

CHALLENGING OF AN ELDERLY PATIENT WITH A SMALL ACCESS SITE

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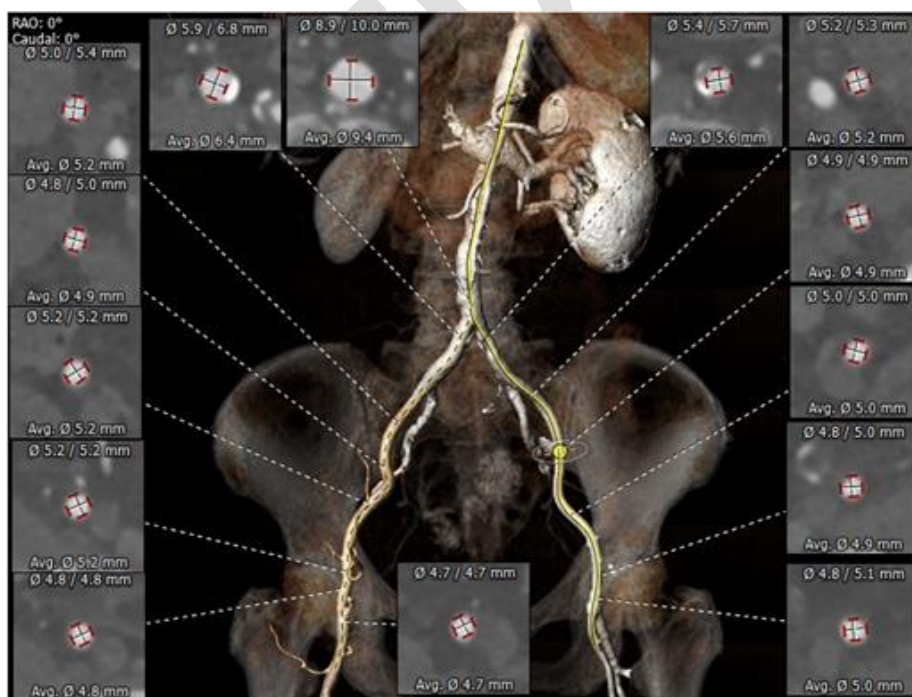
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History and physical:

An 86-year-old Thai small-built female with history of breast cancer underwent mastectomy and chest radiation 10 year with radiation scar at chest wall. She presented with heart failure hospitalization. Echo showed severe AS AVA 0.53 cm², mean gradient 51 mmHg, LVEF 74%, mild AR. Her weight is 45 kg. Heart team conclusion suggested TAVR (intermediate risk, moderately frail). CTA annulus 295 mm² compatible with Sapien S3 size 20 but the access site for transfemoral route was borderline. External iliac artery Left was 4.9 mm and Right was 4.9 mm. Right CFA was 4.8 mm but minimal calcification. Left CFA was 4.9 mm with calcification. Chest wall is fibrosis and the surgeon concerned about wound healing for TA and transaortic approach. Subclavian and transcaval experience are limited. Surgical aortic valve replacement was recommended for the patient, but they refused. We planned for transfemoral route with transapical back up.

Imaging:





Indication for intervention:

Severe symptomatic aortic stenosis

Intervention:

Transfemoral TAVR was chosen and back up by transapical. Ultrasound guided puncture of RFA was chosen due to less calcification. We try passing the 16F dilator and 18F dilator up to the aorta if there was a resistant or cannot be inserted, we planned to switch to alternative approach. The 18F dilator went up smoothly to the aorta. We inserted 14F E-sheath very smoothly. We inserted with 20F Sapien3 valve with moderate resistant. Finally, the valve can be passed to the aorta. The procedure went smoothly. We deployed and post dilated with same balloon. Mild residual AR. Angiogram at RFA was checked. No dissection at CIA, EIA. After sheath removed. There was dissection at CFA puncture site. Our surgeon help repaired it. The procedure went well, and the patient went back home in 3 days after procedure.

Learning points of the procedure:

1. Appropriate access site is essential to increase chance of success procedure, but without the perfect route the procedure can still be done with risk benefit decision to the family
2. The anatomy and the risk score may be the separate issue to advise and prepared for the procedure. The patient with only intermediate risk score but challenging anatomy can have different result.



3. Calcification of the femoral and iliac artery is the important issue. Artery without calcification can be expanded more than calcified vessel

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