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## Images in Surgery

# Congenital corrected transposition of great arteries with situs solitus, dextrocardia and pulmonary stenosis

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A 12 years female presented with dyspnea on exertion. NYHA class-II for last 3 years with reduced effort tolerance and cyanosis since child hood was reported. On examination apex in 5$^{th}$ intercostal space was shifted to the right of mid clavicular line, first heart sound was single (S1), the pulmonary component of second heart sound was loud (P2). Grade 3/6 pan systolic murmur over right parasternal area was present. Chest X-ray, echocardiogram, CT cardiac angiography and cardiac catheterization affirmed situs solitus, dextrocardia, CCTGA with valvular and infundibular pulmonary stenosis, bilateral superior venacavae, large subaortic ventricular septal defect (VSD) with left sided aortic arch and normal biventricular function (Figure 1and 2).

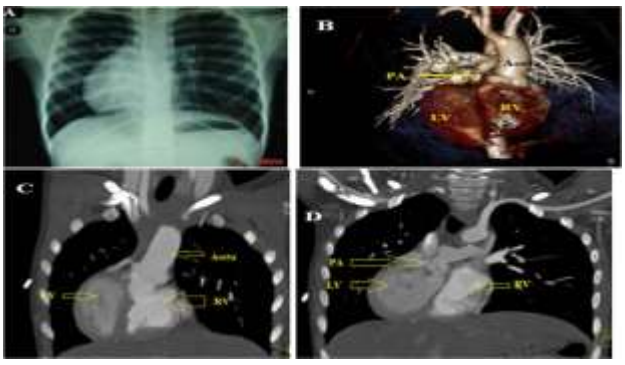

**Figure 1: (A) Chest X- ray AP view showing Dextrocardia, (B, C, D) Cardiac CT showing cc-TGA, with Dextrocardia**

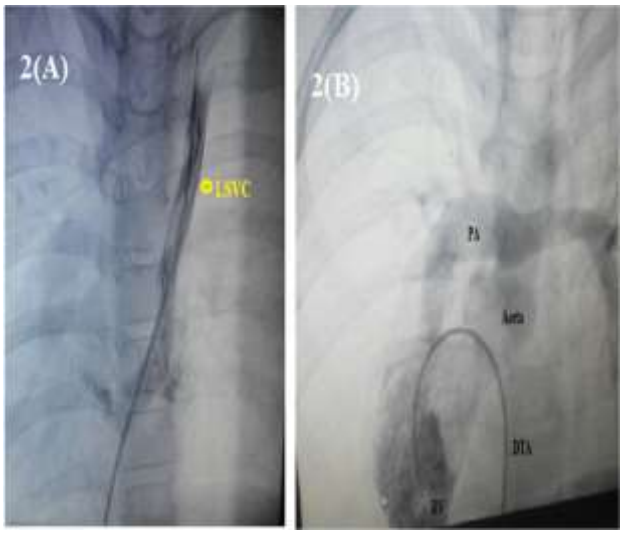


**Figure 2: Cardiac catheterization of CCTGA with dextrocardia, pulmonary stenosis, and VSD, 2; (A) Anterior-posterior projection. A catheter is passed through coronary sinus showing presence of left superior venacava (LSVC), 2; (B) Anterior-posterior projection. A catheter is positioned retrograde into the left-sided morphologic right ventricle. (RV). Contrast fills the trabeculated RV and the leftward aorta. LV opacification by shunting through VSD, Contrast from the LV flows through the LV outflow tract, across the pulmonary valve, and fills the PA, DTA: Descending thoracic aorta.**

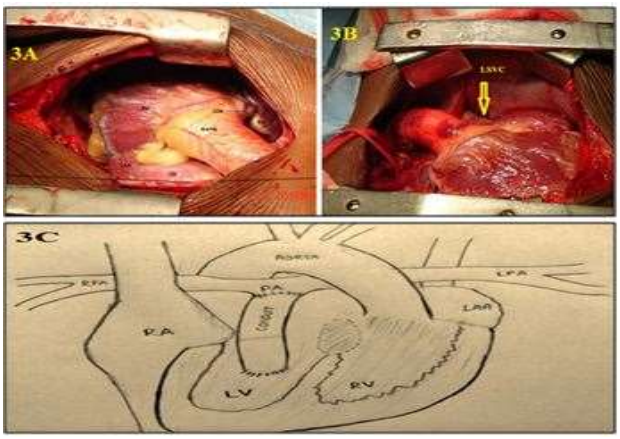


**Figure 3: Intra operative findings: 3; (A) CCTGA with dextrocardia, 3; (B) showing LSVC, 3; (C) showing LV to PA conduit with VSD Patch closure.**

Patient was operated by median sternotomy, under hypothermic cardioplegic arrest, trans right atrial transmittal VSD closure was done with ePTFE patch. Pulmonary artery (PA) was transacted and the proximal end was over sewn. A bovine jugular vein valves conduit (Contegra, size 18 mm) was placed between left ventricle (LV) and distal segment of PA (Figure 3). Postoperatively, the patient required permanent pacemaker implantation for management of complete heart block. At one year follow up, the patient was doing well and performing all day-to-day activities without any discomfort.

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