

THIRD TIME'S THE CHARM: TRANSCATHETER ATRIAL SEPTAL DEFECT CLOSURE IN A PATIENT WITH TWO PRIOR OPEN SURGICAL REPAIRS

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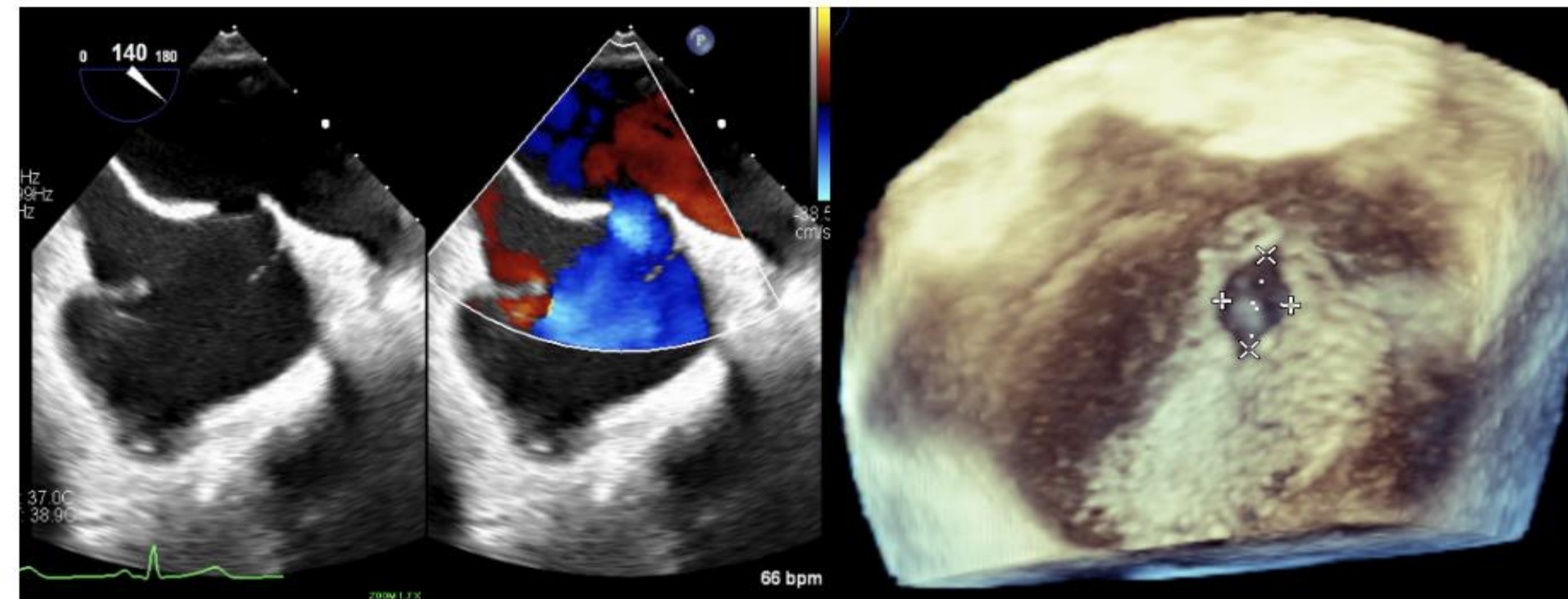


INTRODUCTION

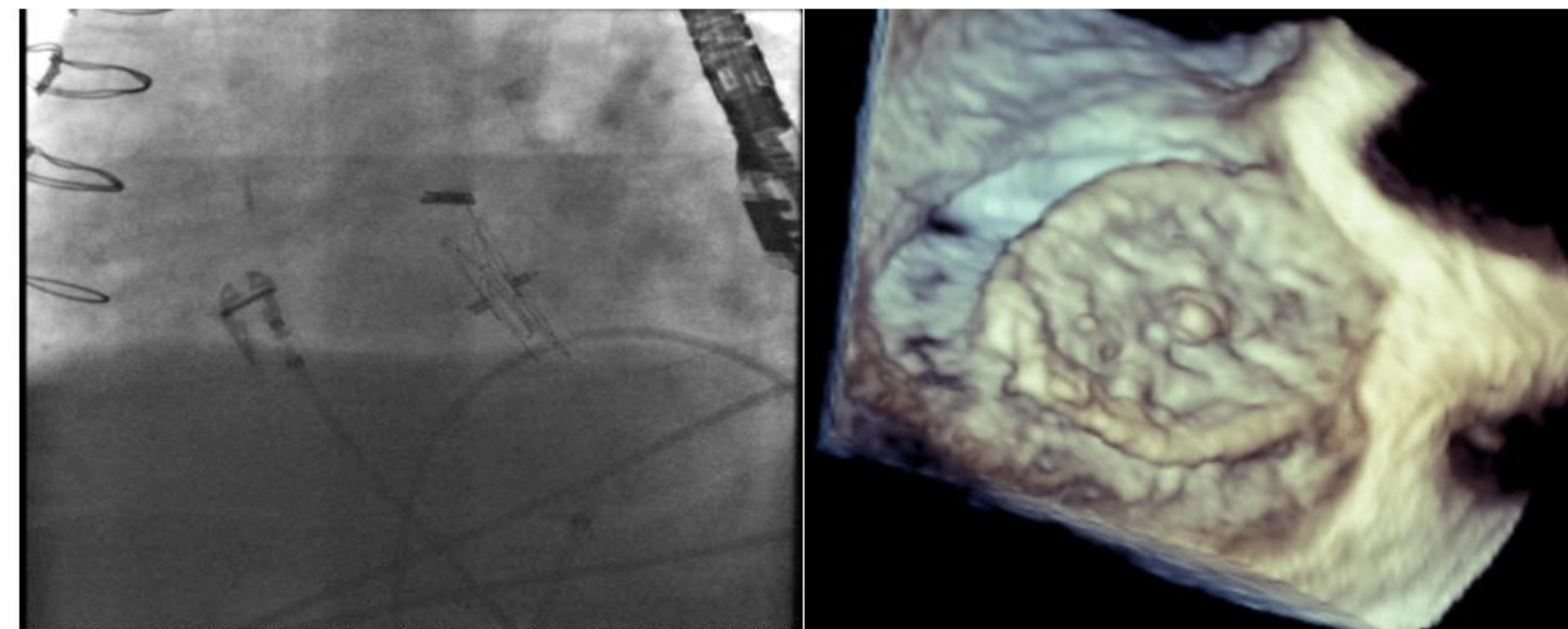
ASD is a common congenital heart disease accounting for approximately 10% of all congenital cardiac defects. Surgical closure of ASD has been practiced for several decades, however transcatheter closure of secundum ASD has replaced surgical closure in majority of cases. We report a case of successful transcatheter ASD closure in a patient with two prior surgical repairs.

CLINICAL CASE

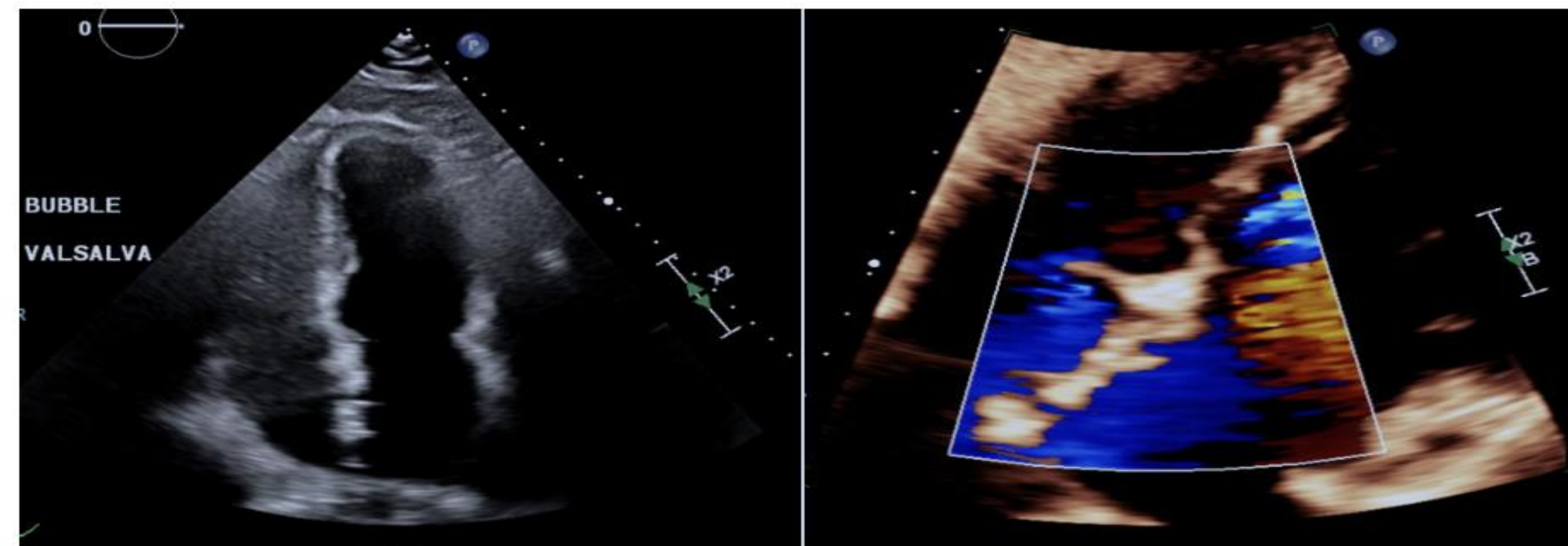
51-year-old male with history of stroke, atrial fibrillation, and ASD with two prior surgical repairs in 1999 followed by redo repair in 2016 reported several months symptoms of generalized fatigue, tiredness and decreased energy. He was hospitalized with hemodynamically significant supraventricular tachycardia requiring cardioversion. TTE showed mildly reduced left ventricular ejection fraction at 40-50% with new regional wall motion abnormalities in the LAD territory, mildly dilated RV with reduced systolic function. Coronary angiogram revealed non obstructive coronary artery disease with moderate 40% stenosis in the mid LAD with negative iFR of 0.92 and FFR of 0.85. TEE showed aneurysmal interatrial septum with large secundum ASD and left to right shunt. Right heart catheterization revealed hemodynamically significant shunting with a Qp/Qs of 1.6.



Pre ASD closure TEE with large ASD and left to right shunt. 3D images show the ASD size.



Post ASD closure with Gore Cardioform device. Fluoroscopy and TEE 3D images show the device in place.



Follow up TTE 1 year after ASD closure with no residual shunt on bubble study and color doppler.

MANAGEMENT

In view of patient's symptoms, prior stroke, right ventricular enlargement and significant shunt; options for ASD closure were discussed including repeat surgical repair vs transcatheter closure. Patient opted for transcatheter approach and underwent successful placement of 32mm Gore Cardioform septal occluder. Follow up TTE at one year showed stable device with no evidence of shunt.

CONCLUSION

With suitable anatomy, transcatheter secundum ASD closure has become the preferred technique over surgical repair. In patients with prior surgical ASD repair and residual defects or significant shunt, transcatheter closure approach may be considered as a suitable treatment option.

DISCLOSURES

Authors have no disclosures.

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