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Incidental Finding of Sinus Venosus Atrial Septal Defect

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Introduction

Sinus Venosus ASD is a rare entity consistuting 1% of all congenital heart diseases[1]. 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^{0}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
- ❖ wide and fixed S2 split
- ❖ 3/6 ejection systolic murmur heard only in pulmonary area
- no signs of cardiac failure

Investigations

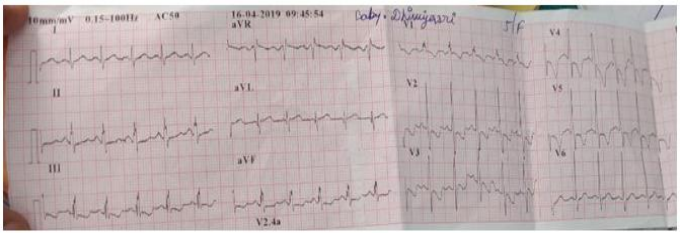
X ray hest: mild cardiomegaly with prominent PA noted

Chest X ray

ECG

ECG -Showing

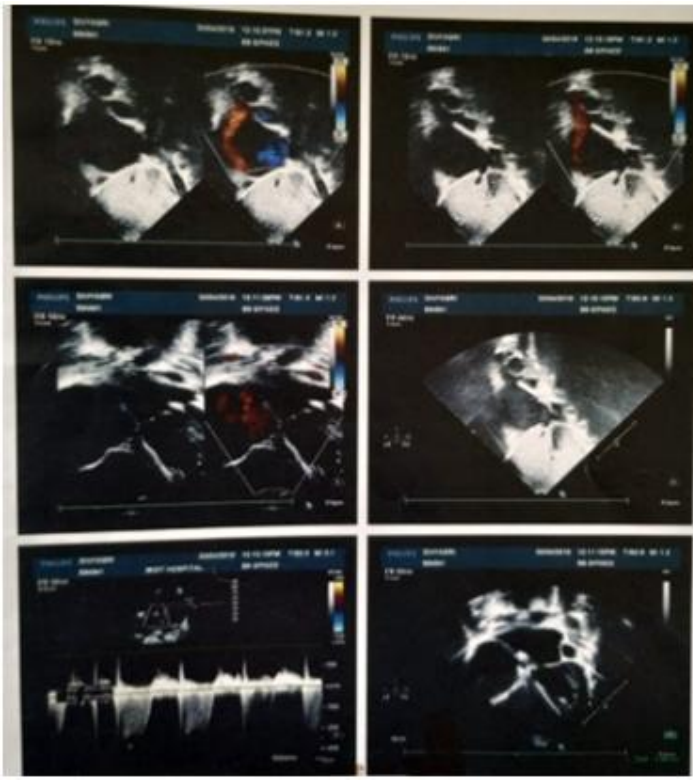
1. T Wave inversion in V1-V5
2. Crochet age Sign



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

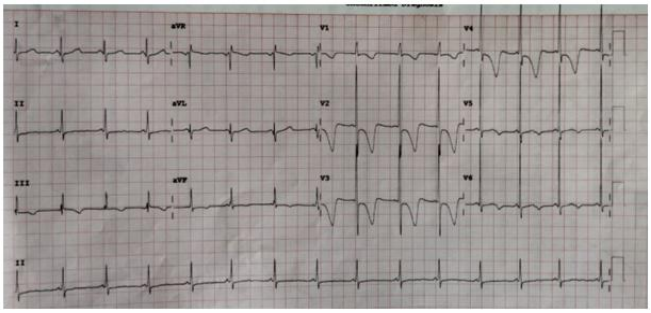
- WARDEN procedure: closure of sinus venosus ASD and repair of PAPVC

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 Biventicular function

Post OP X ray Chest

Post OP Scar



Post OP ECG

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 15years
- so high index of suspicion is required to diagnose sinus venosus ASD.

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