

LEFT LEAFLET BASILICA IN AN 82-YEAR-OLD LADY WITH MULTIPLE COMORBIDITIES AND ON LONG-TERM STEROIDS WITH 2-YEARS FOLLOW UP

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History and Physical

We present an 82-year-old lady, with HT, CAD s/p CABG occluded single vein graft to mid LAD, SAVR(23 Edwards valve) and MVR(27 Edwards valve) in 2012 with severe hypertensive TR, COPD on home 02 and RA on long term steroids. She presented with progressive SOB and leg swelling and was noted to have severe bioprosthetic aortic valve stenosis. On examination, she was very frail, weak with 3/6 late peaking ESM, left S3 and bi pedal grade 2 swelling.

Using standard technique, left coronary leaflet was intentionally split from the base followed by TAVR using 23 Edwards Sapien valve. She was discharged on the next day. EF improved from baseline 35% to 60% on the next day, TR reduced to mild-moderate, pedal edema resolved in a month and she was off home 02. She has done remarkably well over time and continues to do so with over 2 years of follow up while been on steroids.

Imaging

Transthoracic echocardiogram showed severe bioprosthetic aortic valve stenosis with mean gradient of 53 mm Hg and AVA 0.45 cm2.

On CT TAVR, there was poor leaflet mobility of all leaflets, the left coronary height measured 3 mm and right 9 mm and left VTC measured 2.0 mm with no significant calcification.

Indication for Intervention

Severe, symptomatic bioprosthetic aortic valve stenosis with low left main, effaced sinuses, very short valve to coronary distance with very high risk of left main coronary obstruction.

Intervention

Right CFA, left CFA x 2 (6 Fr each) and left CFV (7 Fr long) accessed using USG guidance. A 6 Fr EBU guide was advanced in the left sinus and a 5 Fr IM catheter telescoped through it. Aortic valve was crossed and a 6 Fr MPA guide was advanced in LVOT. A 20 mm goose neck snare was then advanced in the LV from the MPA guide and a 0.014 prowater wire was looped in the LV as safety wire. Left sided leaflet was punctured at the base by electrified Astato wire and received within the goose neck snare parked in LVOT. The left leaflet was then intentionally lacerated by electrifying the Astato wire at 70 W. The 23 S3 valve was then deployed in standard fashion with no coronary obstruction noted on root angiogram.

Learning Points of the Procedure

Long term steroids is unlikely to interfere with BASILICA procedure. Further multicentric pooling may be needed to draw an effective conclusion.