Version 1.0

Cardiac Tumours

Epidemiology: Rare. 95% are secondary. Most primary tumours are benign.

Types: Primary – Myxoma, rhabdomyoma, fibroelastoma, fibroma, teratoma, angioarcoma Secondary – From melanoma, lung, breast, rarely lymphoma. Mx: rad & chemo. Poor prognosis.

Cardiac Myxomas (50%)

- Latrium (75%), Ratrium (20%).
- 5% due to Carney complex (AutoDom, multiple neoplasia syn incl. Schwannomas; pituitary, thyroid, testicular, bone, ovarian, or breast tumours; cutaneous pigmentation & myxomas).
- May be pedunculated and cause syncope/sudden death via flow obstruction.
- Positional murmur, AF, mid-sysolic thud, occ clubbed.
- Mx: Resect.

Rhabdomyomas (20%)

- Majority in children & esp infants.
- Most commonly in ventricles.
- Multiple.
- Assocs:
 - tuberose sclerosis, renal tumours, cardiac arrhythmias, adenoma sebaceum of skin.

Fibroelastoma

- Related to valves/charade.
- May embolise or form thrombus.

Fibromas

• Large ventricular resectable tumours.

Teratomas

- Usually in infants.
- Commonly from pericardium and adherent to great vessels.
- Usually asymptomatic and Dx on CXR.
- Resectable.

Angioarcomas

- 30% of malignant tumours.
- Usually R sided.

Cardiac Transplantation

25% are infants (most have complex CHD). 50% on transplant list die before op.

Indications:

- Life expectancy<1yr
- NYHA class III or IV.

Contraindications:

- Serious underlying disease,
- Pulmonry HT
- Cerebral or periph vasc. disease
- Active PUD
- DM
- COPD
- Vasculitides
- Current infection

Immunosuppression:

Pre-op: high dose steroids, anti-thymocyte globulin or monoclonal antibody, azathioprine and ciclosporin

Long-term: tacrolimus, ciclosporin, azathioprine, prednisolone

Complications:

- Infection most often bacterial. Also CMV, Candida, HSV
- Acute rejection cell mediated. 3 episodes per year decreasing with time.
- Chronic rejection -
 - Coronary arterial disease NB silent ischaemia as denervated
- Renal impairment
- Hyperlipidaemia
- Malignancy in 20% skin, lymphoma
- Lack of response to vagal manoevres, atropine, digitalis due to denervation.
- Highly responsive to adenosine \rightarrow bradycardia (use aminophylline)