

Case Presentation

TOPIC:

SIZING

PRESENTED BY: DR SCUTERI
DATE: 01/12/2017

EXECUTIVE SUMMARY

PRE-CASE PLANNING

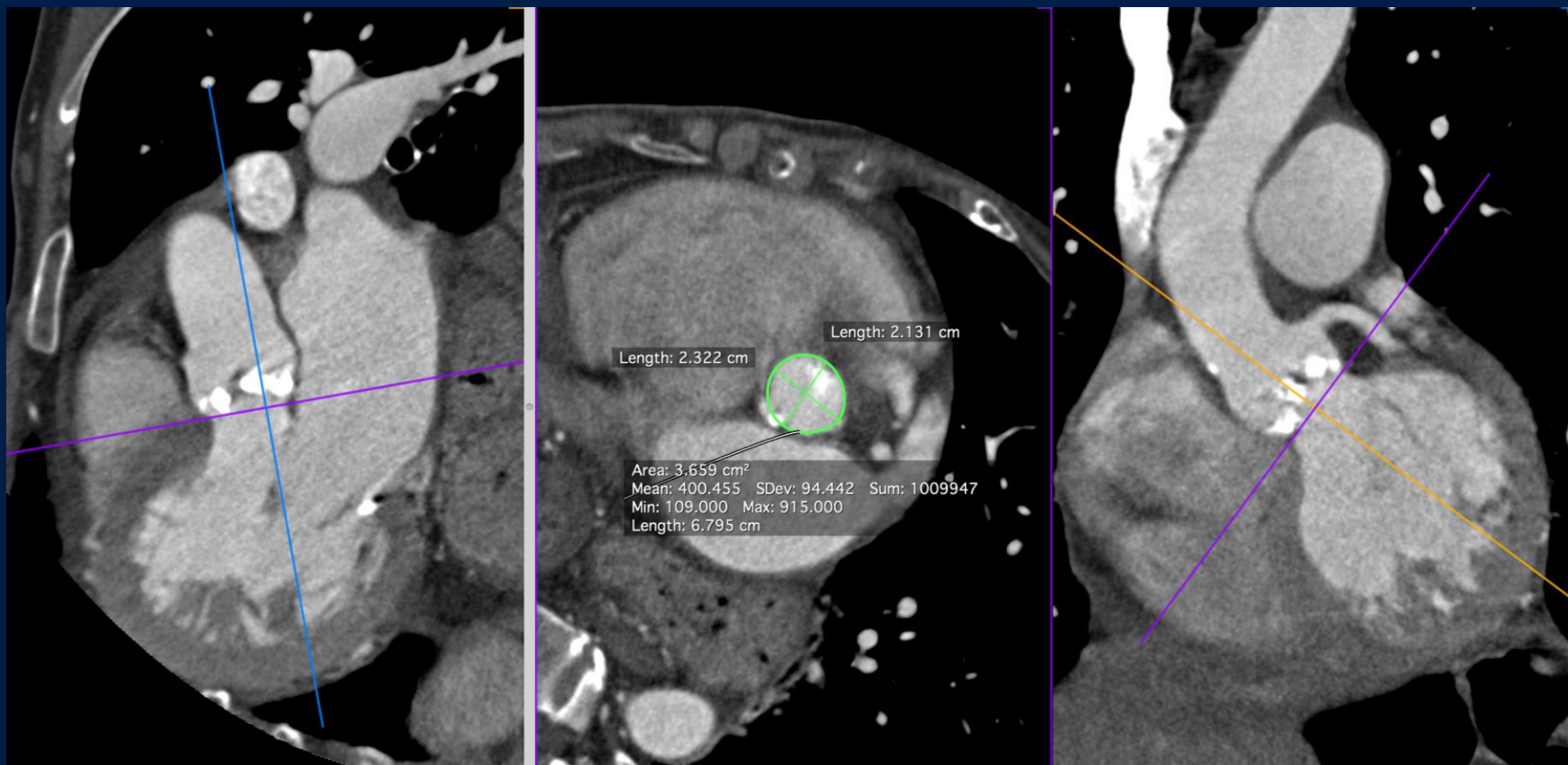
Past Medical History

- 80-year-old Female with Critical Aortic Stenosis
- Considered “High Risk” due to advanced age and frailty
- Aortic Valve Area = 0.4 (cm²)
- Mean Gradient = 64 (mm/Hg) / LVEF = 42 (%)
- Mild AR, mild MR
- COPD

MSCT Analysis:

- Annulus = 21,3 x 23.2 → mean = 22,2(mm)
- Severe calcification of the native annulus.
- Perimeter = 68 (mm²)
- SOV mean of 29 (mm)
- Left subclavian access (7,5 mm)

HOROS'S MEASUREMENTS:



FLUROCT'S MEASUREMENTS:

Medtronic

CoreValve 26mm

26 mm (20-23 mm)

47.9 %

20.6 %

Aortic valve annulus

Area mm²

Perimeter mm

Spline: Spline

Perimeter-derived
diameter mm

PHYSICIAN'S MEASUREMENTS:

AREA	3,96 mm ²
DIAMETRO	24 mm
PERIMETRO	72 mm

CORONARIES HEIGHT:

LCA



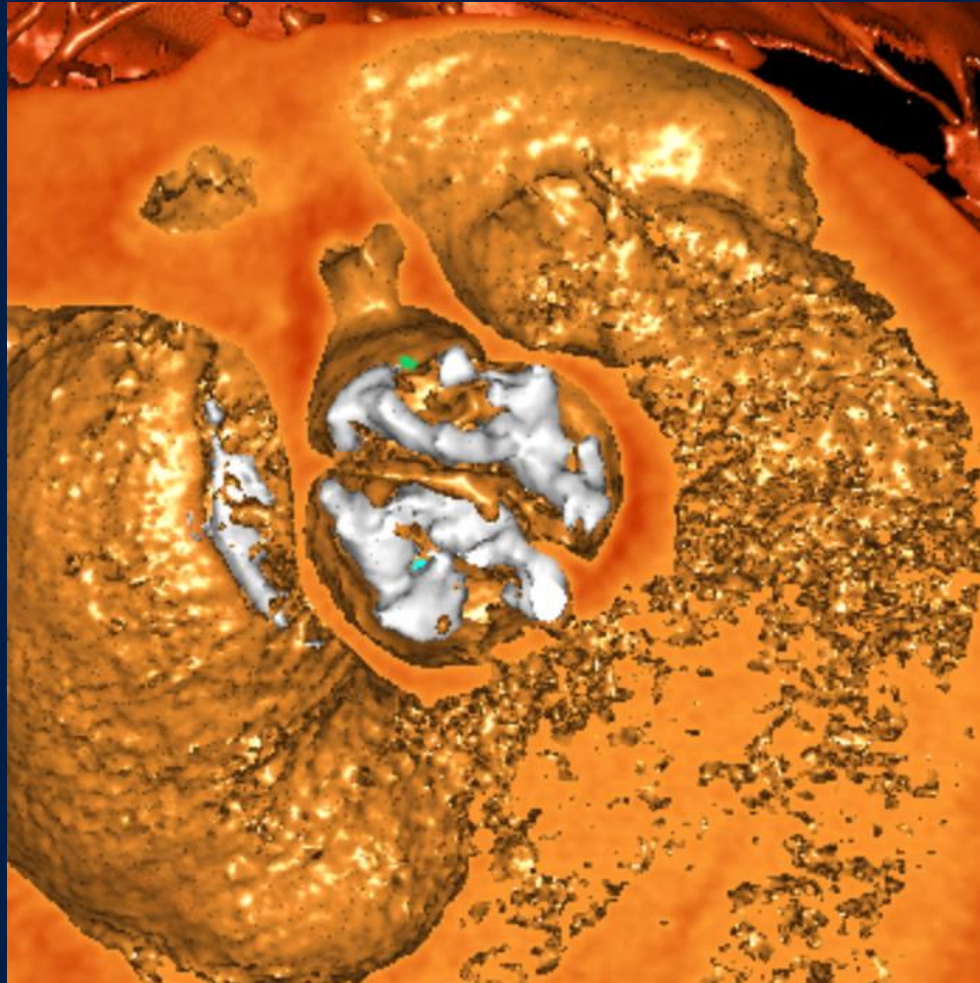
RCA



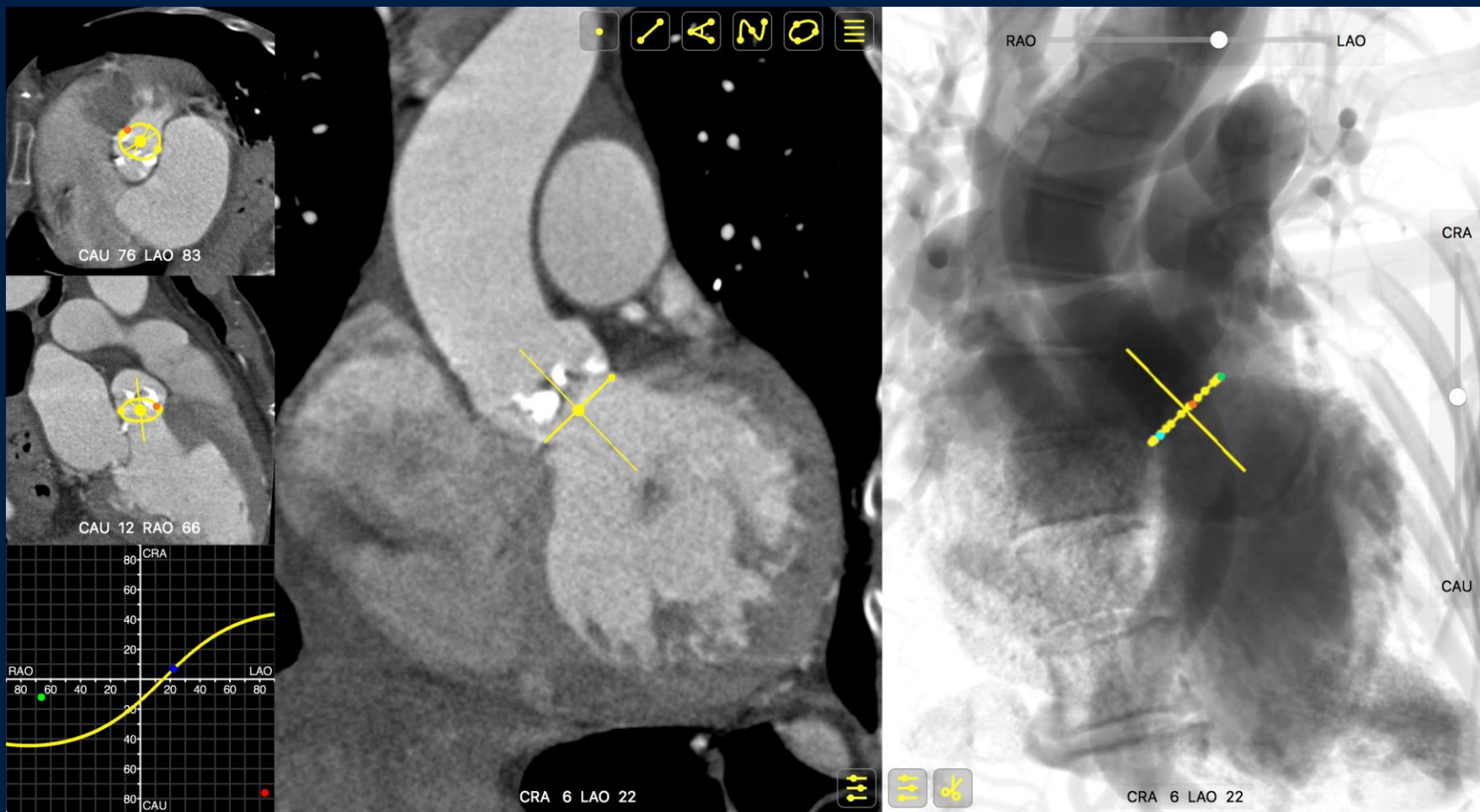
CORONARY SINUS:



CALCIFICATION OF THE ANNULUS:



OPTIMAL IMPLANT PROJECTION:

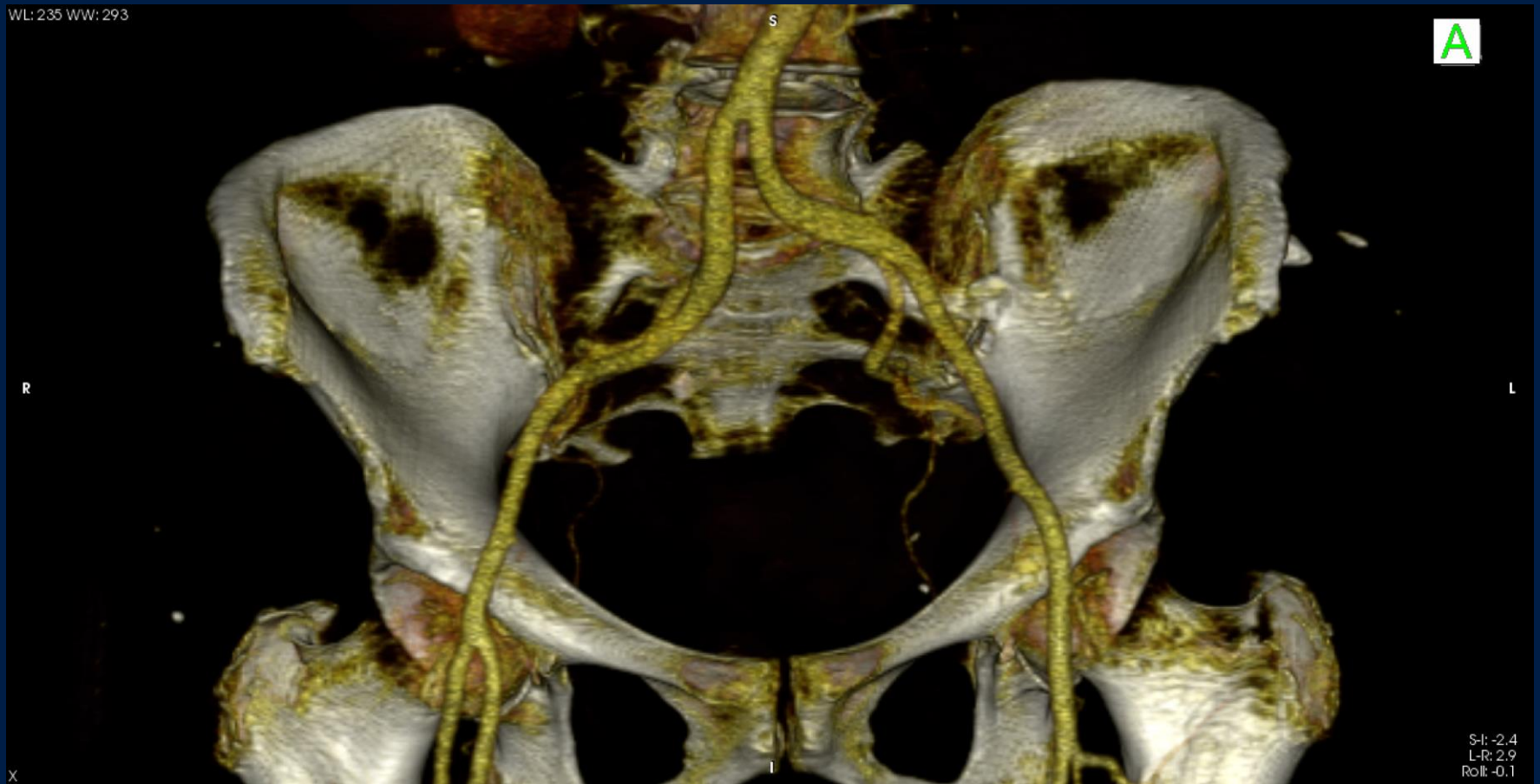


AORTIC ROOT ANGLE:



FEMORAL ACCESS:

WL: 235 WW: 293



S-I: -2.4
L-R: 2.9
Roll: -0.1

AORTIC TORTUOSITY:

WL: 220 WW: 182



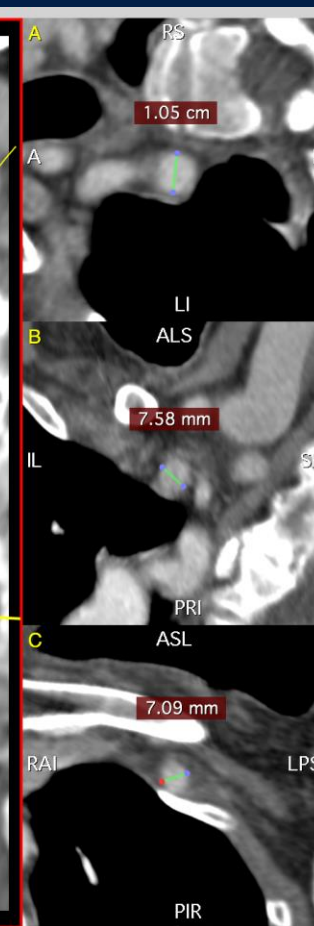
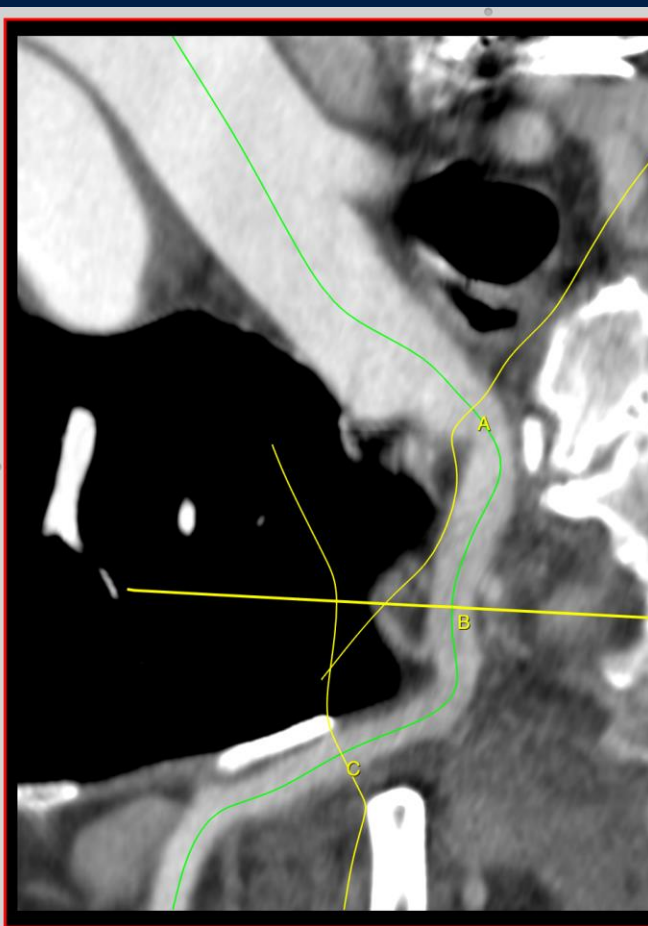
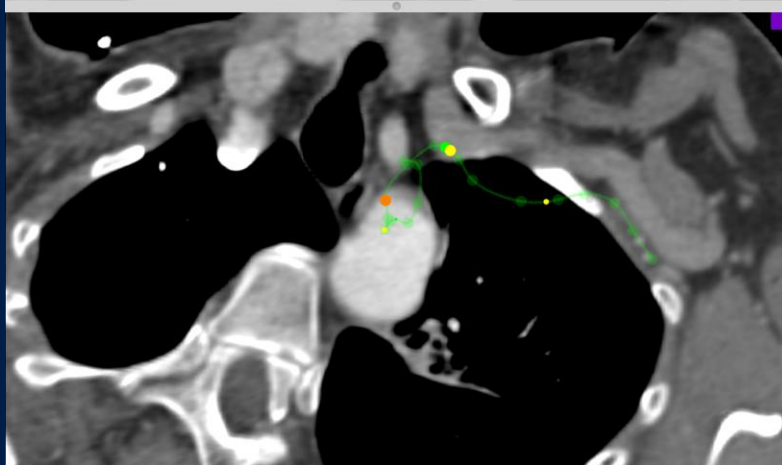
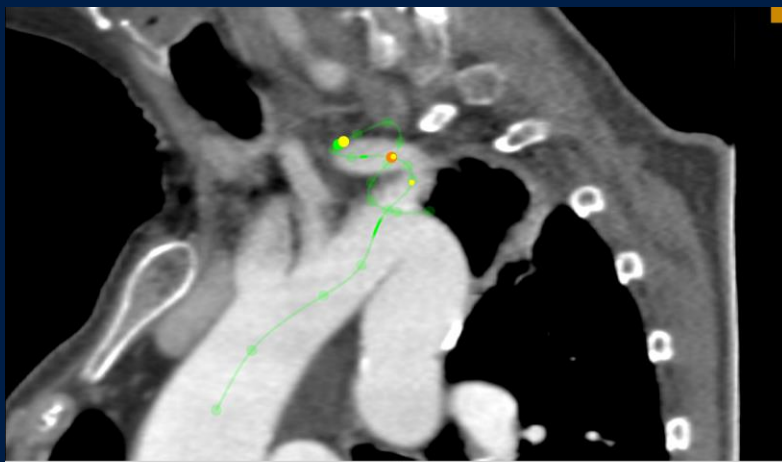
LP

AL

PR

S-I: 6.3
L-R: 127.7
Roll: 0.7

LEFT SUBCLAVIAN ACCESS:



Pre-Case Planning

Procedure Plan:

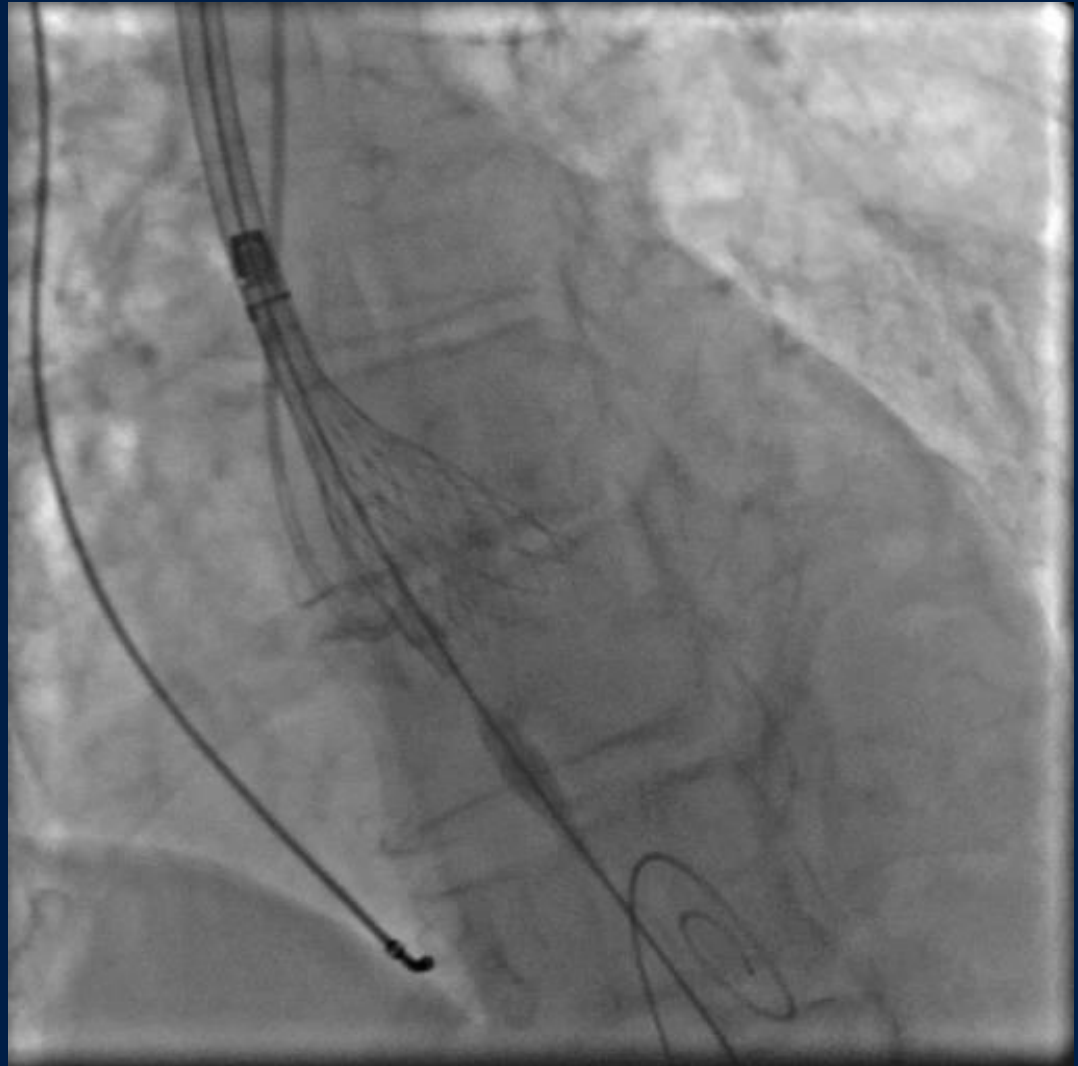
- General Anesthesia
- Temporary pace marker
- Left Subclavian access.
- Guidewire → Confida
- **Bioprosthesis → 26mm Evolut R**
- Direct implant.

Complication Mitigation

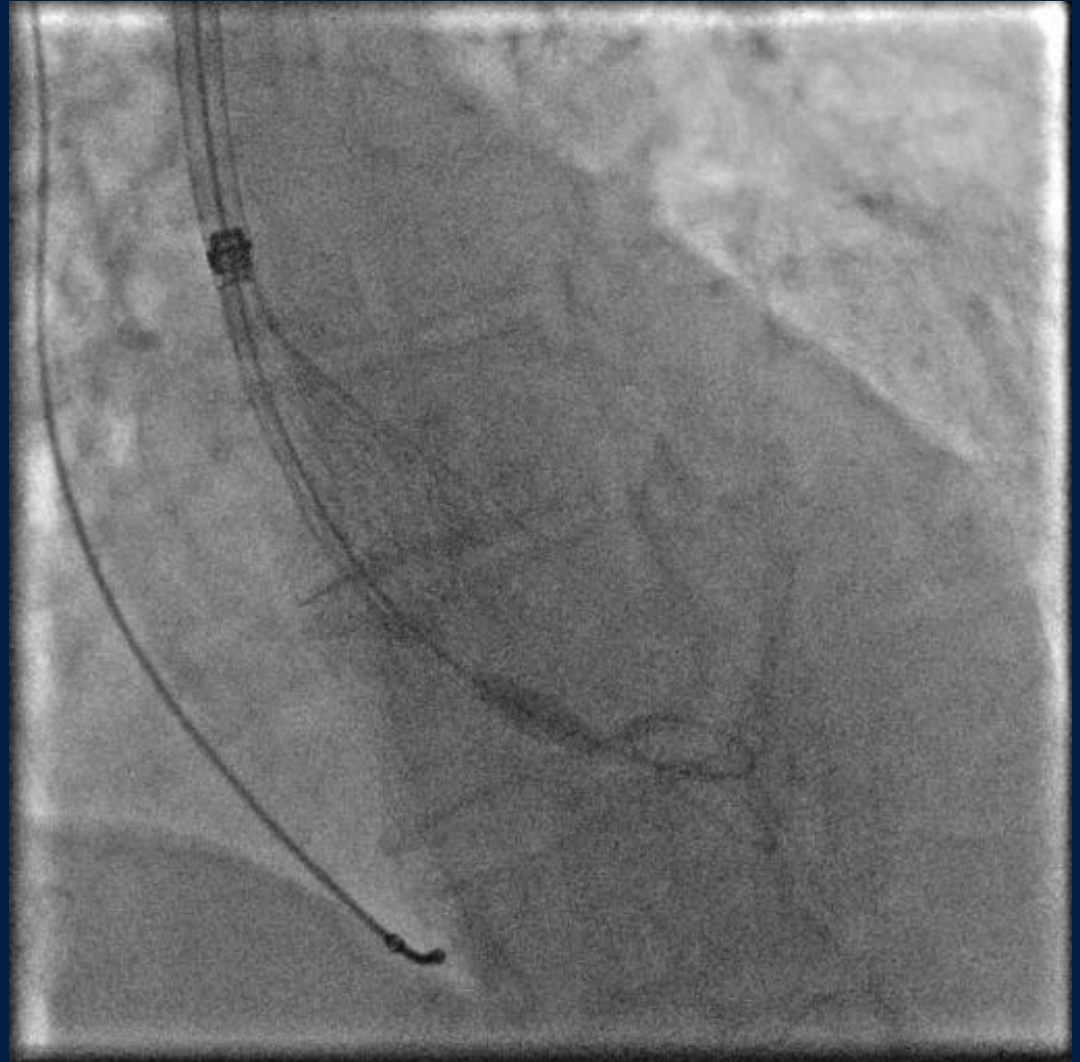
1. Due to a kink in the descending aorta and tortuosity, we choose left subclavian access.

PROCEDURE

Fluoro
Check



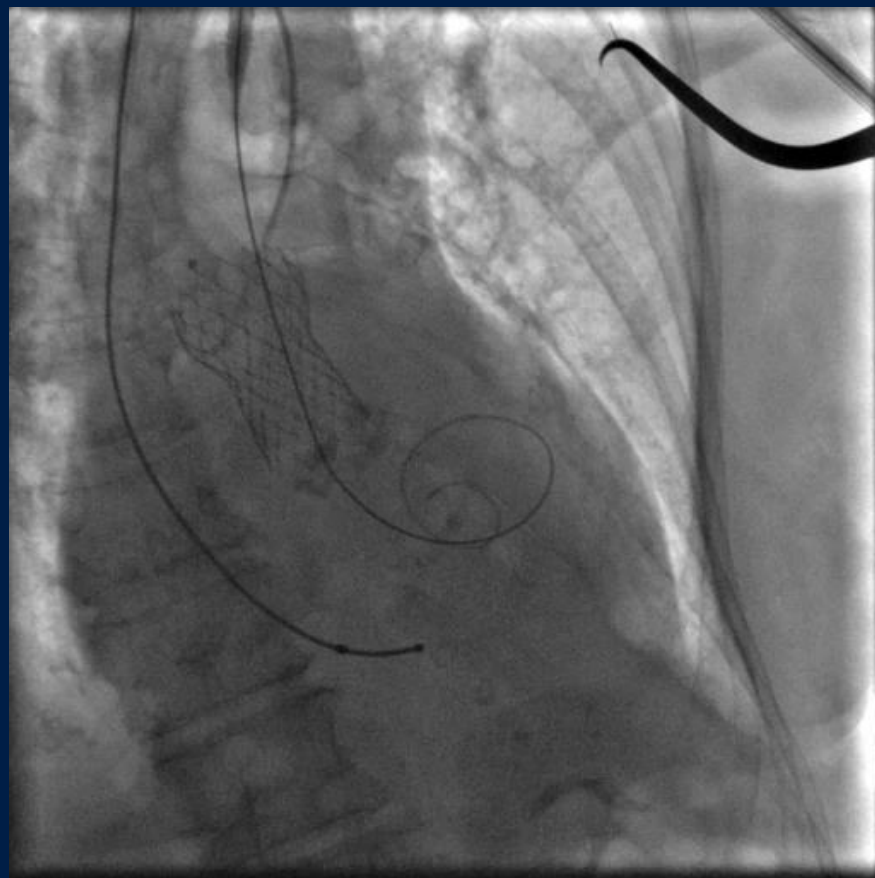
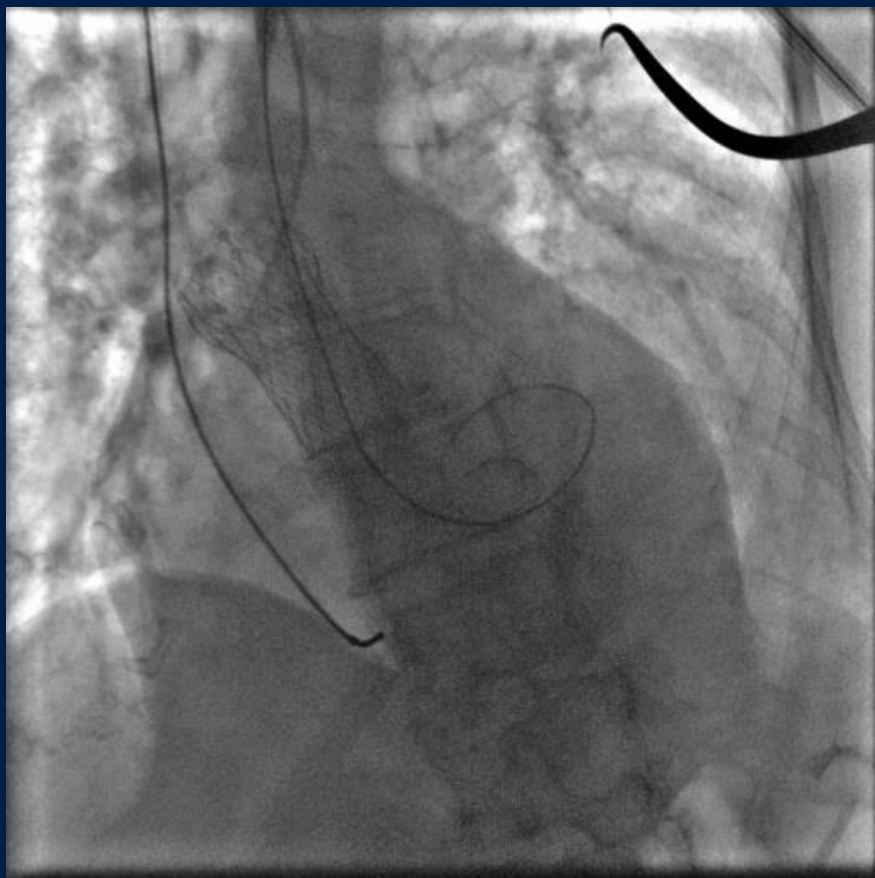
Deployment



Recovery of the
delivery system



Post implantation control



WHY THE VALVE POP UP??

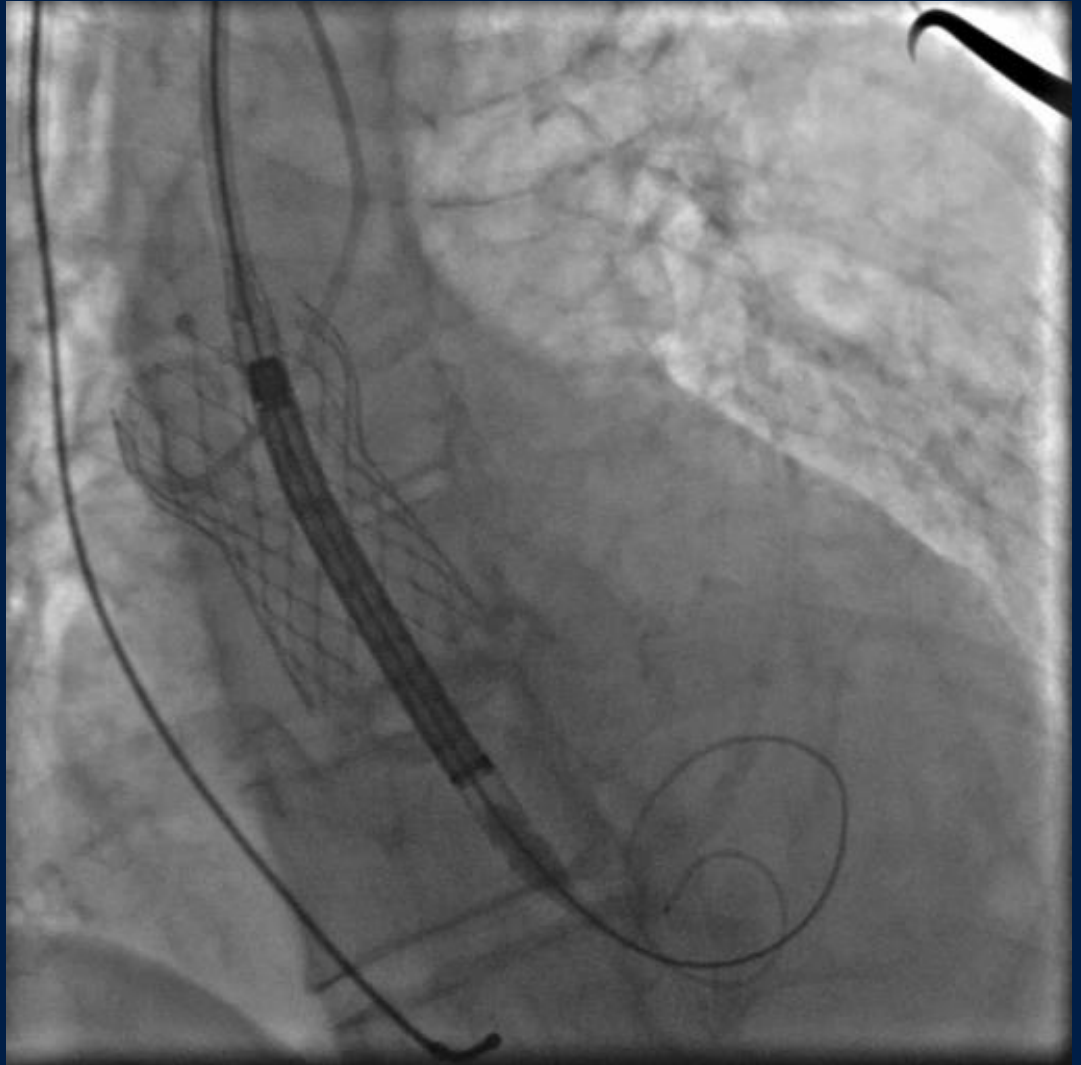
Team decision

We suspect a mistake on the selected valve (26), so it was measured again at this moment.

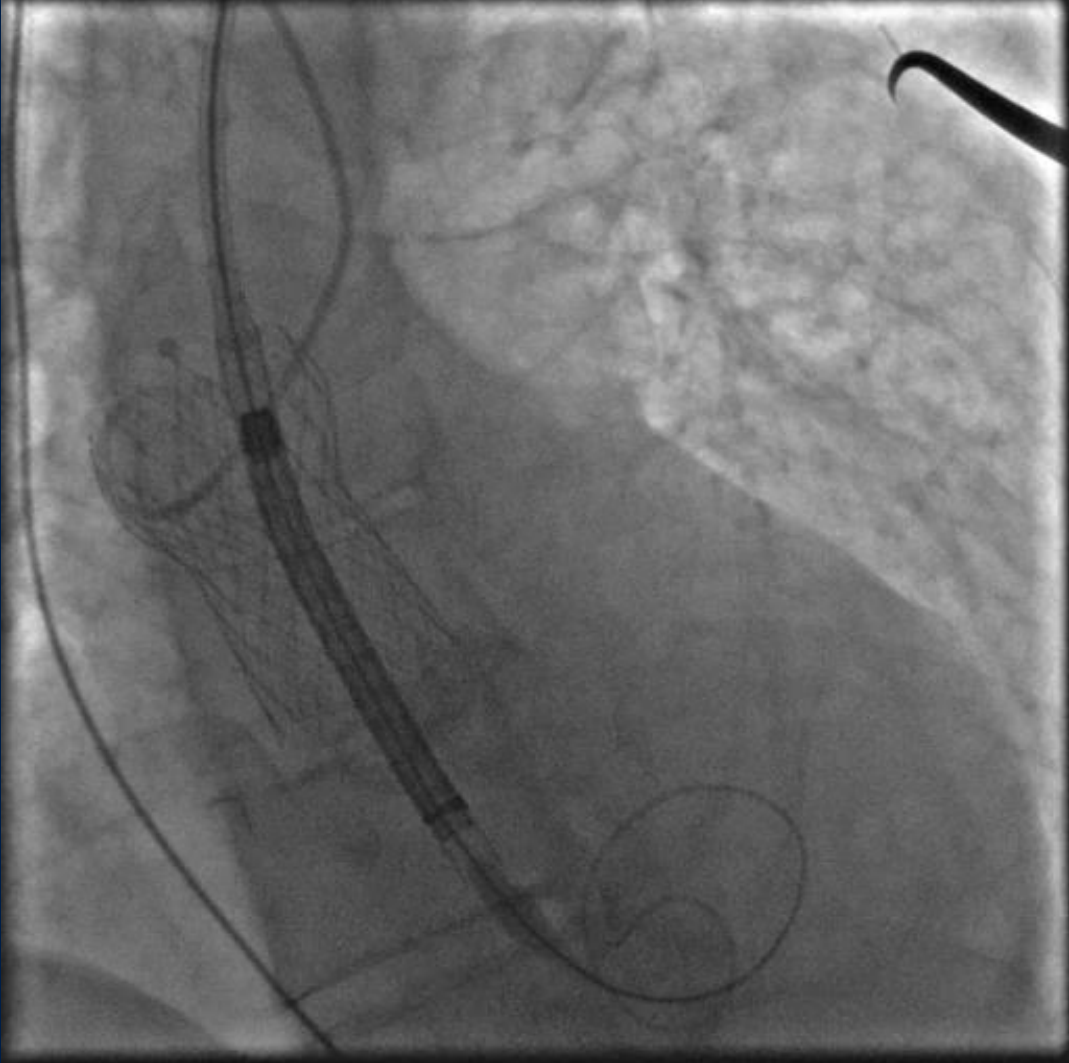
The perimeter was 73 mm, so we choose to use a 29 valve.

Steps to manage the complication

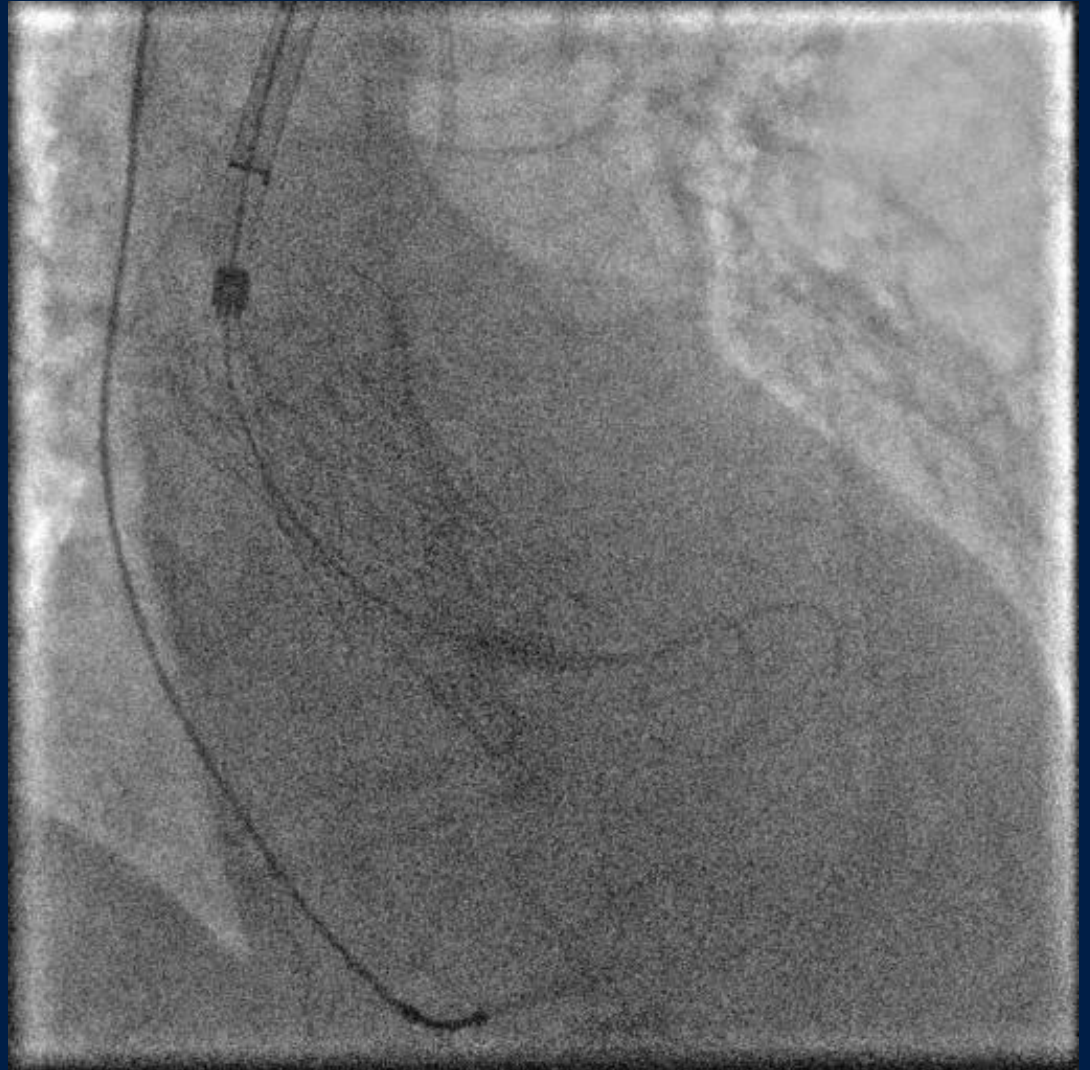
Placement of the second valve (29) and check the right position.



Deployment.



Recovery of the
second delivery
system.



Final Aortography



Final Results of Intervention

The patient was full stable with no PVL by angio and echo. Hemodynamics showed no gradient, a good diastolic pressure and AR index.

LESSONS LEARNED BEST PRACTICES