Incidental Finding of Sinus Venosus Atrial Septal Defect

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Introduction
Sinus Venosus ASD is a rare entity consisting 1% of all congenital heart diseases¹. 2 variants - superior vena caval and inferior vena caval. 90% are associated with partial anomalous pulmonary venous connection [PAPVC]. Excellent prognosis if diagnosed and operated before 15 Years.

Case Report
A 5 yrs old female who presented with complaints of low grade fever, productive cough -3 days. There is no h/o breathlessness, chest pain. No h/o contact with TB patients. No history suggestive of recurrent Lower respiratory tract infections and congestive cardiac failure.

On Examination: Child is Active, Alert
- Anthropometry: Height-99cms, Weight - 14.1kg
- Vitals: Temp-99.6°F, Pulse Rate: 89beats/min, RR-28cycles/min, BP-80/60 mm of Hg in all four limbs
- No pallor/icterus/cyanosis/clubbing/lymphadenopathy/Generalised odema
- Respiratory: Bilateral Air Entry present and normal vesicular breath sounds heard

CVS Examination
- S1, S2 heard

Investigations
X-ray chest: mild cardiomegaly with prominent PA noted

ECG
ECG - Showing
1. T Wave inversion in V1-V5
2. Crochet age Sign
ECG

- Transesophageal 2D-ECHO:
  - Large sinus venosus ASD of SVC type
  - PAPVC-Right upper pulmonary veins to SVC-RA Junction, L-R shunt
  - Bilateral SVC

Dilated RA and RV, mil

Surgery
- WARDEN procedure: closure of sinus venosus ASD and repair of PAPVC

Post OP
- Post Recovery: uneventful
- ECG: sinusrhythm, Right Axis deviation
- 2D-ECHO: no residual shunt/rerouted Right PV draining to LA without obstruction/no PAH
- Unobstructed RSVC draining into RA
- Good Biventricular function

Conclusion
- Detailed systemic examination and assessment of all patients aid in early diagnosis and management of children with sinus venosus ASD
- Excellent prognosis post op if operated before 15 years
- so high index of suspicion is required to diagnose sinus venosus ASD.
References


