

Conclusions. Gadolinium can be safely used to guide TAVI procedure in patients with contraindications to the use of ICM. It provides acceptable image quality especially when used with a power injector, which improve the images quality and reduces the amount of gadolinium administered.

STRUCTURAL - AORTIC VALVE INTERVENTION - CORONARY ARTERY PROTECTION / ACCESS

TCTAP C-207

Triple Trouble in a Complex TAVI

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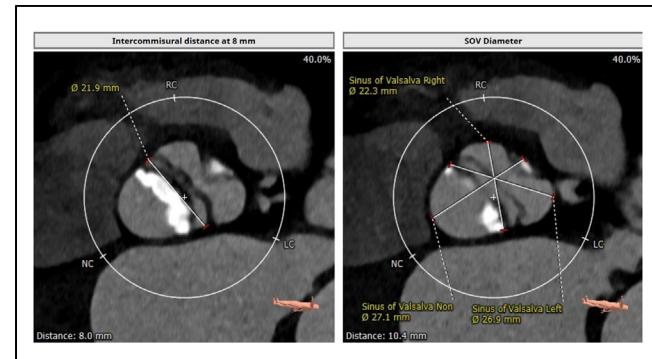
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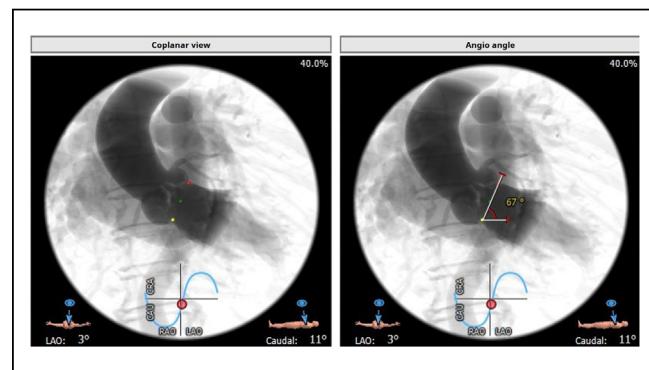


CLINICAL INFORMATION

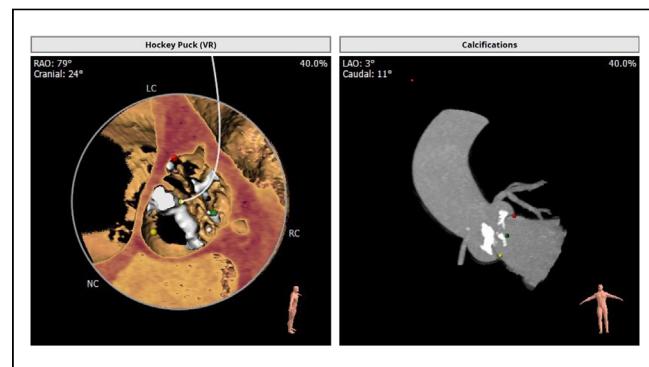
Relevant Clinical History and Physical Exam. A 75-year-old frail, diabetic, hypertensive lady presented to outpatient department with history of recurrent syncope, shortness of breath on exertion. Her vital parameters were within normal limits, while on cardiovascular examination, she had Grade 4/6 ejection systolic murmur in aortic area radiating to the apex and bilateral carotids.

Relevant Test Results Prior to Catheterization. Her echocardiography revealed severe aortic stenosis with mean aortic gradient of 57 mmHg along with mild AR. Her LV ejection was normal, other valves were within normal limits. A CT angiogram with 3mensio analysis showed Type 1a Bicuspid aortic valve with calcified raphe and low coronary heights (9 mm for RCA, 8 mm for LAD). Her peripheral access was adequate with minimum external iliac artery diameter of 6.6 mm.

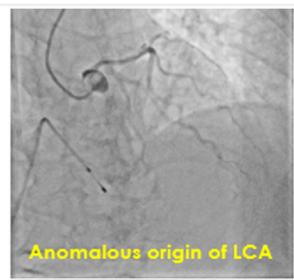




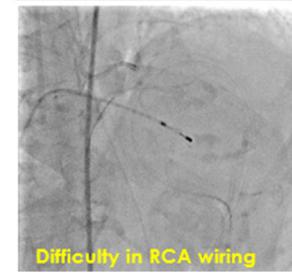
Relevant Catheterization Findings.



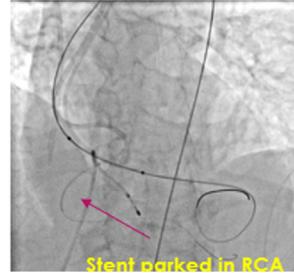
Anomalous origin of RCA



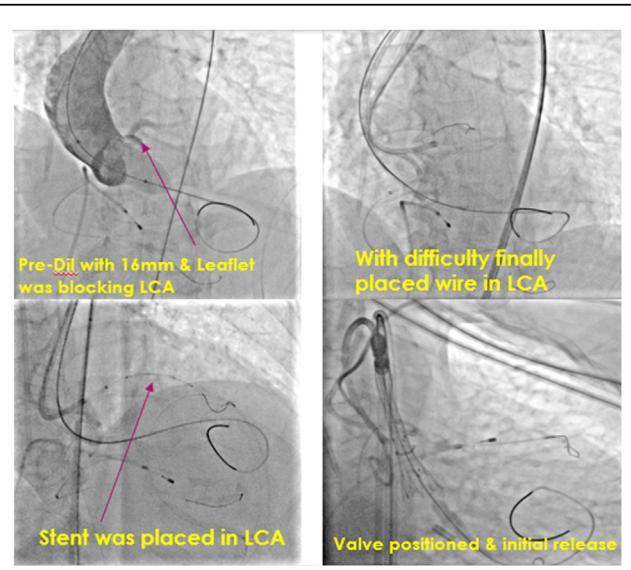
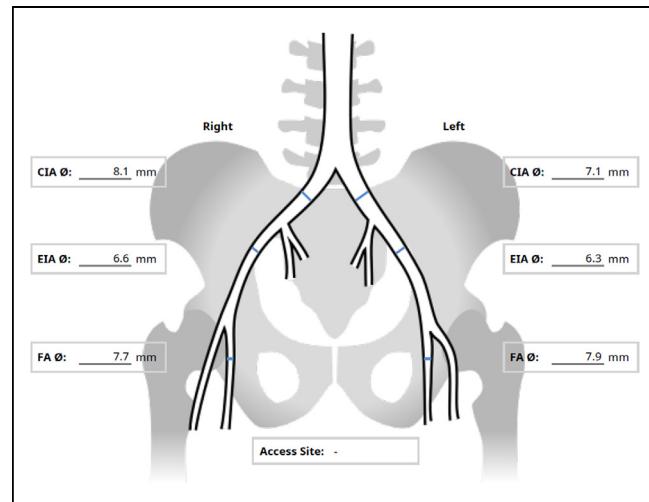
Anomalous origin of LCA

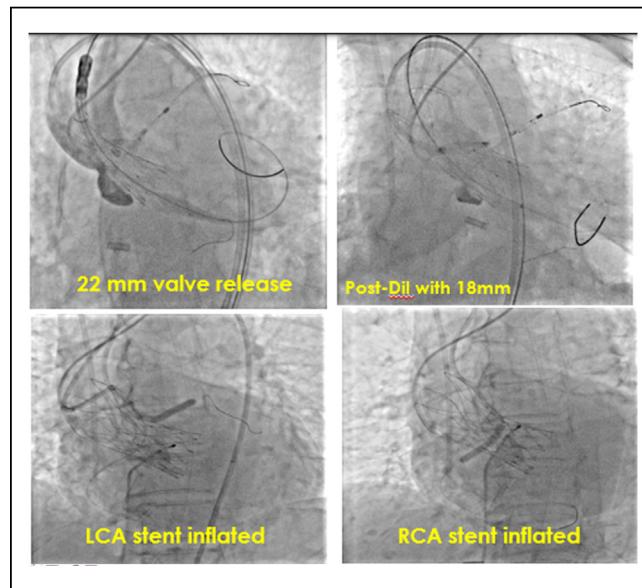


Difficulty in RCA wiring



Stent parked in RCA





INTERVENTIONAL MANAGEMENT

Procedural Step. After gaining arterial access through right radial, right and left femoral arteries, selective cannulation of anomalous RCA was done via left femoral arterial route with an amplatz-1 catheter and wired. The left coronary artery could not be cannulated initially via right radial route. the aortic valve was crossed with a straight tipped wire inside an amplatz guide which was exchanged over a pigail catheter with double curved lunderquist DC wire. Predilatation was done with an 18mm balloon. During the balloon inflation, it was noted that left coronary artery was at risk of occlusion. After numerous attempts, LCA was selectively engaged and wired. Thereafter, 26mm Hydra Valve (Self Expanding) under temporary pacing was deployed and the subsequent aortogram showed absence of paravalvular leakage and threatened occlusion of RCA and LCA ostia due to upright standing native aortic valve leaflets. Chimney stenting was carried out to both left and right coronary ostia to ensure uninterrupted blood flow in the both coronary arteries. At the end of the procedure, patient developed persistent hypotension with swelling in left lower quadrant of abdomen, which was found to be a rectus sheath hematoma on ultrasound. The bleeder was found to be a branch of left inferior epigastric artery and sealed with glue. Patient required 4 units of blood, followed by an uneventful recovery.

Conclusions. Bicuspid AV (Type 1a) with calcified raphe is a difficult subset to tackle while doing TAVR. Bilateral low coronary ostia with abnormal origins of both coronary arteries presented a second challenge in this case. Spontaneous bleeding in a small branch of inferior epigastric artery that required sealing off with glue was the final sting in the tale.

TCTAP C-208

In Doubt of High-Risk Noncardiac Surgery Following Percutaneous Coronary Intervention (PCI) and Transcatheter Aortic Valve Replacement (TAVR): When Is the Best Time?



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CLINICAL INFORMATION

Relevant Clinical History and Physical Exam. A Thai 85-year-old woman with history of prior myocardial infarction, AF, type 2 DM, HTN and DLP, presented with a 5-month history of exertional dyspnea. Physical examination revealed fine crepitations in both lower lung fields, irregularly irregular with lower volume of carotid pulse and grade 3 systolic ejection murmur at right upper parasternal border with sign of left ventricular hypertrophy.

