Coarctation of the Aorta

What is it?

- A narrowing of the aorta.
- Usually narrowed where the ductus arteriosus inserts.
- Accounts for 5-8% of all congenital heart defects.
- Can be associated with left sided lesions (eg BAV, AS, MV stenosis).
- Symptoms include headache, nosebleeds, breathlessness, dizziness, tinnitus, abdominal angina, leg cramps/fatigue and cold feet.
- Clinical features include upper body hypertension, lower body hypotension, radio-femoral pulse delay and palpable collaterals.

How is it diagnosed?

- Echocardiogram
- Cardiac MRI and CT
- Cardiac catheterisation
- CXR
- Physical exam

How does it affect the heart?

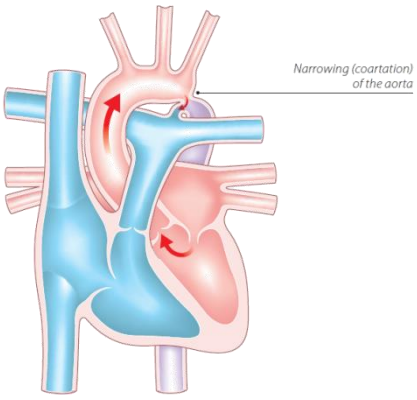
- Imposes significant afterload on the LV.
- Results in increased wall stress, LVH, LV dysfunction and development in arterial collaterals.
- Risk of associated heart defects, aortic dissection, hypertension, stroke cerebral abscess.
- Risk of endocarditis.

What is the treatment/long term management?

- Surgical options include; resection of the narrowed area, prosthetic patches aortoplasty, subclavian flap aortoplasty, interposition of a graft and bypass tube grafts.
- Stenting percutaneously is also a treatment option.
- Hypertension management – important risk factor in CAD, ventricular dysfunction and aortic aneurysm rupture.

What is the follow up?

- Should see ACHD team at least every two years.
- Imaging of the aorta (CMR) post-repair.
- Imaging intervals depend on baseline pathology.



J.S/ACHD 2018

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