

Mediastinum

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I. Mediastinal Masses

A. Mediastinal compartments

1. Two major methods for dividing the mediastinum
 - Make strong arguments for either method
 - Difficult to ask on an exam
 - Strangely, it doesn't affect the differential diagnoses much.

B. Felson method

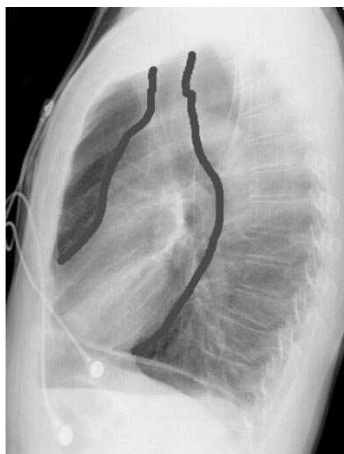
1. Three compartments:
 - Anterior: anterior to a line drawn in front of trachea and behind the heart
 - Posterior: posterior to a line drawn 1 cm posterior to anterior margin of thoracic vertebral bodies
 - Middle: between the two

C. Anatomist method

1. Four compartments
 - a. Superior mediastinum: above a line from the sternal angle to the 4th thoracic spine interspace
 - b. Inferior mediastinum: below the line, subdivided into anterior, middle and posterior mediastinum
 - Anterior mediastinum: anterior to the heart and great vessels
 - Middle mediastinum: heart, great vessels, central airways
 - Posterior mediastinum: posterior to heart, includes esophagus

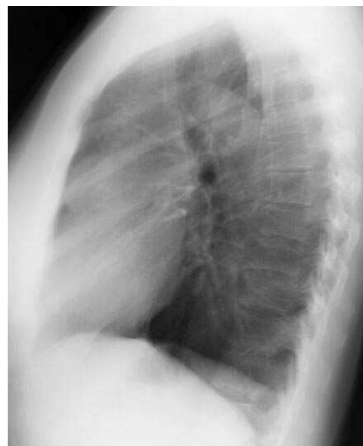
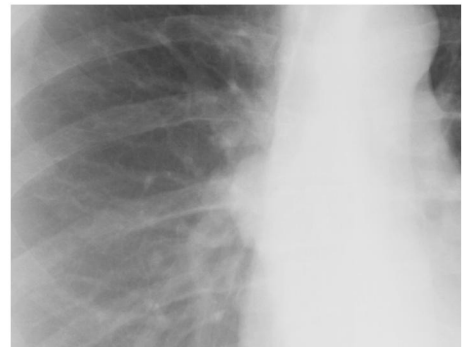
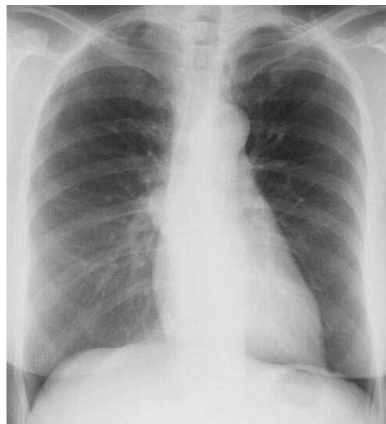
D. What we really do

- A little bit of an “in between”
- Follow the anatomist method generally
- Ignore superior and inferior divisions: continue ant, middle and post to thoracic inlet



E. Anterior mediastinal masses

1. Thymic masses: thymoma, cysts, hyperplasia
2. Germ cell neoplasms: teratoma, seminoma, embryonal cell ca...
3. Lymphoma: Hodgkin's, NHL
4. Thyroid masses: goiter, tumor
5. Infamous 4 T's
 - Thymus
 - Teratoma
 - T-cells (lymphoma)
 - Thyroid
6. OK, but remember it's not complete.
7. Thymoma
 - Round, smooth, may have cysts on CT
 - Often near AP window
 - May be calcified
 - May be invasion and/or drop mets
 - Association with myasthenia gravis
 - "Older" age range: around 50 +/- 10



8. Teratoma
 - a. Cystic or solid
 - b. Benign or malignant
 - c. May be calcified
 - d. May contain fat
 - e. It's not a "dermoid"