



High-risk left main PCI in a patient with severe aortic stenosis

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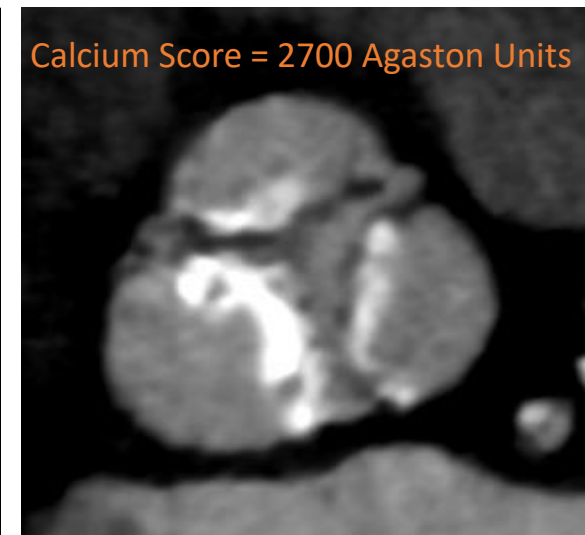
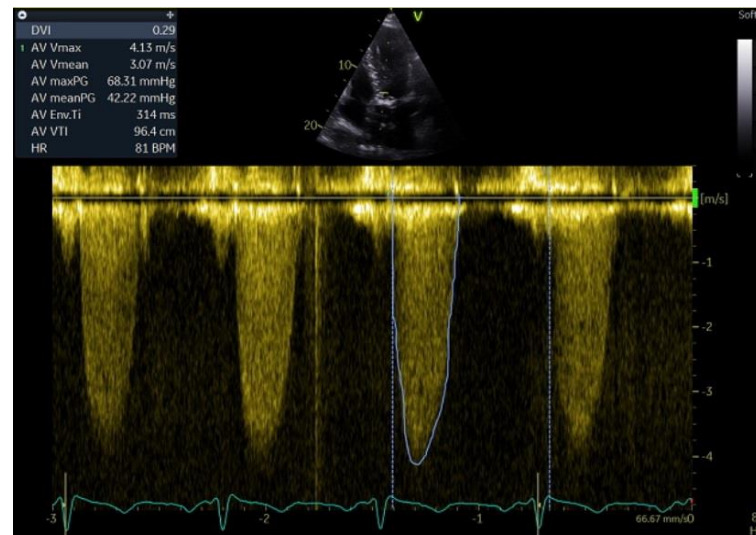
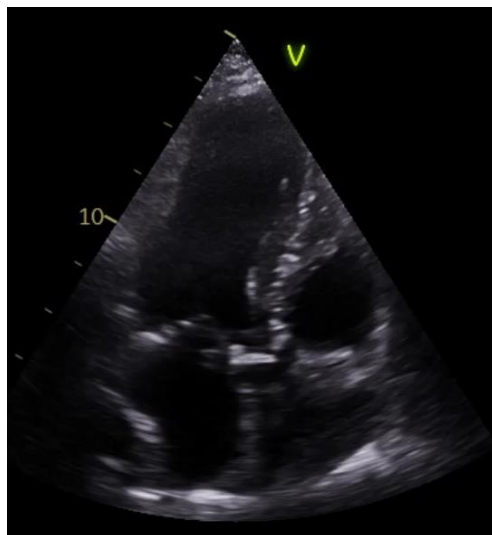
UK

78 year old gentleman

- Admitted with heart failure in the setting of symptomatic severe aortic stenosis (MG 42mmHg, Vmax 4.1 m/s, DI 0.25)
- Normal LV function

Comorbidities:

- Asbestos-related lung disease - frequent admissions with pneumonia
- Recurrent infected leg ulcers
- Hypertension

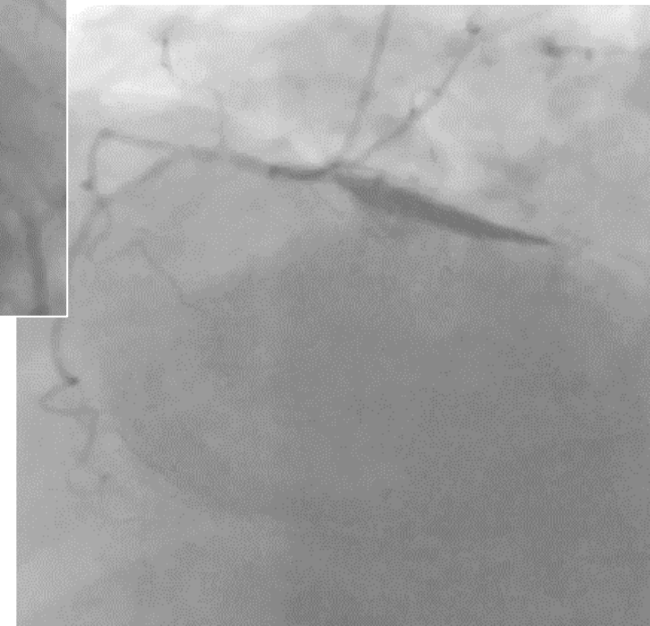
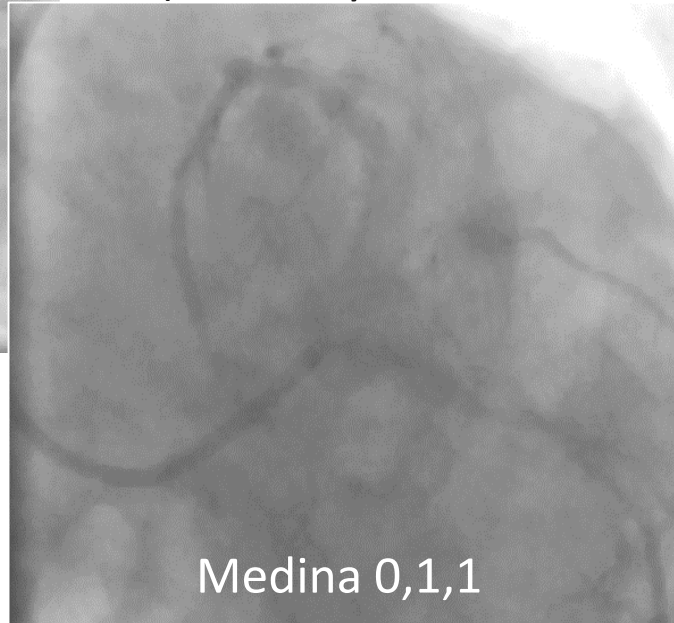


Coronary angiography



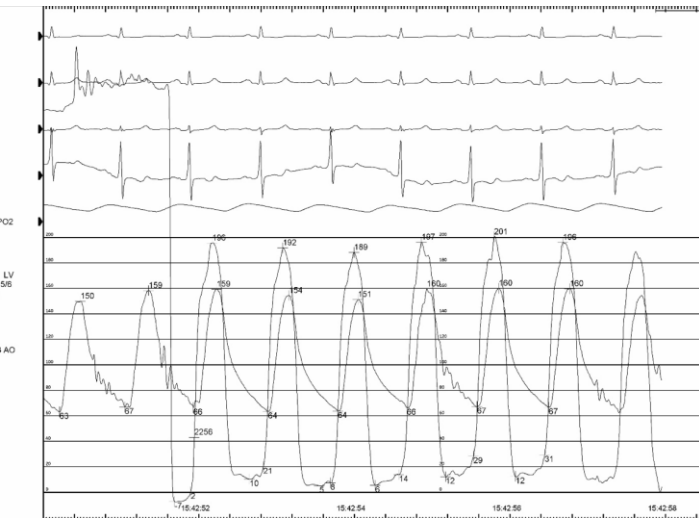
Heart Team discussion:

- Poor surgical candidate given respiratory comorbidities and recurrent infected leg ulcers (currently on antibiotics)



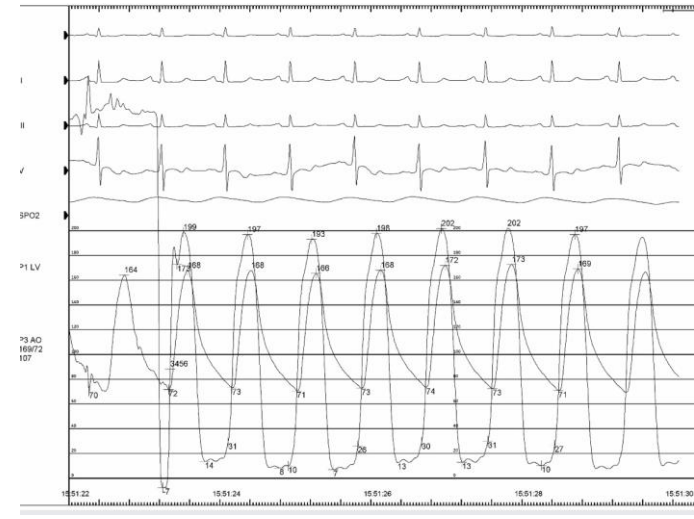
- Decision for high-risk PCI to LMCA and BAV
- Deferred decision with regards to TAVI

Balloon aortic valvuloplasty

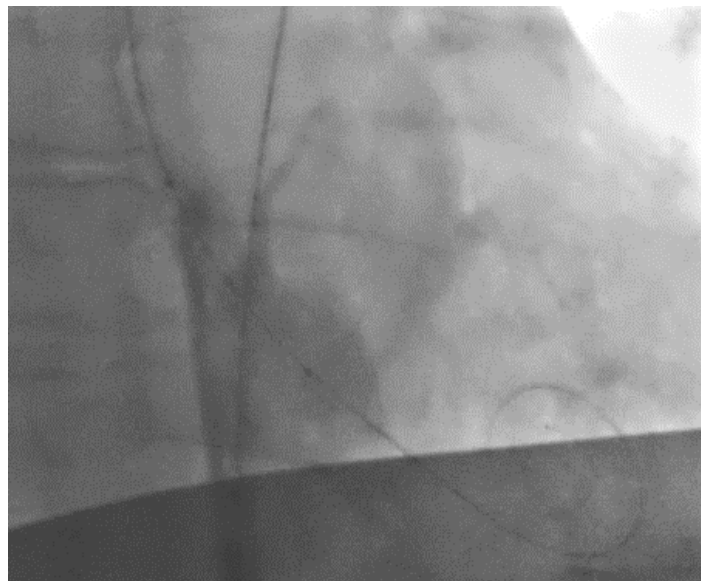


Pre-BAV
Peak-to-peak gradient =
38mmHg

BAV with 22mm and
25mm true balloons

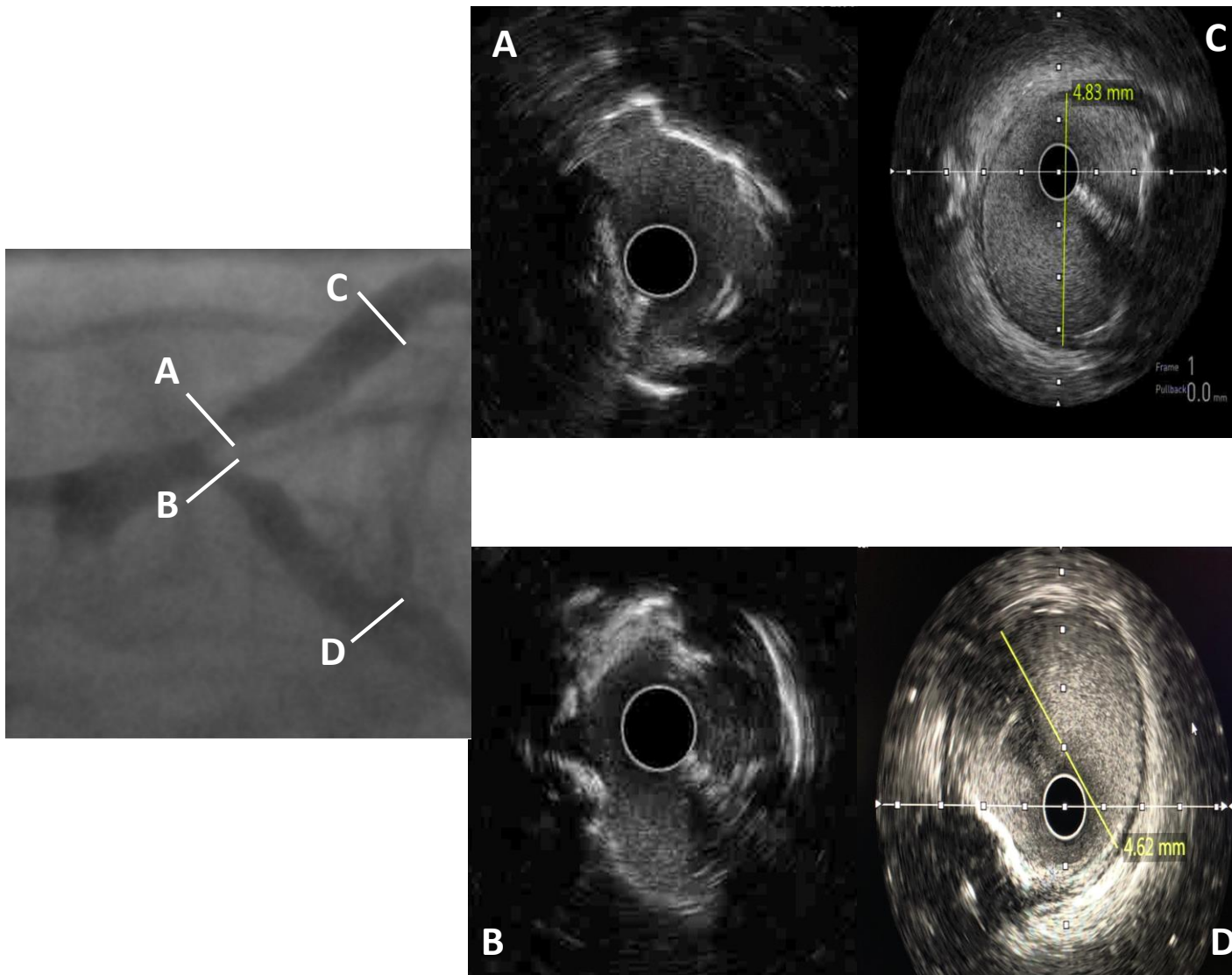


Post-BAV
Peak-to-peak gradient =
28mmHg

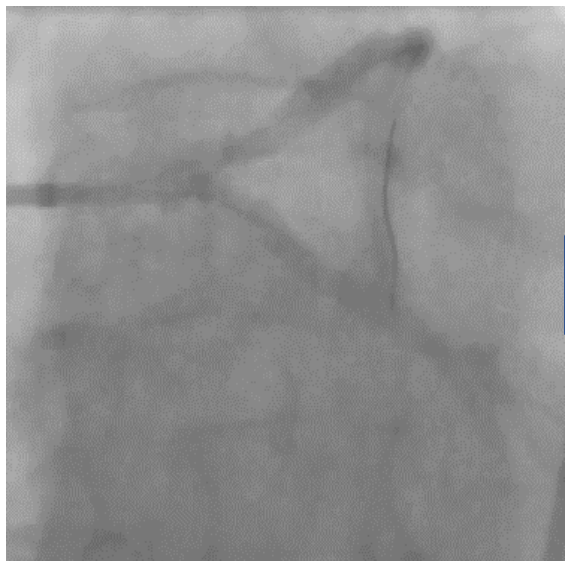


DK-Crush strategy for LMCA disease

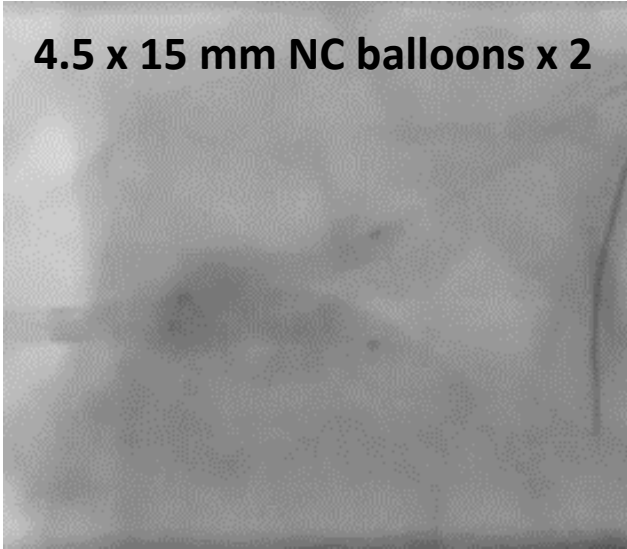
7F EBU 3.5 guide, Sion Blue wires to LAD and LCx



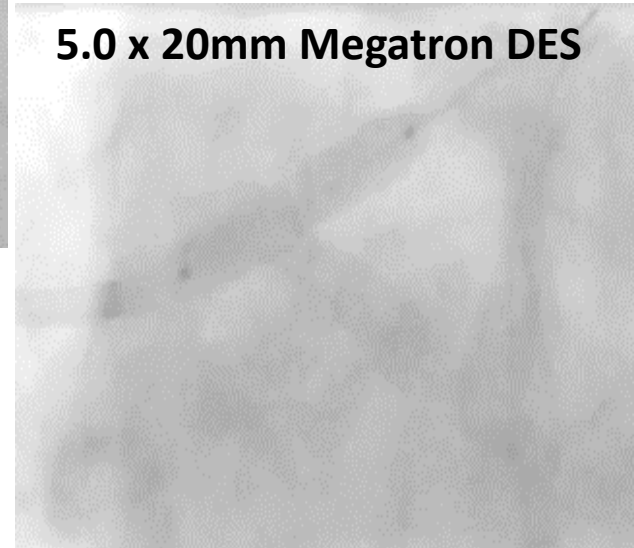
Stent deployment in LCx



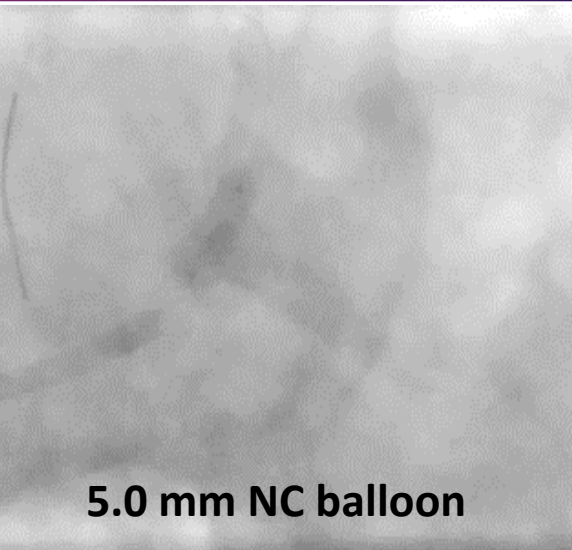
4.5 x 15 mm NC balloons x 2



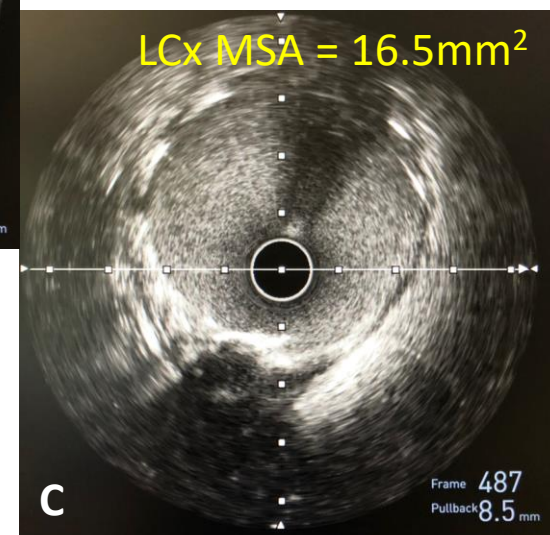
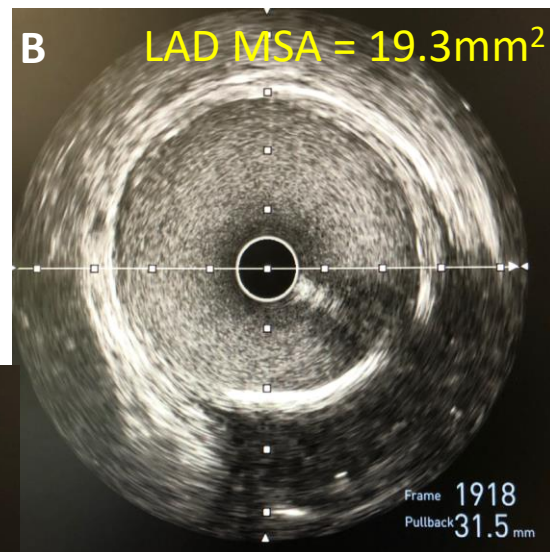
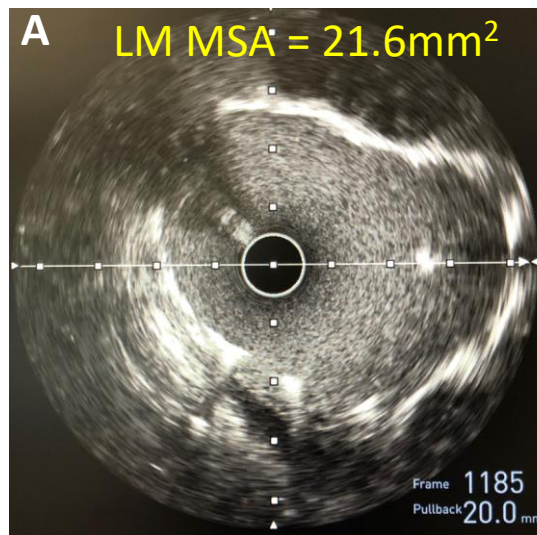
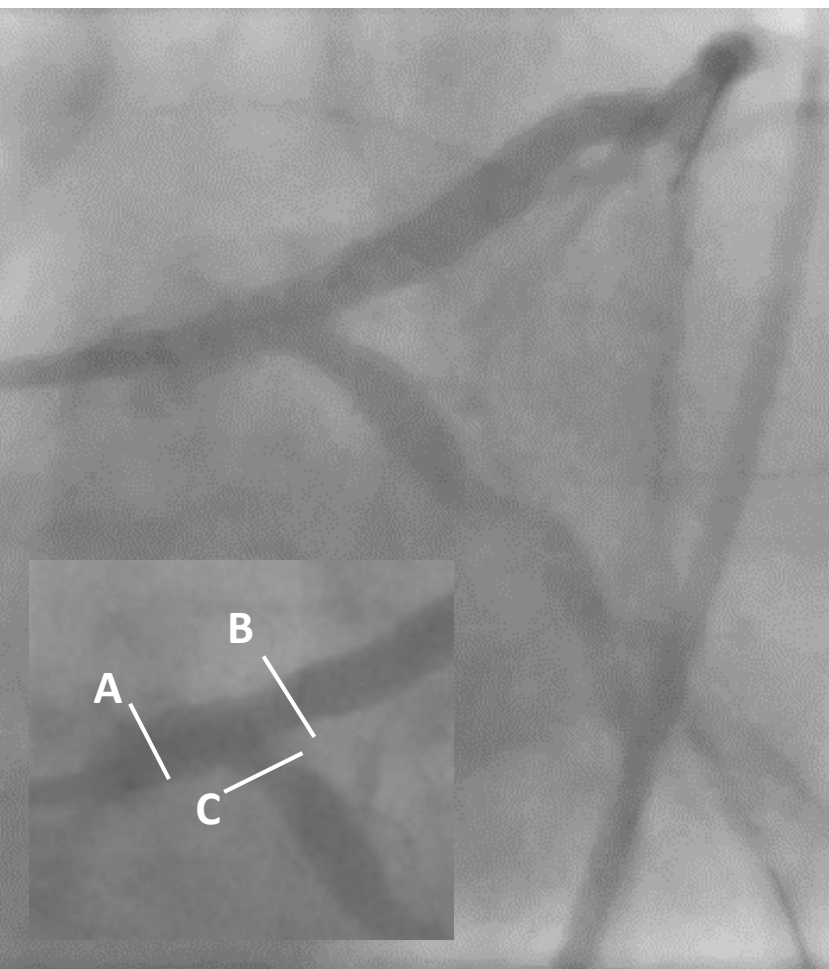
5.0 x 20mm Megatron DES



POT and 2nd Kissing Balloon Inflations



Final Angiographic and IVUS Images



- Use of balloon aortic valvuloplasty to facilitate high-risk PCI in patients with severe AS
- Use of image-guided DK-Crush technique in PCI of the left main coronary artery bifurcation
- Appropriateness and timing of TAVI in chronic conditions that predispose to endocarditis (e.g. leg ulcers)