

Incidentally Discovered Cor Triatriatum Sinistrum Anomaly During Heart Transplant

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July 16, 2020

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Cor triatriatum is abnormal septation within the atrium. It exists in two different varieties; cor triatriatum sinister (CTS) in the left atrium and cor triatriatum dexter (CTD) in the right atrium. Cor triatriatum sinister is an uncommon congenital cardiac anomaly with an incidence of about 0.1- 0.4% of patients with congenital cardiac disease. CTS usually associated with other congenital cardiac anomalies such as ostium secundum, patent foramen oval, atrial septal defect, left superior vena cava, anomalous pulmonary venous return, and mitral valve regurgitation. CTD is commonly associated with right ventricular hypoplasia, pulmonary valve atresia, pulmonary valve stenosis, and Ebstein anomaly. Symptoms typically mimic mitral and tricuspid in CTS and CTD respectively. Surgical resection is the standard treatment, however, balloon dilatation may be considered in certain circumstances as heart failure, pregnancy or as a bridge to definitive management.

We report an incidentally discovered CTS during heart transplant in a 51-year-old male patient with heart failure due to ischemic cardiomyopathy. He had been experiencing intermittent angina. His past medical and surgical history were remarkable for coronary stenting and coronary artery bypass grafting. His echocardiography revealed a thin band-like structure in the left atrium (Fig. 1A). A suitable donor was available and the patient successfully underwent orthotopic heart transplant. During explanation of the native heart, CTS was

discovered as a semicircular membrane within the left atrium (Fig. 1B). CTS was completely excised and careful inspection of the pulmonary veins and both superior and inferior vena cavae showed no anomalies. His postoperative course was uneventful and he was discharged from the hospital on postoperative day 13.

Although CTS is a rare congenital cardiac anomaly, adult cardiac surgeons should be aware of the potential associated other anomalies specially left superior vena cava and anomalous pulmonary venous return during heart transplant procedure.

Conflict of interest disclosure

The authors have no conflict of interest and this study was not financially supported

Figure Legends

Fig. 1: (A) TTE shows a band within the left atrium (arrow) and mitral valve (star), and (B) Photo shows the cor triatriatum (forceps), the aorta (star), the main pulmonary artery (arrow), and the superior vena cava cannula (arrow head).

