

JCK Poster

JCK Poster 4 (III-JCKP4)

Cardiac Surgery

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Sun. Jul 9, 2017 1:00 PM - 2:00 PM Poster Presentation Area (Exhibition and Event Hall)

1:00 PM - 2:00 PM

[III-JCKP4-03]Unusual association of systemic semilunar valve stenosis in double outlet right ventricle with pulmonary semilunar valve atresia: *a case report*

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Introduction: Systemic semilunar valve stenosis in cyanotic congenital heart disease is rare. It is difficult to plan optimal surgical strategy because there are right and left ventricular outflow tract obstructions. In this case, cardiovascular magnetic resonance was very useful for planning optimal surgical strategy.

Case: Three days old, 2,210 grams male baby was referred for evaluation of cyanotic congenital heart disease. Examination of the neonate showed mild central cyanosis, cardiomegaly, single 2nd heart sound and an ejection click followed by grade 3 ejection systolic murmur at left 2nd intercostal space. Trans-thoracic echocardiography showed situs solitus, levocardia, normal systemic and pulmonary venous connections and atrio-ventricular concordance. There was a large malaligned subarterial VSD with bidirectional shunt. One great artery was overlying VSD (50% rule) and was arising from the ventricular mass, and was continuing as the arch of aorta. The semilunar valve of this great vessel was tricuspid and markedly dysplastic with peak instantaneous gradient of 40 mmHg. The pulmonary arteries, which were confluent, arose from the undersurface of the aortic arch which is the typical location of PDA. We demonstrated the pulmonary annulus and the atretic pulmonary valve. We then diagnosed double outlet right ventricle, pulmonary atresia and aortic valve stenosis. We firstly performed Brock operation and PDA ligation at sixteen days, and secondly Rastelli operation and VSD closure without aortic valvuloplasty at seven months, with improvement of aortic valve stenosis.