

ASD & VENOUS ANOMALIES

an exam oriented session

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Which of the following associations is NOT correct

1. Ostium primum ASD and cleft mitral valve
2. Ostium secundum ASD and mitral valve prolapse
3. Coronary sinus ASD and left SVC
4. Sinus venosus ASD and anomalous pulmonary vein
5. All the above are CORRECT

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Sinus venosus ASD is most often associated with

1. Anomalous drainage of right upper pulmonary vein
2. Anomalous drainage of left upper pulmonary vein
3. Persistent left superior vena cava
4. Prominent Eustachian valve
5. Hepatic arterio-venous malformation

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All of the following are considered iatrogenic atrial septal defects EXCEPT:

1. Blalock-Hanlon

2. Park

3. Rashkind

4. Jatene

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4-year old with heart murmur: Diagnosis?

1. Secundum atrial septal defect
2. Secundum atrial septal defect with pulmonary hypertension
3. Sinus venosus atrial septal defect with anomalous right upper pul vein
4. Sinus venosus atrial septal defect with anomalous left upper pul vein
5. Primum atrial septal defect

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Top tip - Other causes of right heart dilatation

Coronary sinus ASD

TAPVC / PAPVC

Pulmonary hypertension

Ebstein's malformation of the tricuspid valve

Tricuspid regurgitation

Pulmonary regurgitation

LV to RA shunt (Gerbode) (RARE)

Top tip Atrial septal aneurysm

Associations:

PFO

Fenestrated septum

Atrial arrhythmias

Increased stroke risk

Benefit of PFO closure greatest with

1.Larger PFO

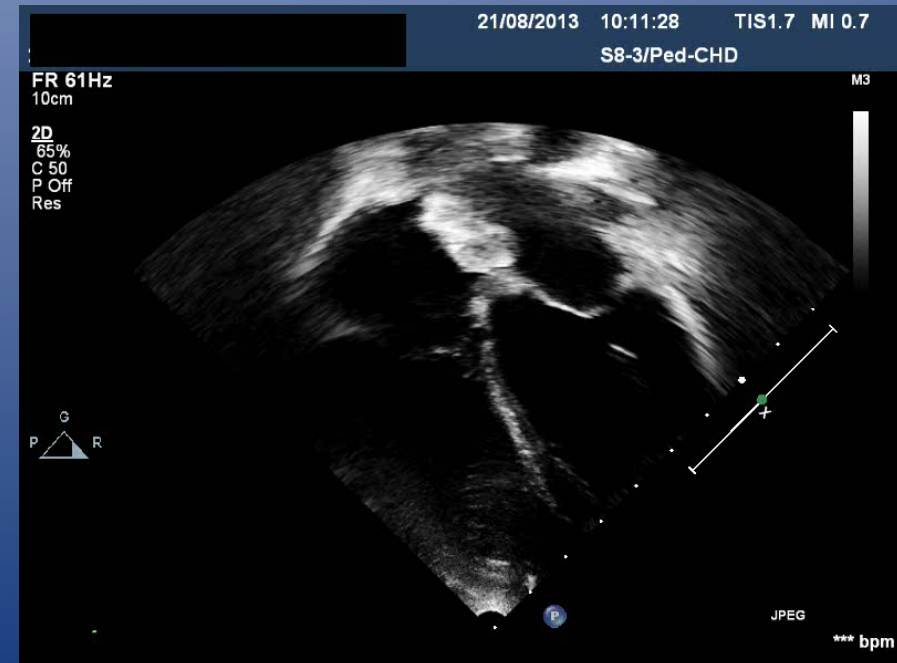
2.Complete PFO closure

3.Greater number of previous strokes

Contrast echo – use of perfluorocarbon bubbles

Which of the following features are suitable for a device closure of ASD EXCEPT:

1. Defect size 25 mm
2. Mitral rim 8 mm
3. Aortic rim 4 mm
4. Inferior vena cava rim 2 mm
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Top tips Device closure suitability

Sufficient rim –

Superior rim (SVC); Posterior rim (towards pul veins);
Inferior rim (IVC); Mitral rim (MV); Aortic rim (Aorta)

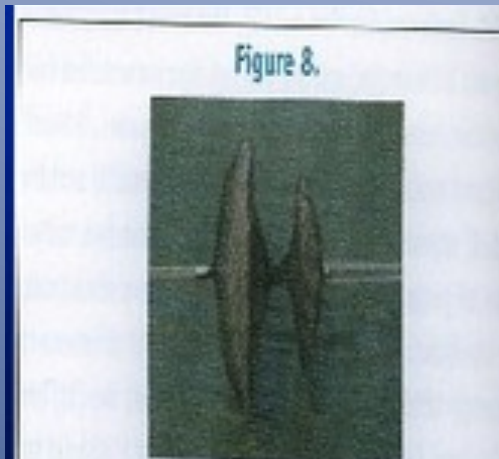
Generally acceptable is 7 mm on either side

Aortic rim is the least important, while inferior rim is the most important

Multiple defects; Total septal length; Baseline AV valve regurgitations

Complications of device closure

Stroke; Device embolisation; Erosion; Atrial arrhythmia, pul vein/SVC obstruction



PFO Device



ASD Device

14 year old girl referred for a murmur and fainting episodes. Most likely diagnosis?

1. Mitral stenosis
2. Mitral regurgitation
3. Supramitral valve ring with obstruction
4. Cor triatriatum with obstruction
5. Cor triatriatum without obstruction

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4. Cortriatriatum with obstruction
5. Cortriatriatum with no obstruction

The following features of cortriatriatum (divided LA) are correct EXCEPT

1. Cortriatriatum is a membrane seen well above the mitral valve
2. The membrane is below the left atrial appendage
3. Cortriatriatum is sometimes mistaken with septum primum ASD
4. The membrane does not move well during the cardiac cycle
5. Cortriatriatum can be an asymptomatic finding during an echocardiogram

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7-day old baby boy with tachypnoea, Saturations 93%
Most likely diagnosis?

1. TAPVC to portal vein with obstruction
2. TAPVC to coronary sinus without obstruction
3. TAPVC to Left vertical vein with obstruction
4. TAPVC to Left vertical vein without obstruction
5. TAPVC to right atrium



Top tip

Crab view for pulmonary veins

High parasternal short axis or suprasternal sagittal views

Legs of the crab: two right and two left pulmonary veins

Claws of the crab: right SVC and left atrial appendage



**"That's
all
folks!"**

