



## A RARE CASE OF DOUBLE SVC

## Radio-Diagnosis

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## ABSTRACT

Various anomalies in the development of great thoracic veins of the embryo can be found incidentally in a normal adult. Normally the superior vena cava is a single vascular structure formed by the union of right and left brachiocephalic veins which are in turn formed by the union of corresponding internal jugular and subclavian veins, draining the head and neck as well as the superior extremity. 1 A review of the literature since 1887 indicates that this is an addition to 216 cases of double superior venae cava in cadavers. 2

## KEYWORDS

Double SVC, Persistent left anterior cardinal vein

## INTRODUCTION:

Normally the superior vena cava is a single vascular structure formed by the union of right and left brachiocephalic veins which are in turn formed by the union of corresponding internal jugular and subclavian veins, draining the head and neck as well as the superior extremity. 1 The incidence of double SVC in general population is 0.3% whereas in patients with congenital heart disease it varies from 10-11%. Duplication of superior vena cava is a rare entity but most common thoracic venous congenital anomaly. It is due to result from failure of embryonic left anterior cardinal vein to regress. Its drainage can be either right atrium, coronary sinus or left atrium. In addition to a right superior vena cava with normal appearance located in the normal position, on the left side, a normal-looking extra superior vena cava persisted and descended vertically in front of the aortic arch between the left pulmonary vein and the left auricle. 3 Double SVC has more significance if left SVC drains into left atrium.

## CASE REPORT:

Here we present a case of 65year old female who is known case of Atrial Septal Defect and ischaemic heart disease came with complaints of palpitations and occasional cyanotic spells and breathlessness on exertion. The patient underwent basic investigations and Echocardiography where the cardiologist suspected some venous anomaly due to dilated coronary sinus and advised for pulmonary angiography where the patient was found to have aberrant left superior vena cava which drains into right atrium.

## Imaging Findings:

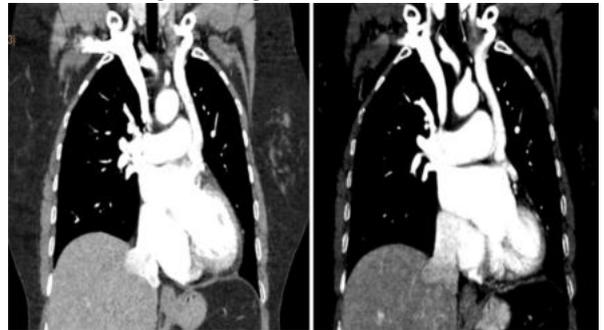


Persistent left proximal anterior cardinal vein noted which is draining into coronary sinus which further drains into right atrium P/o Superior vena cava duplication

## CONCLUSION:

Double SVC are mostly found during catheter insertion or thoracic or cardiac imaging and during surgery. While a persistent left superior vena cava does not usually cause physiological derangement, it can complicate certain clinical interventions. Awareness of this anomaly is

important to avoid complications during procedures such as cardiac catheterization or pacemaker placement.



Coronal Sections Showing Superior Vena Cava Duplication

## REFERENCES:

1. Sushma, R., Kotian., Antony, Sylvan, D. Souza., Praveena, Ravichandran., Pallavi, Bhat., Mamatha, Hosapatna. (2015). Double Superiorvenacava and its Associated Clinical Implications - A Case Report and Literature Review. 05(01):075-078. doi: 10.1055/S-0040-1709754
2. Kalidas, Nandy., Charles, B., Blair. (1965). Double superior venae cavae with completely paired azygos veins.. Anatomical Record-advances in Integrative Anatomy and Evolutionary Biology, 151(1):1-9. doi: 10.1002/AR.1091510102
3. Chisato, Mori., Hisashi, Hashimoto., Kazumasa, Hoshino. (1990). Two cases of double superior vena cava.. Japanese Heart Journal, 31(6):881-888. doi: 10.1536/IHJ.31.881