

TAVI in a Patient with Coronary Stent in Left Main Ostium

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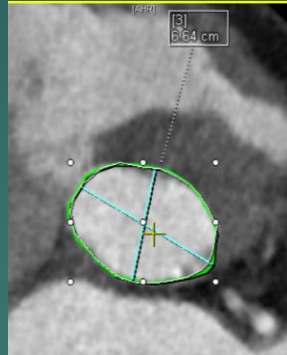
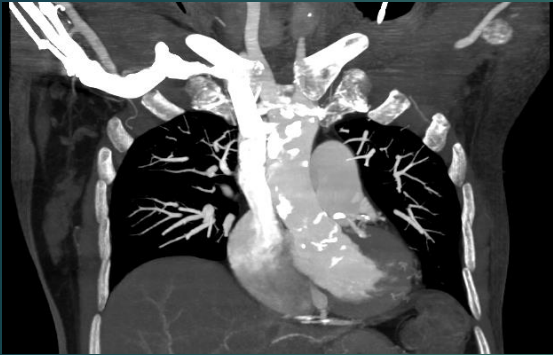
History

- ▶ 65 year old lady
- ▶ Ca breast S/P mastectomy and radiation >20 years ago
- ▶ DM on insulin
- ▶ Hypertension
- ▶ Hyperlipidemia
- ▶ NYHA II

Transthoracic echocardiogram

- ▶ Dilated left atrium. Left ventricular hypertrophy; concentric.
- ▶ LVEF 70%
- ▶ Aortic valve stenosis severe: AVA 0.6cm², Mean gradient 40mmHg
- ▶ Aortic regurgitation; moderate . Tricuspid valve prolapse. Tricuspid valve regurgitation; moderate. Pulmonary hypertension; moderate

CT



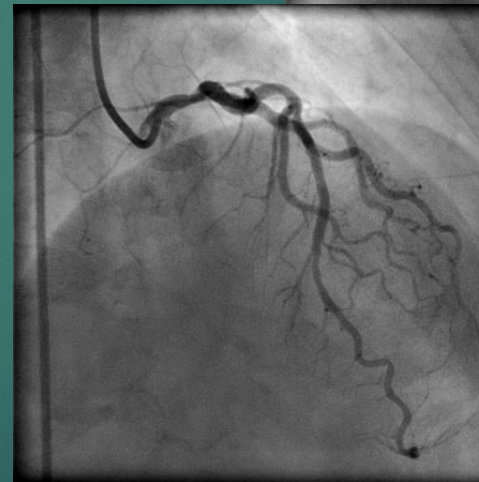
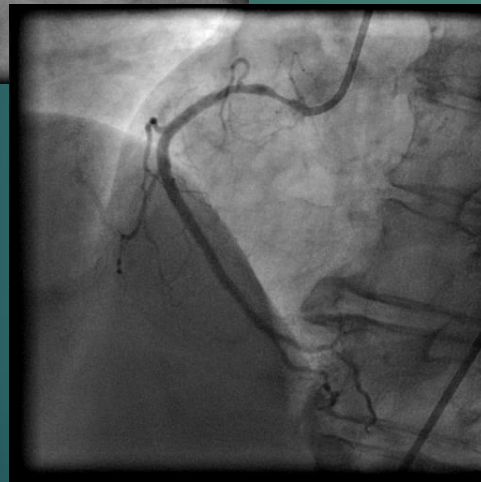
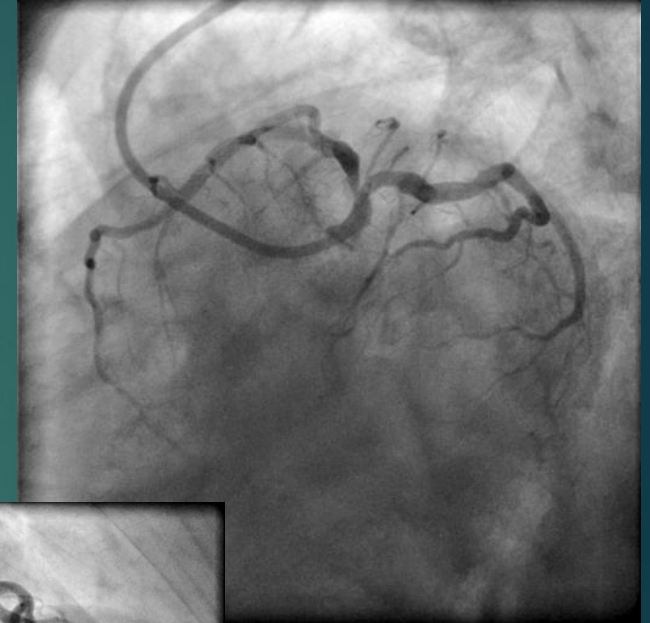
6,1x6,3mm

Annulus: 17 x 22 mm; Perimeter: 66 mm; mean diameter: 19.5 mm; area: 343 mm²

annulus to RCA ostium: 15.8 mm

annulus to LM ostium: 12.6 mm

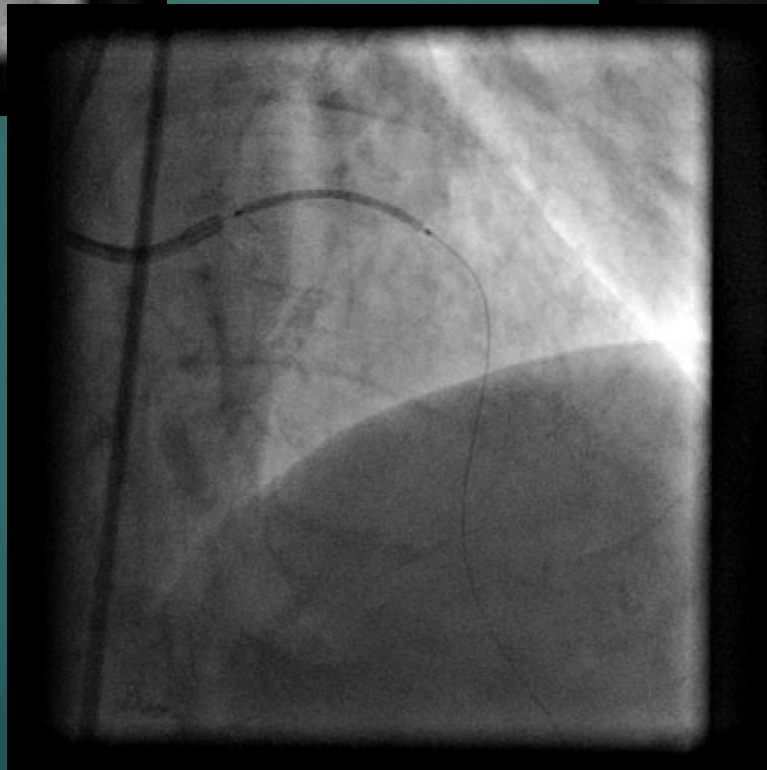
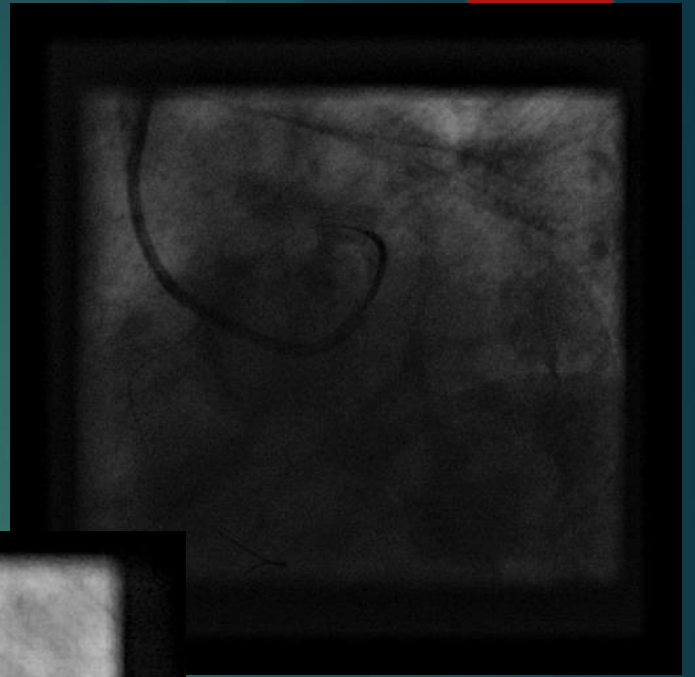
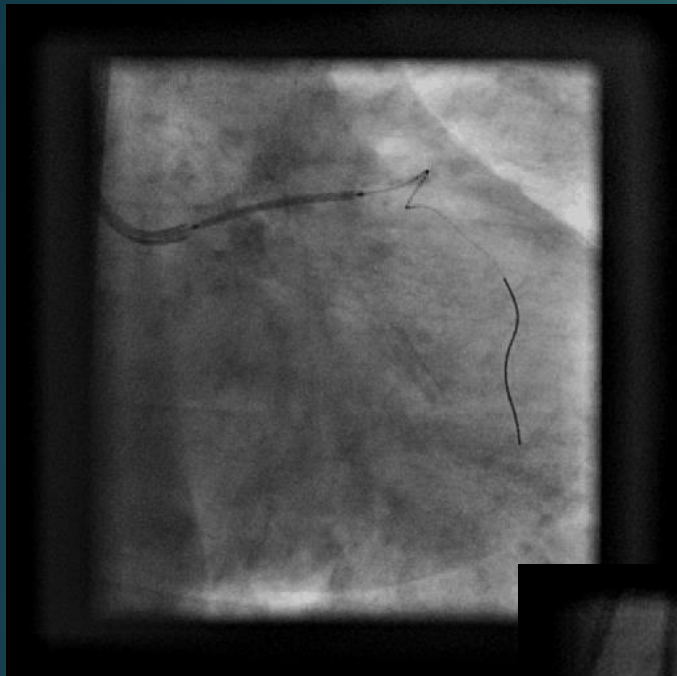
Coronary angiograms

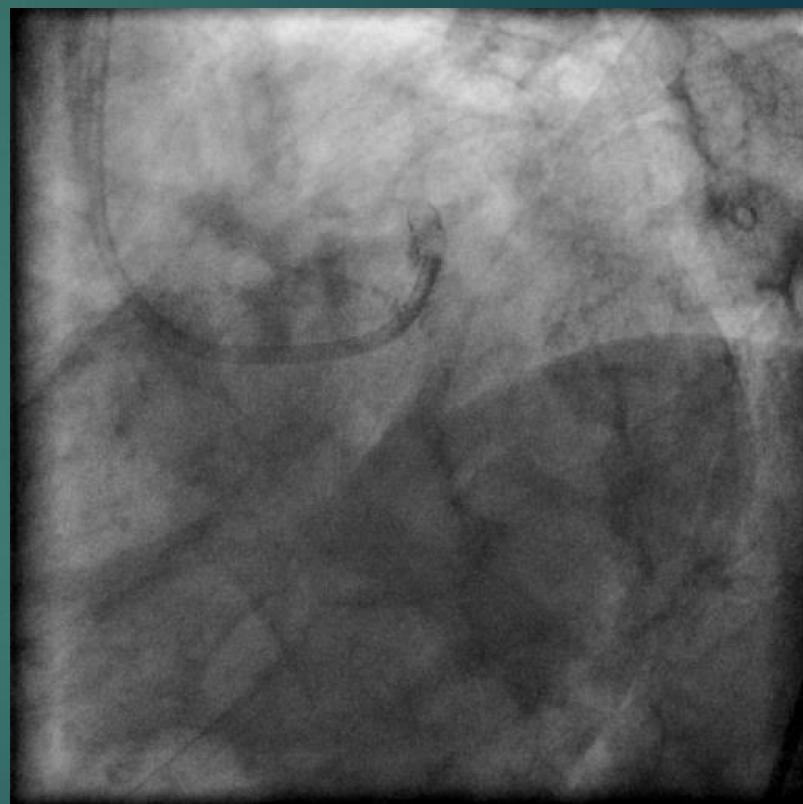
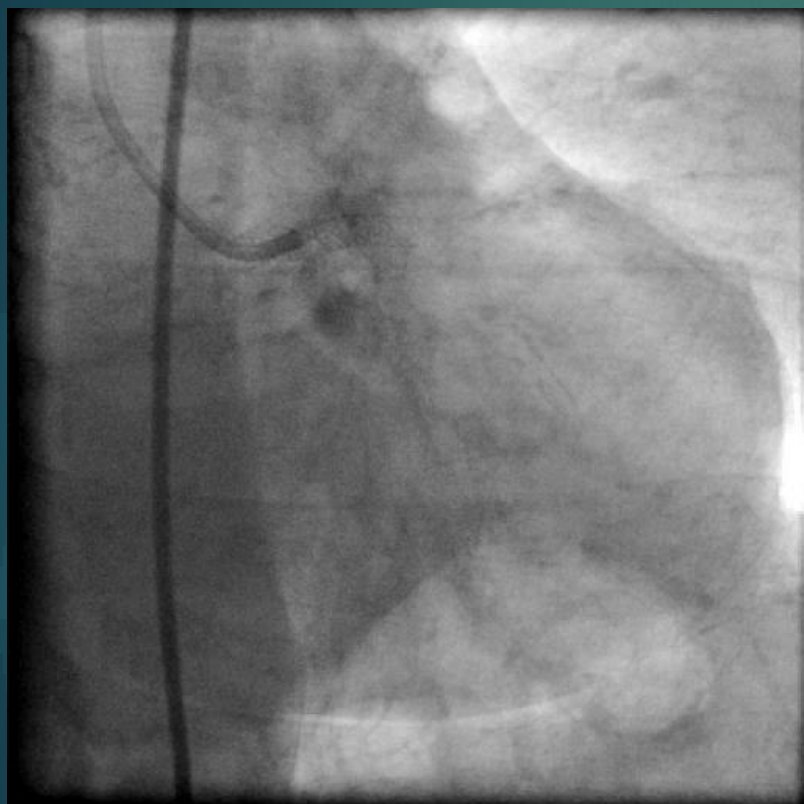


- ▶ FFR measurements of the intermediate stenoses of the ostial LAD and proximal RCA were performed. The FFR of the LAD measured 0.75 (hemodynamically significant), and the FFR of the RCA measured 0.84 (non-significant).

PCI

- ▶ 4x25 mm SYNERGY (DES) stent
- ▶ postdilated with a 4x15 mm Sapphire II NC balloon up to 24 atms
- ▶ Ostium of the LCx was dilated with a 3x15 mm Quantum Apex balloon at 14 atms
- ▶ Final kissing balloon inflation then followed with 4x15 and 3x15 mm NC Quantum Apex balloons, both to 14 atmospheres

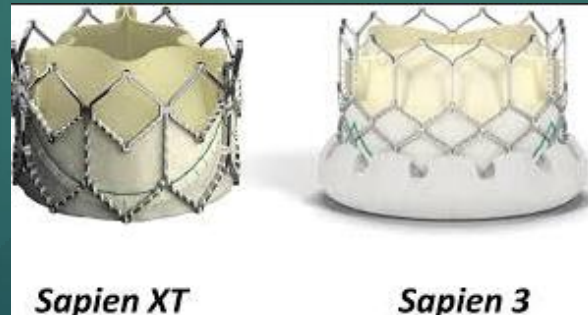
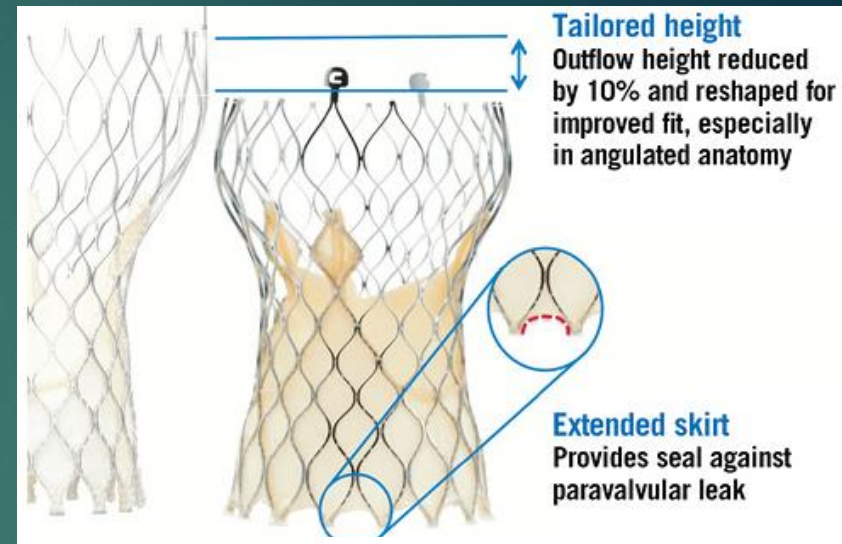
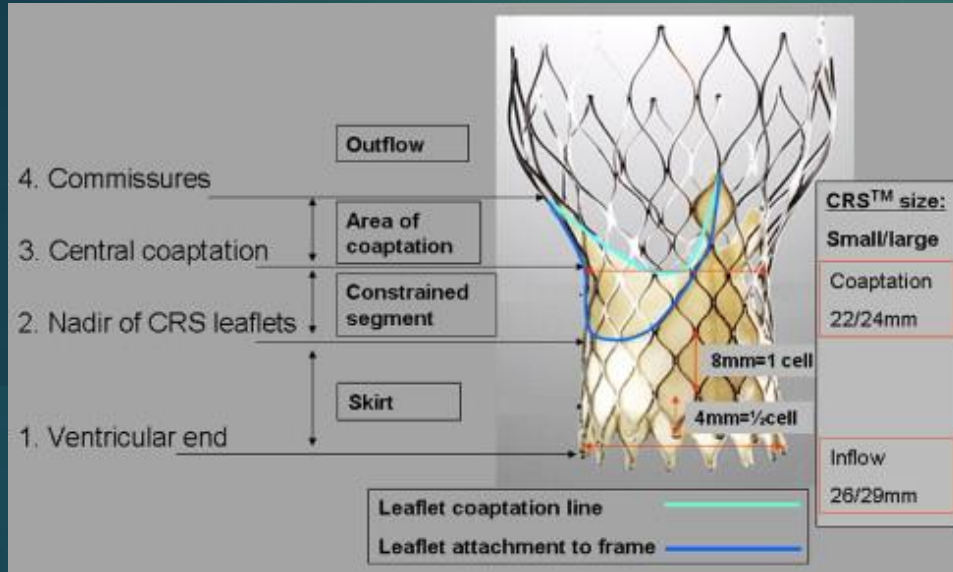


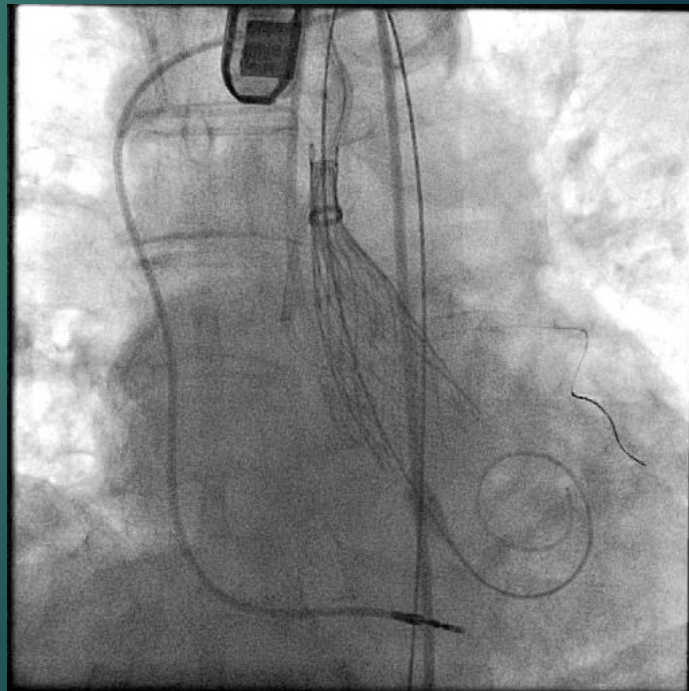
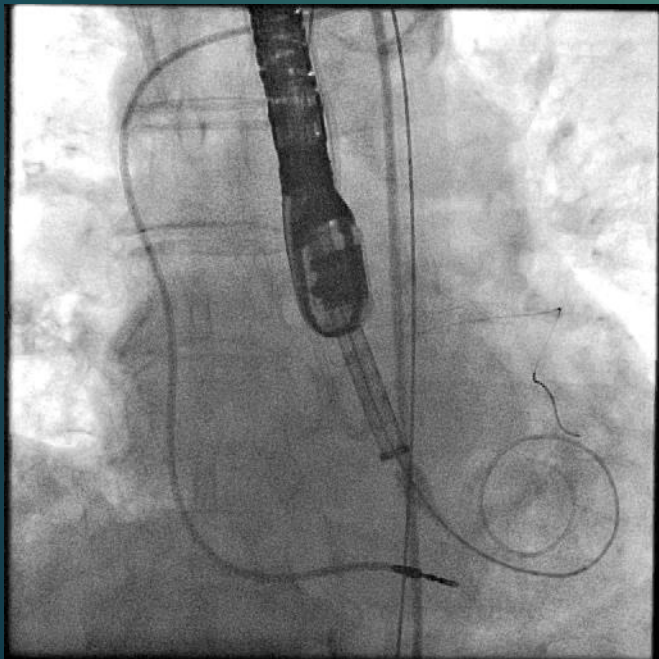
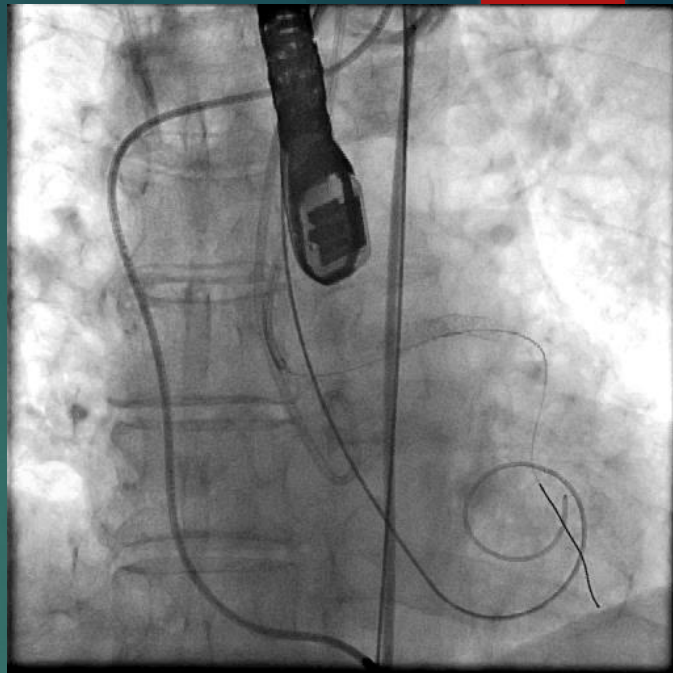
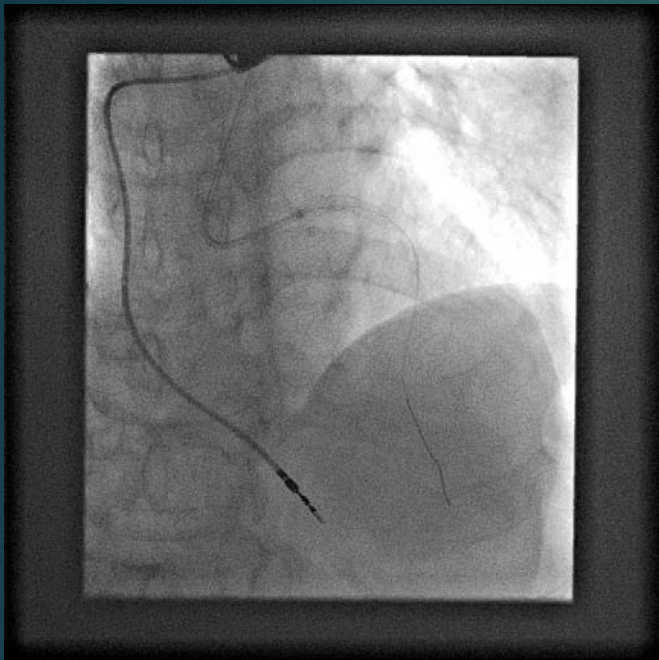


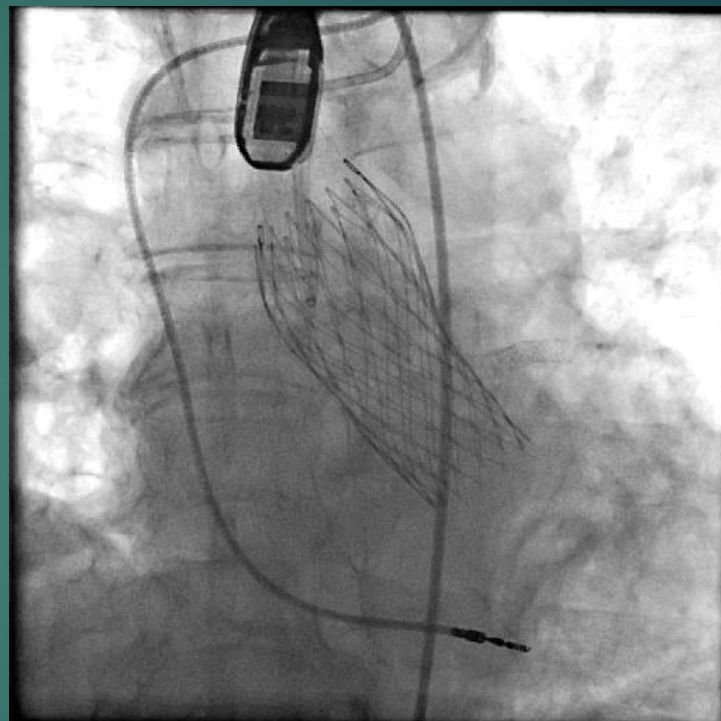
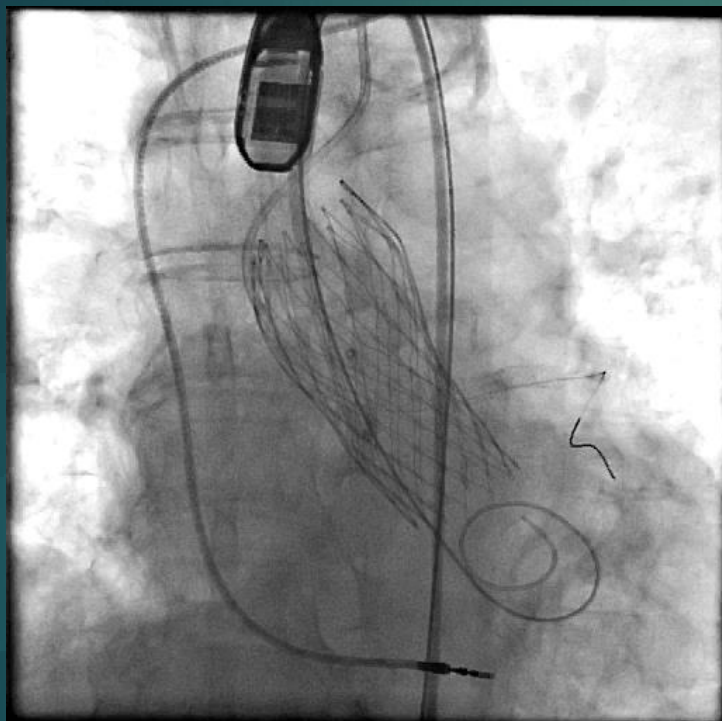
IVUS

- ▶ After PCI MLA ostial LAD 10.8, ostial LCx 4.3, proximal LM 12.5mm²
- ▶ Protrusion of LM stent
- ▶ How to perform the TAVI?
- ▶ Risk of coronary stent being crushed by device?
- ▶ Risk of post dilatation after TAVI?

TAVI







Outcome

- ▶ Dilated left heart chambers. Left ventricular hypertrophy; concentric. **Normal left ventricular ejection fraction**. Prolonged left ventricular relaxation. Aortic valve prosthesis; normal function. Aortic valve prosthesis; **trivial paravalvular regurgitation**. Mitral valve regurgitation; mild. Tricuspid valve prolapse. Tricuspid valve regurgitation; mild to moderate. Pulmonary hypertension;

Conclusion

- ▶ Cautious when stenting left main ostium in planned TAVI patients
- ▶ Consider height of LM ostium but also width of the aorta at the level of the ostium
- ▶ Choose the appropriate valve



Thank you