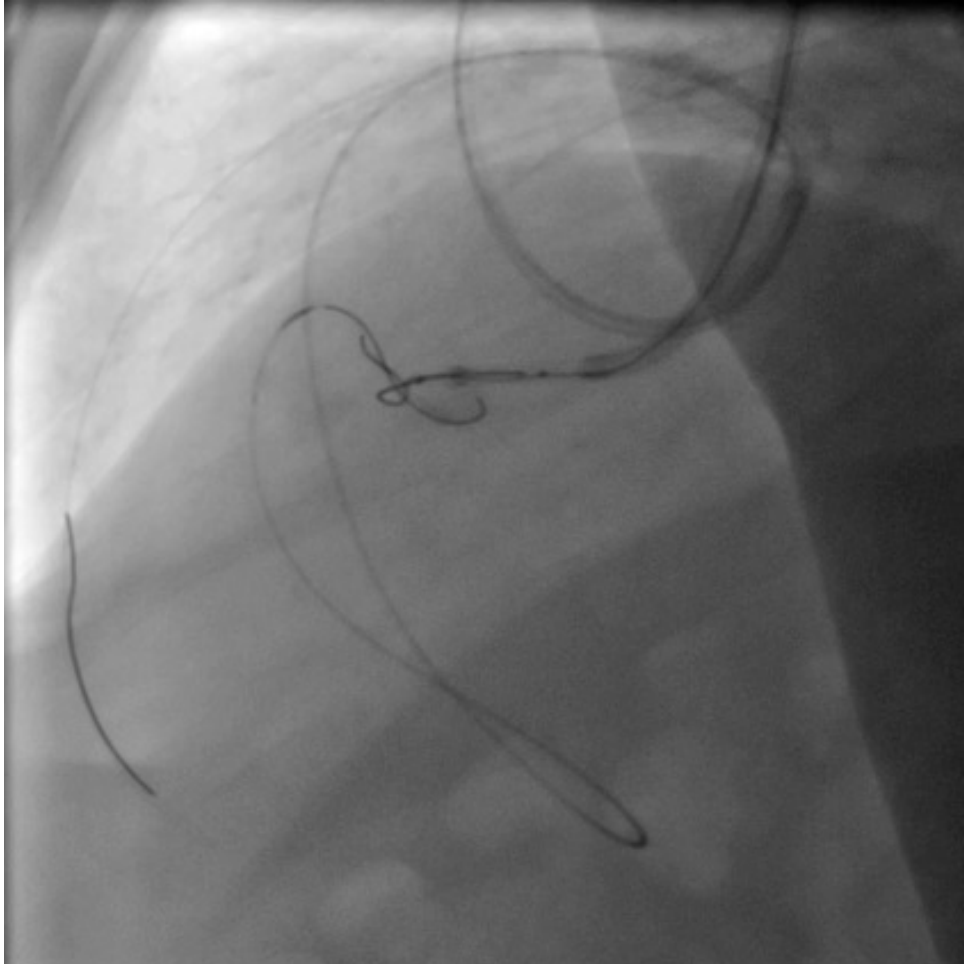
Now the antegrade gear progressed into the proximal RCA straightening its course
Then trying to track the course with the retrograde gear



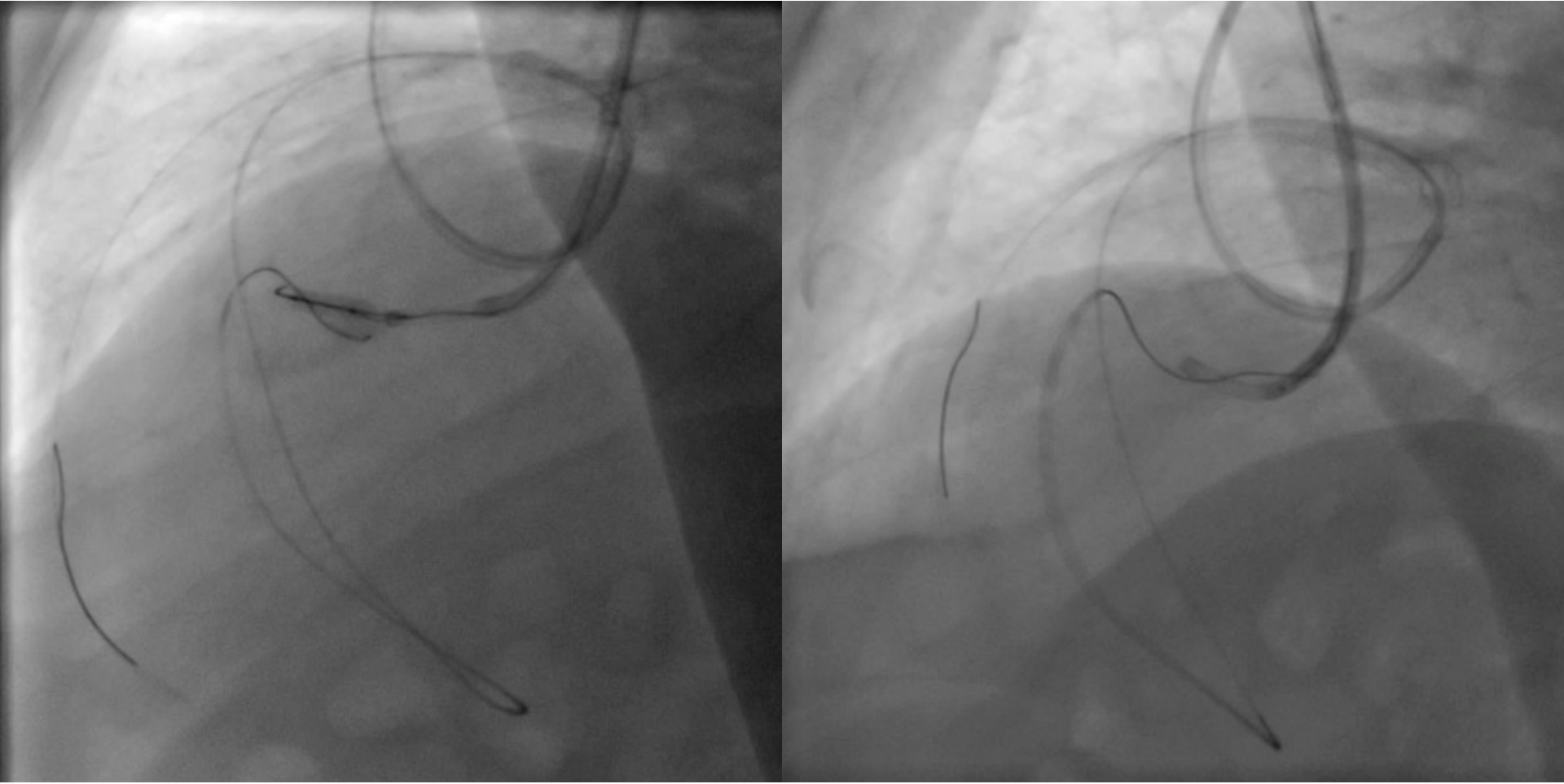
With a lot of S curves in both wires, but they seemed approximate



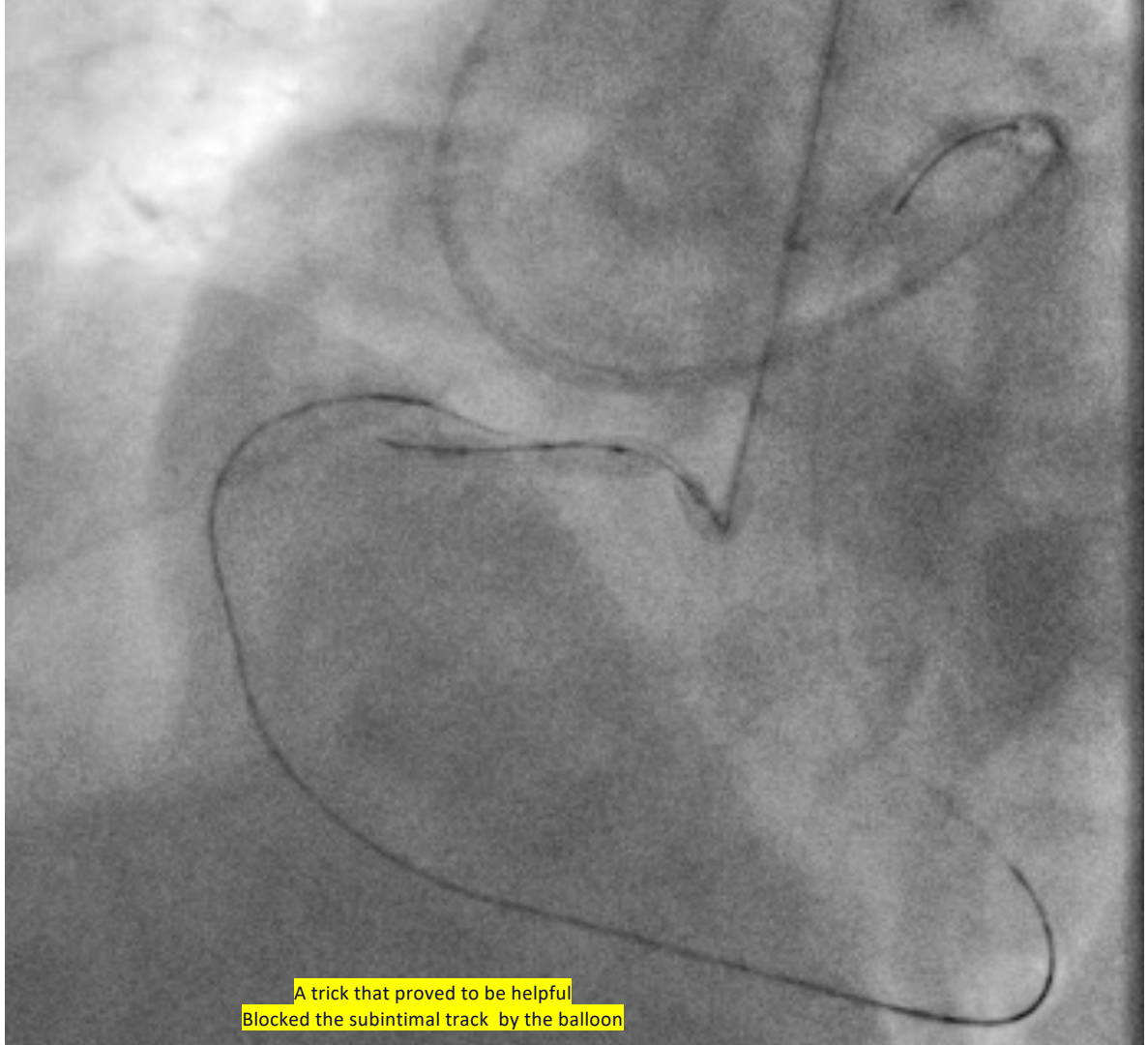
With a retrograde CP12, trying to puncture and externalize to the antegrade JR guide, but diving in the large hematoma (post Carlino)



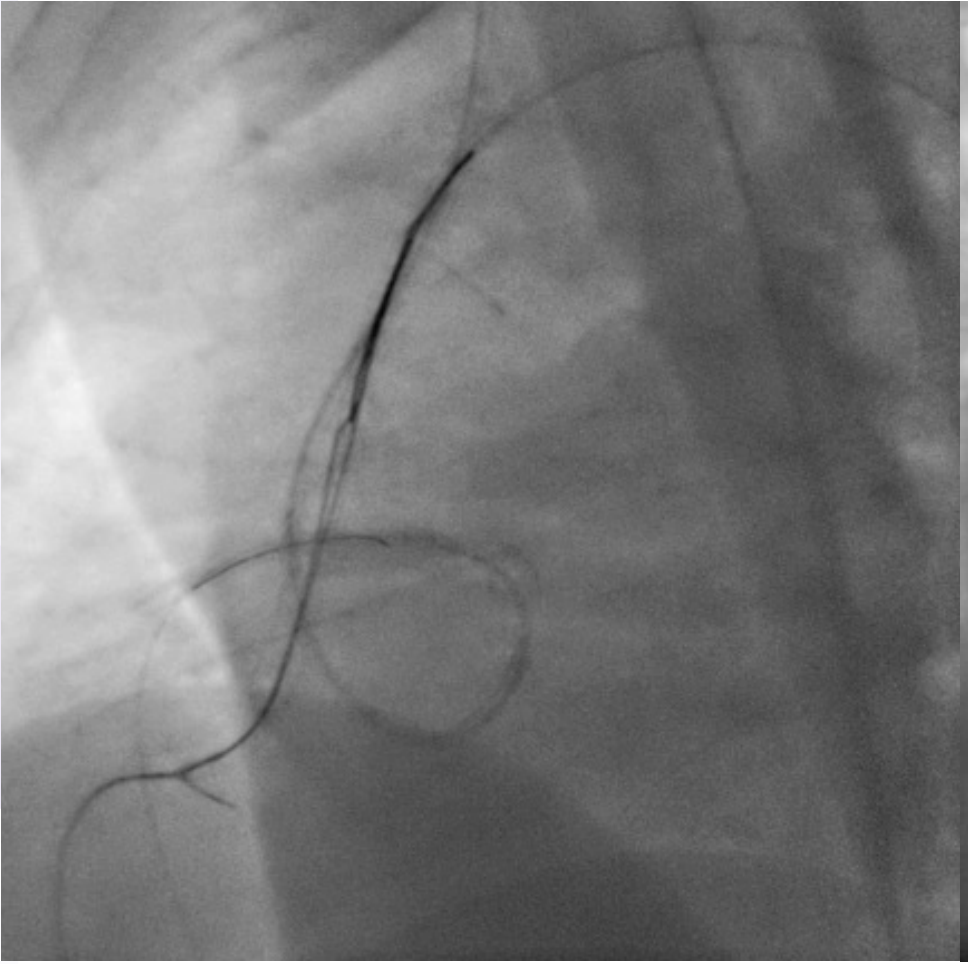
So, planned for Guideliner-assisted r-CART at the paraostial RCA advancing a 3 x15 NCB



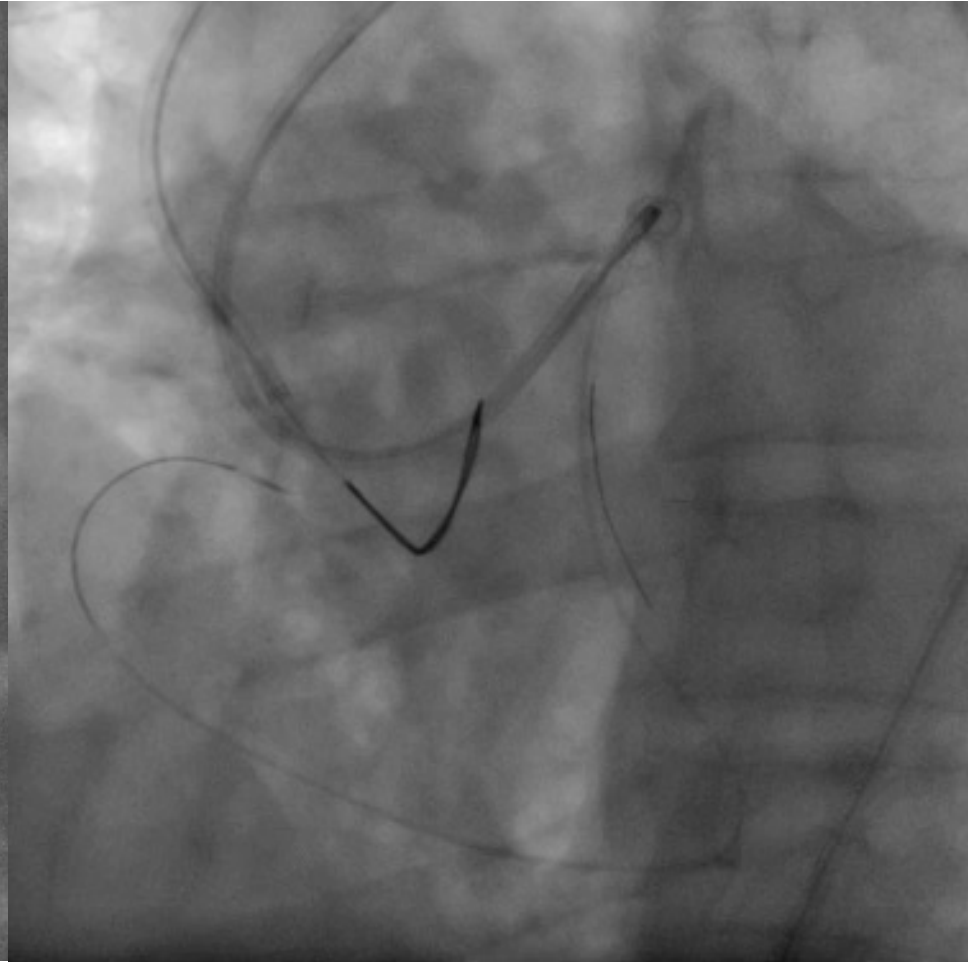
Repeatedly, the CP12 advances to the large subintimal space unable to puncture into the RCA lumen



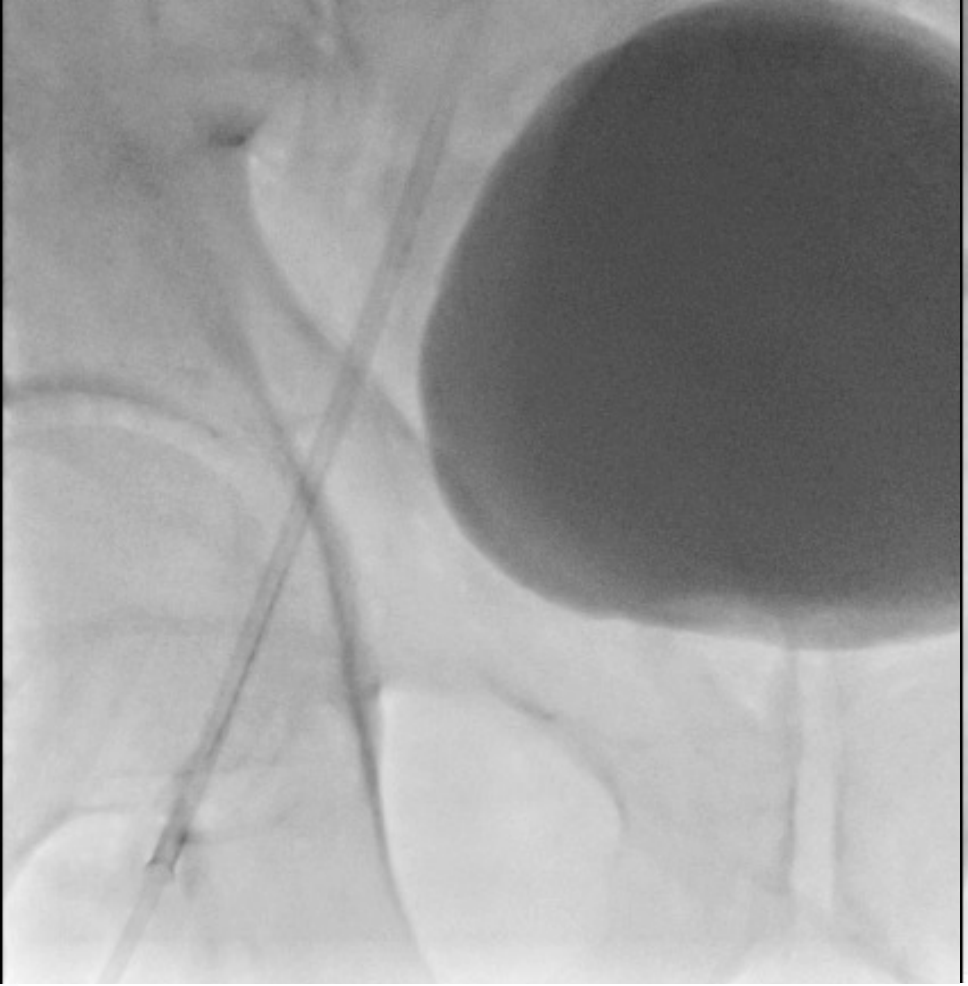
A trick that proved to be helpful
Blocked the subintimal track by the balloon

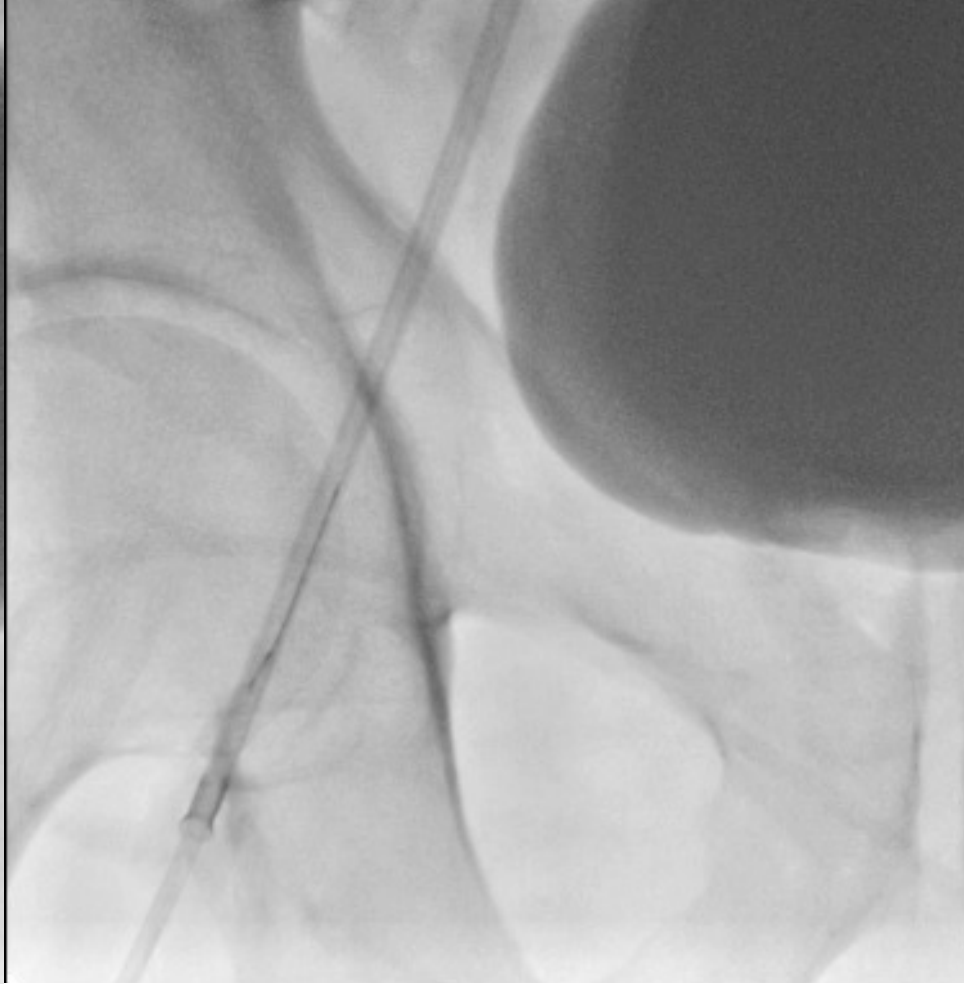


We had to snare and trap the Gaia to be able to externalize the MC into the aorta,
Because we believed we should not upset the RCA paraostium any more



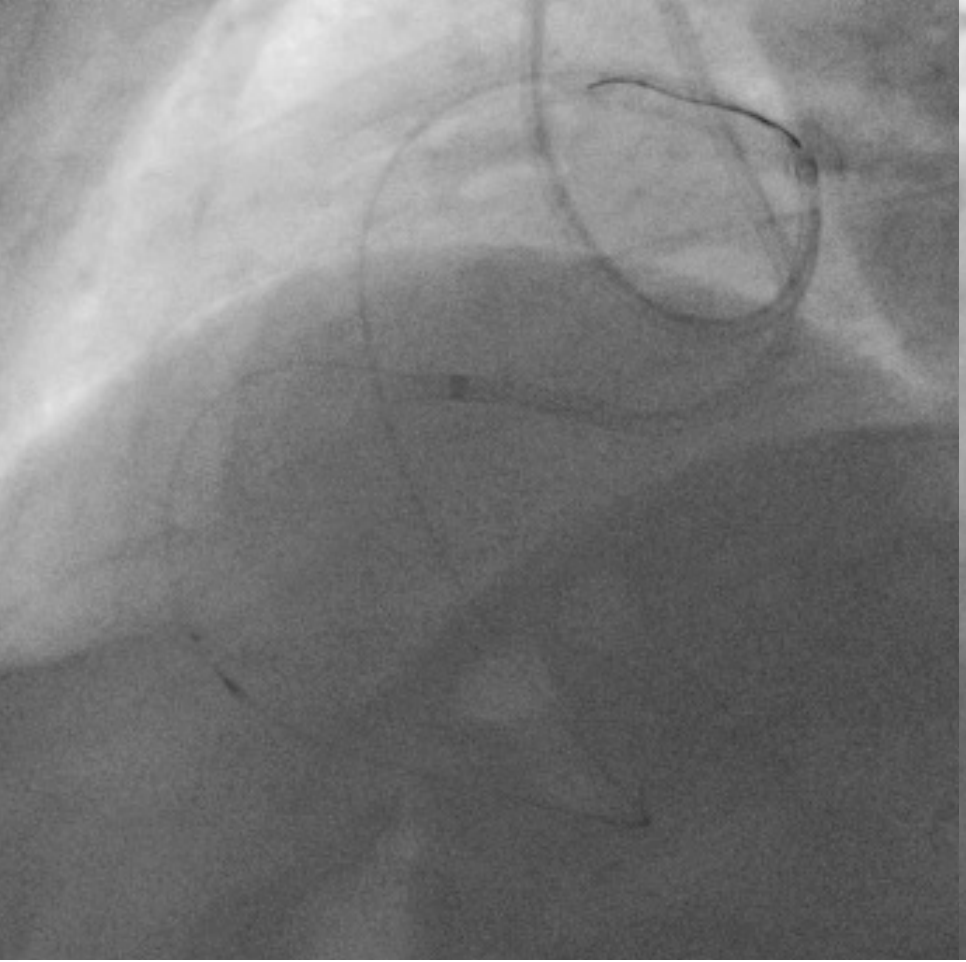
Then, we had to snare an RG3 externalized from the MC



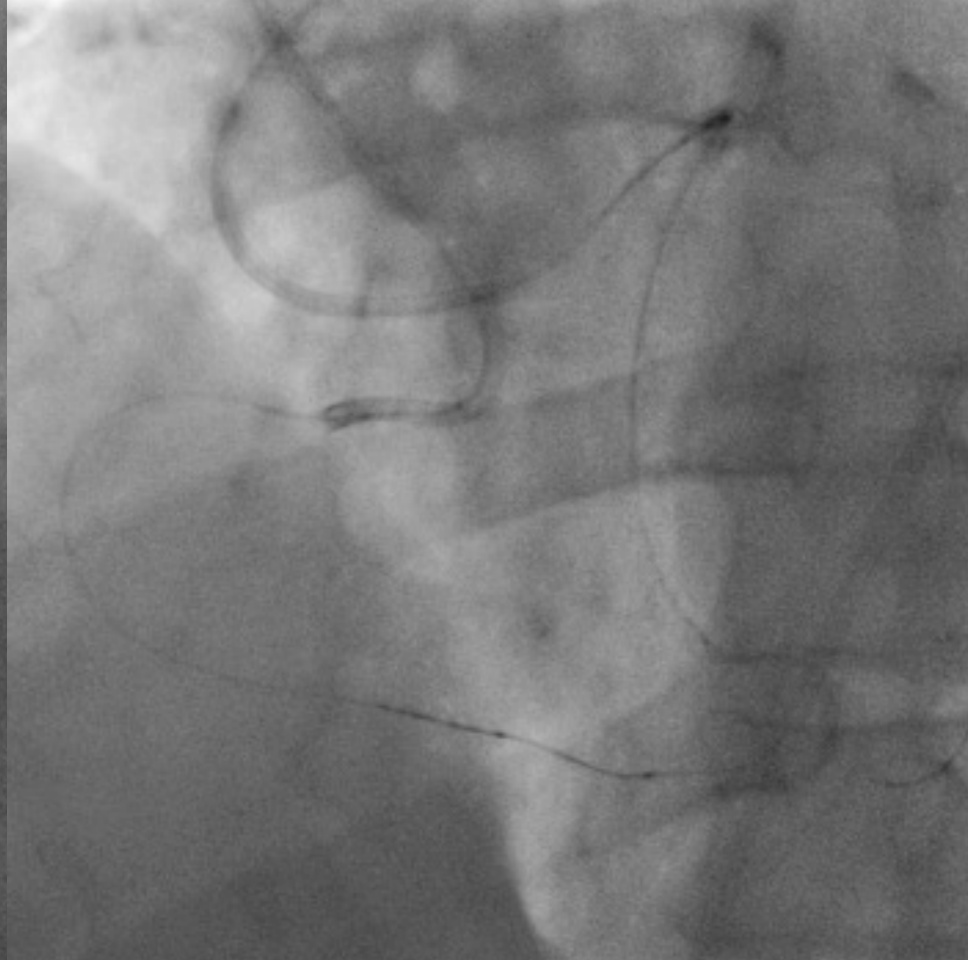


While almost there, but the RG3 was suffering huge friction with the exhausted Caravel
Unable to advance the few remaining inches

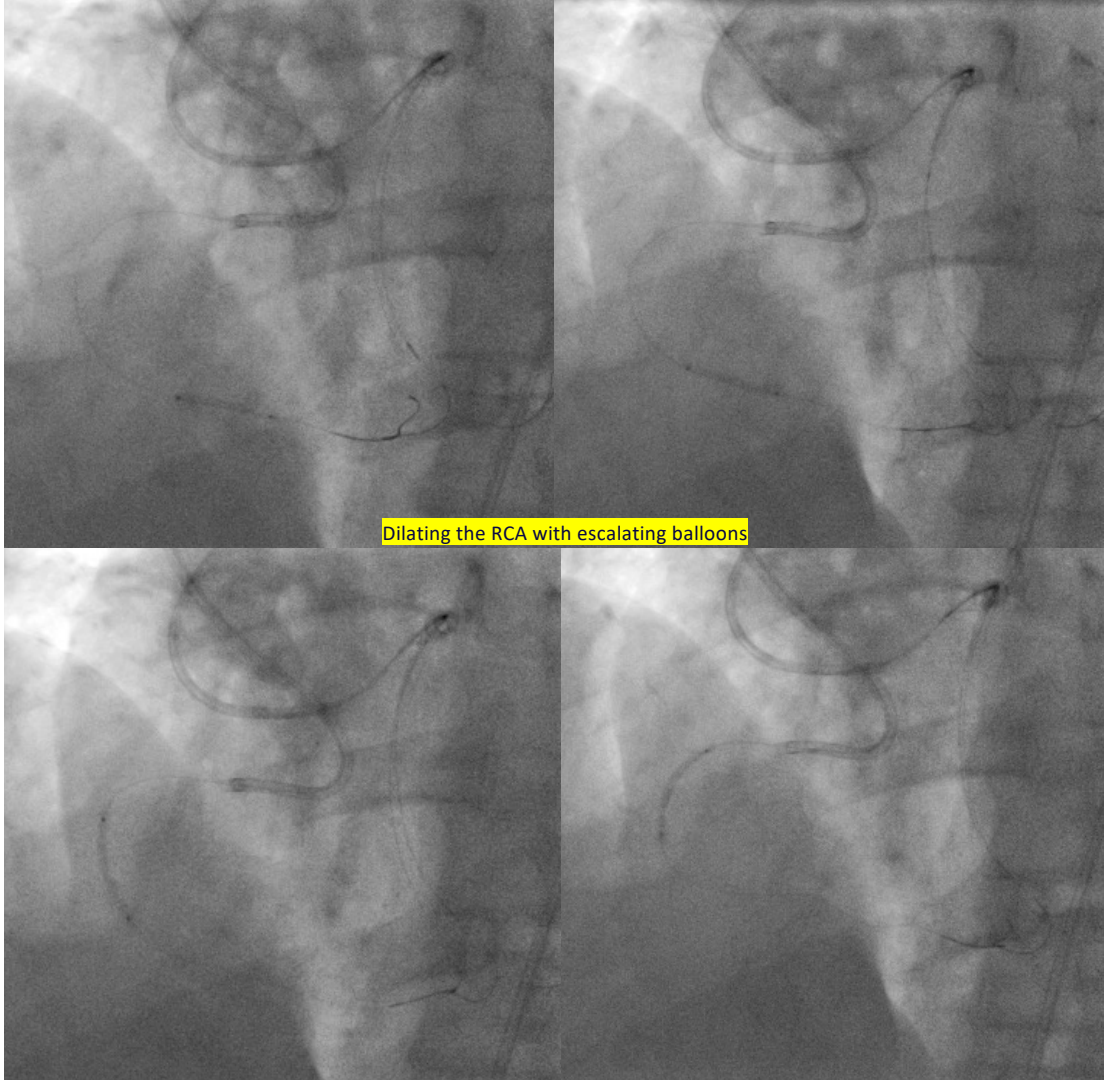
So, we used the Navitian for reverse Tip-in to be advanced over the RG3



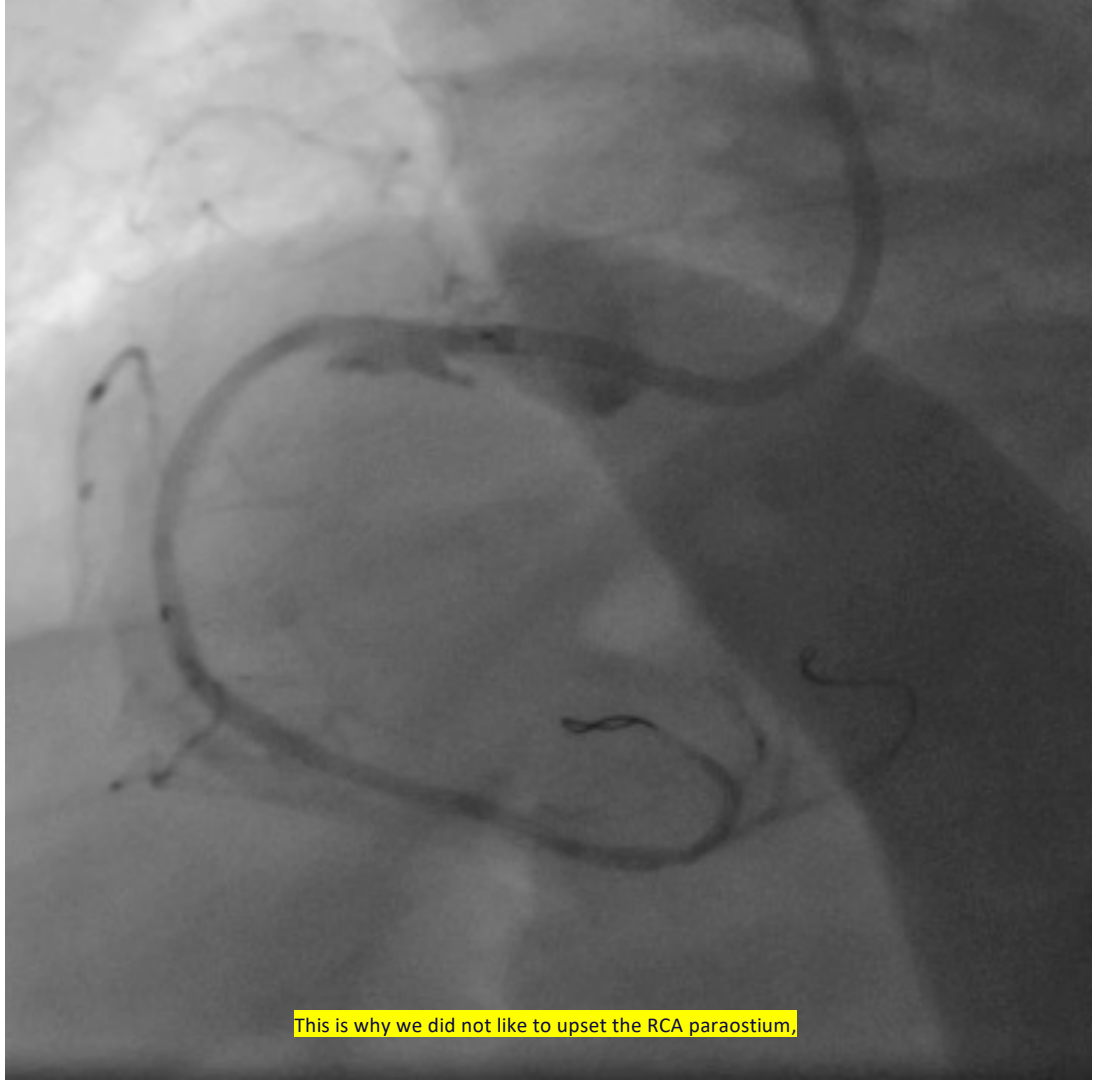
Over the same RG3, retreating the Caravel and advancing the Navitian



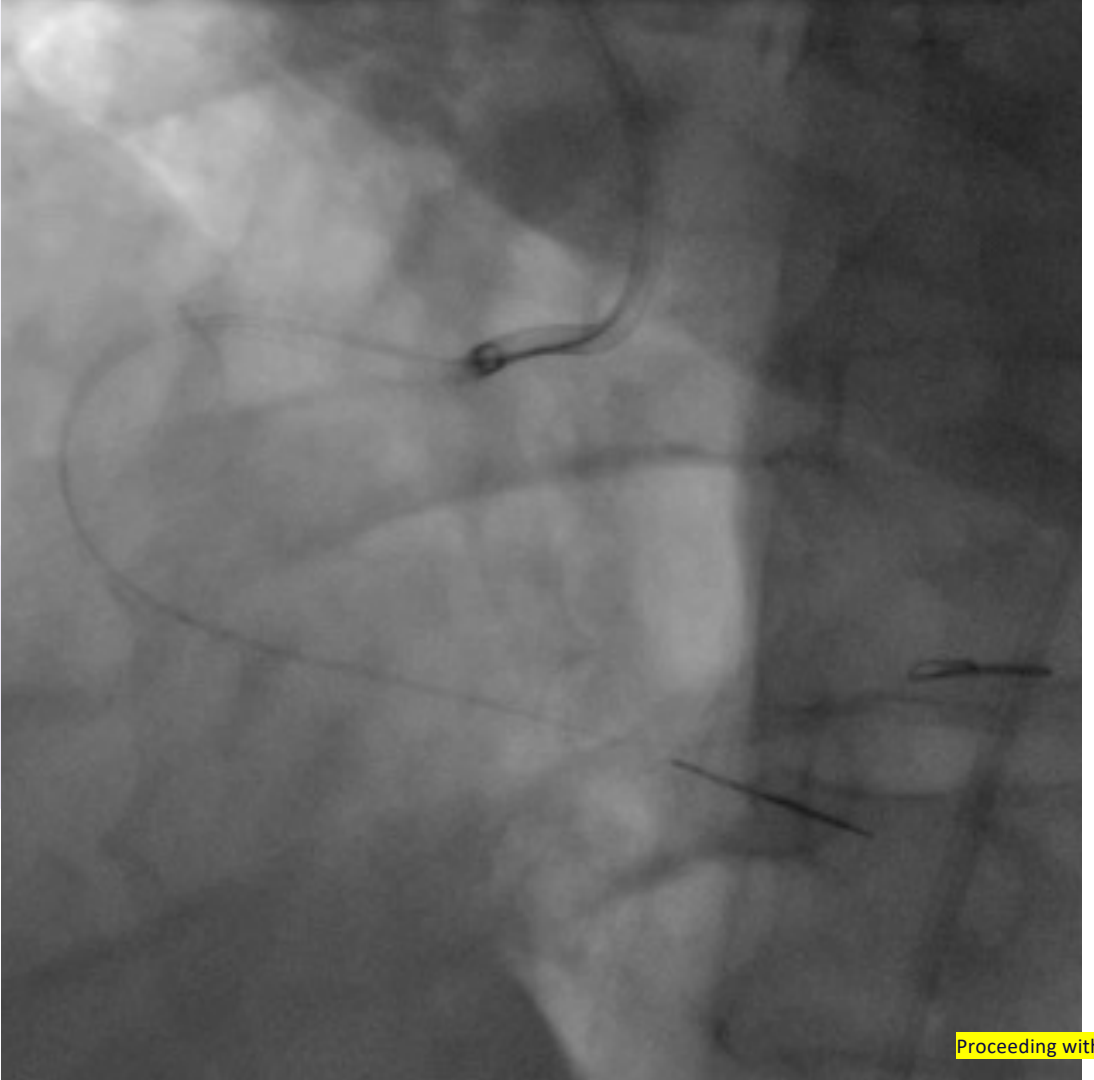
Once the Navitian in distal RCA, pulled back the RG3 to the collateral
Then advanced a workhorse wire antegradely into the PDA

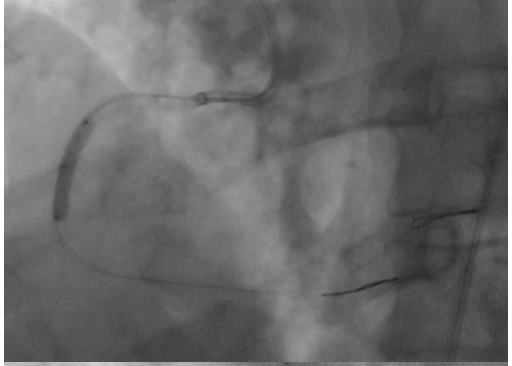


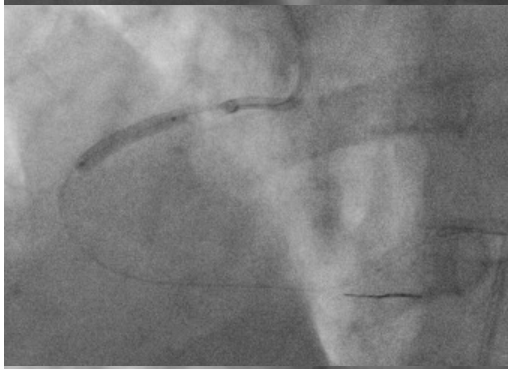
Dilating the RCA with escalating balloons

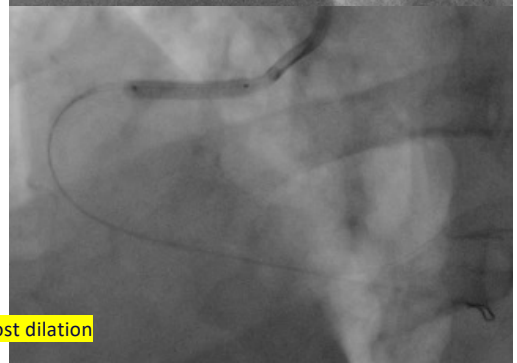


This is why we did not like to upset the RCA paraostium,

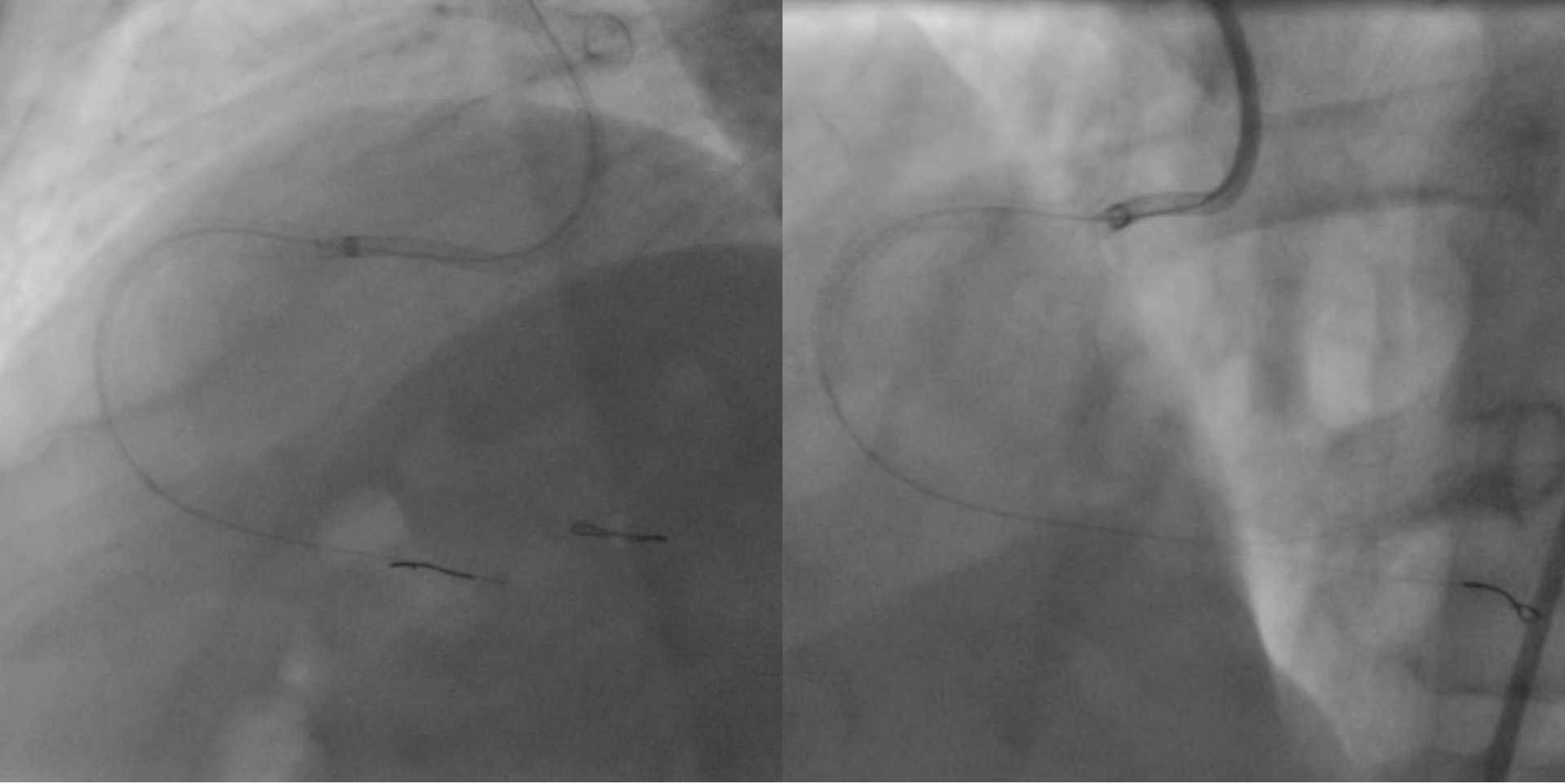








Proceeding with stenting and post dilation



To have this final result

Thank you