#### Version 2.0

# **Mediastinal Disorders**

#### **Mediastinal Masses**

### Anterior

- <u>Upper</u>
  - Lymph nodes
  - o Thyroid
- Middle
- o LN
- Asc. Ao aneurysm
- o Thymoma
- o **Teratoma**
- o Lipoma
- Inferior
  - o Fat pad
  - Diaphragmatic hump
  - Foramen of Morgagni hernia
  - o Pericardial cyst

# Pneumomediastinum

Middle

- Lymph nodes
- Ao arch aneurysm
- Bronchogenic cyst
- Pulmonary artery

### Posterior

- <u>Superior</u>
  - Pharyngeal pouch
  - Neurogenic tumour
- <u>Anteroinferior</u>
  - Hiatus hernia
  - $_{\rm O}$  Oesophageal tumour
  - Desc Ao aneurysm
- <u>Posterior</u>
  - Neurogenic tumour
  - $\circ~$  TB of spine
  - o Hodgkin's disease

**Causes** – rapid ↑intrathoracic pressure e.g. respiratory illness such as asthma→alveolar rupture It has also been associated with Mycoplasma pneumoniae pneumonia, anorexia, obesity,

oesophageal perf (Boerhaave syndrome from vomiting), trauma

Hamman's sign - Crunching sound synchronous with heartbeat=mediastinal emphysema.

**CXR:** Multiple streaks of radiolucent gas, does not completely encircle heart, may  $\rightarrow$  to neck **Mx:** Conservative usually, if sev compromised mediastinotomy at sternal notch.

# Pneumopericardium

Uncommon

Same causes as a pneumothorax (trauma, lung disease, tumours)

Hamman's sign can also be found.

**CXR:** fine rim of air outlining right & left heart borders. May fully encircle heart. Air is always contained superiorly at the level of aorta and pulm arteries.

Only if very large volumes present is cardiac function impaired.

Mx: Conservative if small. Pericardiocentesis/pericardial drain if under tension.

May need surgery for underlying cause.