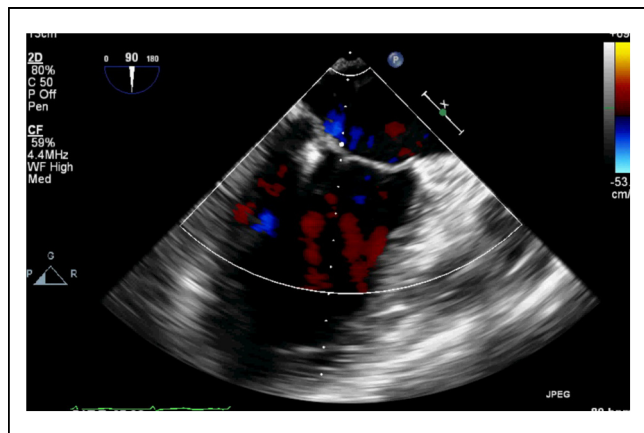


from 90 to 77, then 70 mmHg). So a 12 mm ASD occluder was deployed. The puncture wound was closed by figure 8 suture and the patient was sent to intensive care unit for further care.



Case Summary. A emergent MitraClip can be life saving procedure for acute chordae ruptured patient with biventricular dysfunction.

Right ventricle failure and elevated right atrium pressure may predict the requirement of ASD occluder.

TCTAP C-269

Transseptal Approach for Aortic Balloon Valvuloplasty in Newborn with Critical Aortic Stenosis



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[CLINICAL INFORMATION]

Patient initials or identifier number. Yu2016

Relevant clinical history and physical exam. A 14 days old newborn boy was admitted to the hospital with diagnosis critical aortic stenosis with weight 3,3 kg and body surface area 0.22 m². Unstable hemodynamics. Arterial blood pressure 80/60. Systolic murmur on aortic valve.

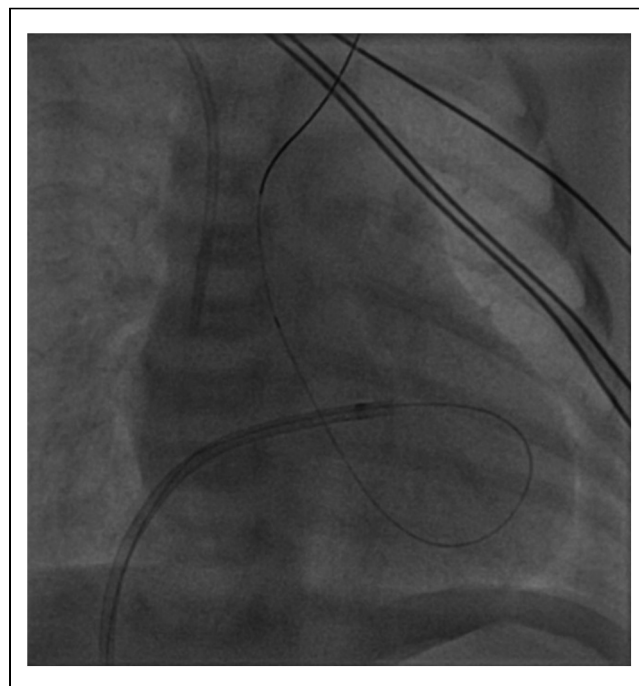
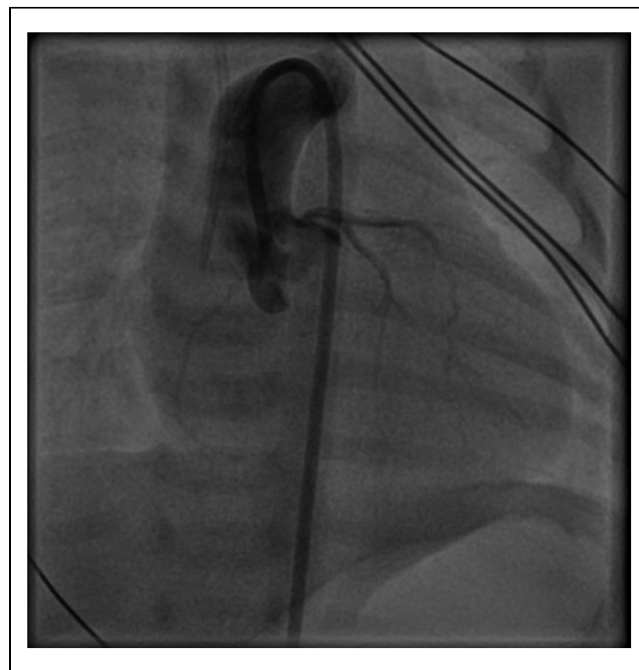
Relevant test results prior to catheterization. Echocardiography: Bicuspid aortic valve, thick cusps decreased opening motion, peak gradient 95 mmHg on aortic valve. Aortic valve ring 9 mm. EDV 1.8 cm. EF 73%. Aortic regurgitation (+), mitral regurgitation (+++), foramen oval 0.2 cm.

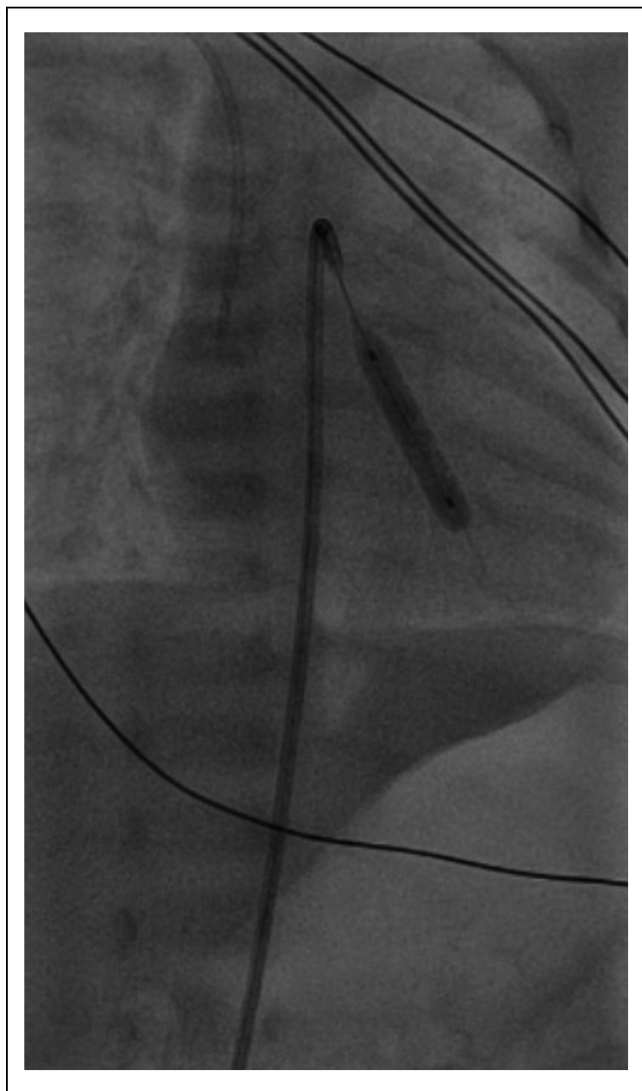
Relevant catheterization findings. Aortic valve ring 9 mm.

[INTERVENTIONAL MANAGEMENT]

Procedural step. A femoral arterial access (5F). Catheter AR1 has been positioned in ascending aorta. Angiogram. A lot of tries to put the tip of BMW, PILOT 150 wires on AR1-3, XB, JR3-4 catheters was unsuccessful because the thin aortic valve aperture (1-2 mm). Femoral venous access has been performed (5F). MPA catheter used to pass through foramen ovale to LA and has been replaced on the wire to the XB4. Pilot 150 wire has been delivered to the LV and then by the blood flow to aorta. At this step hemodynamics of the patient became worse. We tried to deliver the balloon to aortic valve from venous side, but it resulted in tension of the system while passing the LV U-turn and we stopped to avoid the wire loss. Wire has been captured in abdominal aorta by Gooseneck retriever and has been withdrawn from arterial access. Quantum Maverick 5 x 20 RX has been delivered to the aortic valve from arterial side taking into consideration the sharp end of the wire in LV, then 16 atm predilation. Wire and balloon has been withdrawn and patient has been stabilized in 7 minutes. Echocardiography: MR was decreased to 2,

no separation of pericardium, GP was 70 mm Hg. AR1 catheter has been used from arterial side and PILOT 150 easily has been passed through the valve to LV and final balloon valvuloplasty has been done with TYSHAK 10 x 30. The result is 9 mm Hg aortic valve gradient with decrease of MR, AR (++), no complications. Extubation in 10 hours and discharge from ACU in 24 hours.





Case Summary.

1. In aortic valve balloon valvuloplasty in a newborn with critical aortic valve stenosis, transseptal approach can be an effective alternative if it is impossible to pass the wire from an arterial side
2. It is difficult to deliver the balloon to the aortic valve from the venous side because of angulations on the way, that is why is useful to capture the wire from an arterial side and use balloon from the arterial side of the wire
3. This procedure can be done safely without any complication taking into consideration some cautions (chords of the mitral valve, stiff side of the wire).

TCTAP C-270

TAVI with a Trouble of Balloon Stuck to Corevalve Strut

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[CLINICAL INFORMATION]

Patient initials or identifier number. T.J.

Relevant clinical history and physical exam. A 82 year-old man came to our hospital with a complaint of shortness of breath.

Echocardiography revealed severe aortic stenosis.

His height is 156 cm

His weight is 46kg

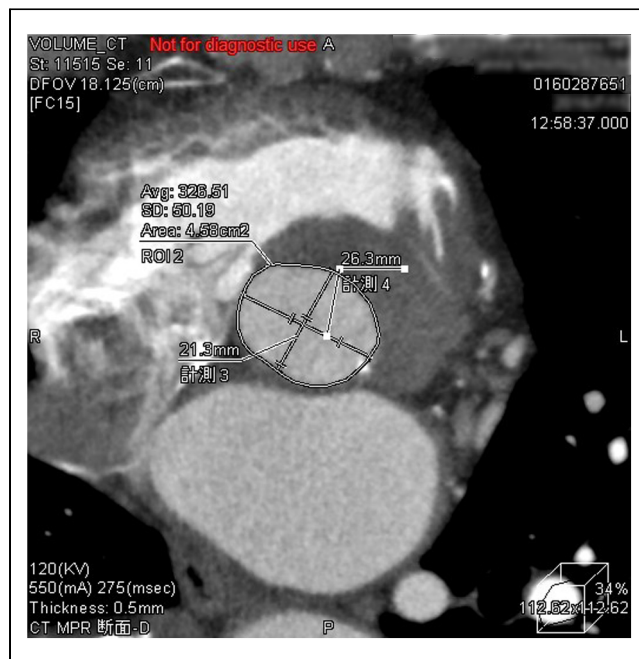
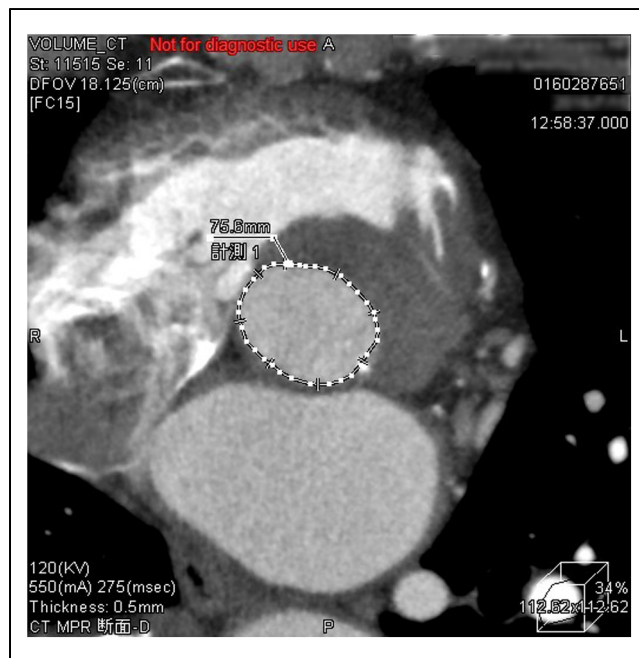
His past history is hypertension and post cerebral infarction

And his STS score is over 4 and we decided to perform TAVI.

Relevant test results prior to catheterization. The CT findings showed that his annulus area is 439 mm², perimeter is 75.3 mm.

His left and right coronary height is enough and his sinus of valsalva is wide enough.

And his iliac artery is enough thick for trans-femoral approach TAVI.



Relevant catheterization findings. We performed trans-femoral approach TAVI with Corevalve under general anesthesia.

We deployed Corevalve 29 mm without any trouble.

[INTERVENTIONAL MANAGEMENT]

Procedural step. After deploying Corevalve with the Safariwire, we checked paravalvular leak by transesophageal echocardiography.

An Echocardiologist judged aortic valve regurgitation was moderate. So we decided to add post-dilatation. But it was necessary for us to reinset the wire because we had already pull outside from left ventricle. We cross the wire through Corevalve again. And then, we insert 20 mm balloon catheter and by using that, dilated his aortic annulus.