

**The prevalence of persistent Left Superior Vena Cava in patients with and without congenital heart disease**

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**Background:** The persistent left superior vena cava (LSVC) is one of the common anomalies of the systemic veins. It usually drains to the coronary sinus. The prevalence of LSVC in the general population is between 0.1–0.5%. It is more common in patients with congenital heart disease (CHD) (3-5%).

The importance of detecting LSVC prior to cardiac surgery is paramount for the management of the systemic veins canulations. Failure to detect its presence before surgery may lead to some difficulties and prolongation of the intervention.

**OBJECTIVE:** To estimate the prevalence of persistent LSVC in patients with or without congenital heart disease in our patient population.

**METHODS:** All echocardiographic studies and data of patients seen in our hospital between December 2010 and November 2011 were reviewed for presence of persistent LSVC. The demographic data, CHD diagnosis, presence of LSVC and associated diseases or syndromes were documented. The incomplete studies were excluded from analysis.

**RESULTS:** The total no of screened patients were 1802, there was no gender predominance. Patients with no CHD made 53% of our population, while those with CHD were 47%. The prevalence of LSVC in the healthy children was 0.9% and in those with CHD was 7%. Down syndrome was one of the most commonly associated syndromes. The most common cardiac lesion associated with LSVC was complete atrio-ventricular-septal- defect. In all but one patient, the LSVC drained to the coronary sinus.

**CONCLUSION:** The prevalence of LSVC in the current population is higher than reported in the literature. Down syndrome have higher incidence of LSVC, especially patients with complete atrioventricular septal defect.