

## Cardiac CT in Mixed Type Atrial Septum Defects

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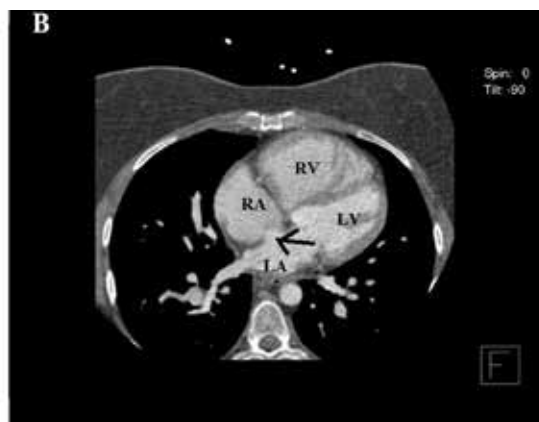
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### 1. Introduction

A 38-year-old woman presented with dyspnea on exertion [New York Heart Association (NYHA) functional class II]. Physical examination showed no cyanosis or clubbing of the fingers or toes. Elevated jugular venous pressure, holo-systolic (II/VI) murmur at the left sternal border, and wide fixed S2 splitting were present. Transthoracic echo-

cardiography revealed severe right ventricular enlargement with moderate to severely reduced systolic function, severe right atrial (RA) enlargement, and severe pulmonary artery hypertension (pulmonary artery pressure = 90 mm Hg). According to the computed tomography (CT) figures, presented below, **what is your diagnosis?**



## 2. Answer

A large secundum type atrial septal defect (ASD) associated with moderate size sinus venosus, superior vena cava (SVC) type ASD with partial anomalous pulmonary venous connection (PAPVC) of the right upper pulmonary vein (RUPV) to the RA.

## 3. Comment

The SVC type of sinus venosus defects is located immediately below the junction of the SVC and the RA and varies from small to non-restricted. The orifice of the SVC may override the defect, which is therefore bi-atrial (1).

The most common type of the ASD is ostium secundum in fossa ovalis location. Moreover, 10-15% of ostium secundum ASDs are associated with PAPVC, while 80-90% of the SVC type of sinus venosus defects are associated with the anomalous connection of the RUPV to the RA or the SVC

(2); also interestingly in about 10% of patients with Sinus venosus atrial septal defect, an associated secundum type ASD is present (3).

## Authors' Contribution

The authors' contribution in preparing of this interesting image is equal.

## Financial Disclosure

There is no financial disclosure.

## References

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