ASD Sinus Venosus (IVC Type)

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40 years old male presented to cardiology OPD with H/O Palpitations on and off-on moderate exertion. Increased in intensity over last one year Not associated with chest pain, syncope or SOB.

No history suggestive of Cardiac Failure. No H/O fever/joint pain/swelling/ rashes/cough with expectoration.

No history suggestive of Recurrent Respiratory Tract Infections/Cyanotic Spells/RHD

Clinical examination : was unremarkable

ECG : NSR , normal axis , no significant changes

CXR : Mild cardiomegaly , clear lung field.

Trans thoracic Echo revealed mild dilatation of right side of the heart with QP/QS: 1.4/1. Trans esophageal Echo revealed drop out point and left to right shunt by colored doppler at the mouth of inferior vena cava which was diagnosed as ASD sinus venosus IVC type. From Literature Review, ASD can be classified into:

Ostium secundum defects (75%- 85% of ASDs) are located in the region of the fossa ovalis. Ostium primum defects (10 - 15%) occur in the lower portion of the atrial septum.

Sinus venosus defects (5 - 10%) are located near the orifice of the superior vena cava.

Sinus venosus defects of IVC type (1%).

Coronary sinus (1%) septal defect (in which a defect between the coronary sinus and the left atrium allows a left-to-right shunt to occur through an “unroofed” coronary sinus).

In cases of superior sinus venosus defect, the hole is located superiorly to the fossa ovalis, which can itself either be intact or deficient.

Inferior sinus venosus type atrial septal defect (ASD) is a rare congenital cardiac deformity that occurs between the IVC and right atrium.

The fossa ovalis region of the interatrial septum is intact.


COMPLICATIONS: Symptoms of exercise intolerance and fatigue/CCF .Atrial arrhythmias ,Pulmonary hypertension ,Systemic embolization and Reduced life expectancy.

Prognosi: The prognosis is excellent for young patients who undergo repair of uncomplicated defects.

Repair delayed until the third decade of life is associated with a decrease in life expectancy.