MS COW 4
History

• 16 year old boy with progressive shortness of breath for several weeks. On further questioning he is also more tired than usual and has had occasional fevers.
• Abnormal mediastinal contour
Chest CT (axial image)
Chest CT (axial image)
Chest CT (axial image)
Chest CT (axial image)
Chest CT (sagittal image)
Chest CT (sagittal image)
Chest CT (coronal image)

- Correlates well with the initial chest radiograph
Findings

• **CXR**
  - abnormal contour of the mediastinum consistent with a mass

• **Chest CT**
  - Large, lobulated anterior mediastinal mass
Differential Diagnosis

- Anterior mediastinal mass:
  - THE FOUR "T"'s
    - 1) Thymoma
    - 2) Teratoma
    - 3) Thyroid gland (i.e. goiter -- unlikely in a young man!)
    - 4) "Terrible" lymphoma
Discussion

• The mediastinum is divided into 4 compartments
  – Anterior
  – Middle
  – Posterior
  – Superior

• Localizing a mediastinal mass into the correct compartment can help narrow the differential diagnosis
Discussion

- **Anterior mediastinum**
  - The 4 T’s (thymus, teratoma, thyroid, “terrible” lymphoma

- **Middle**
  - Abnormal lymph nodes, airway or esophagus lesions

- **Posterior**
  - Neurogenic tumors, bone tumors