X-Ray Quiz

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This is a chest X-ray of a two-year-old girl admitted for fever with coryzal symptoms for one week. She was noted to have tachypnea on admission.

Questions
What is the likely diagnosis?
A. Normal thymus
B. Lobar collapse due to mucus plugging
C. Tuberculous pneumonia
D. Incidental finding of left upper lobe pulmonary sequestration
E. Mediastinal mass

(Answer on page 13)
Answers to X-ray Quiz on page 12

The correct answer is E (Mediastinal mass)

This chest X-ray showed an obvious opacity occupying the entire left upper zone and the trachea was deviated to the right side. This finding was not supportive of pneumonia or lobar collapse as it could not explain the contralateral tracheal deviation. Indeed, the opacity extended across midline to the right side, resulted in mediastinal widening. The middle part of the trachea was also obscured by the mass. Added together, these features made mediastinal lesion the most likely diagnosis.

Mediastinal masses can be broadly divided according to the compartments from which they arise, though some masses can extend across compartments. In order to further delineate the extent and internal characteristic of this mediastinal lesion, an urgent contrast computer tomography scan of the thorax was performed and showed a large multi-septated cystic lesion involving the superior aspect of anterior, middle and posterior mediastinum, with extension from the subcarinal to the retropharyngeal region at cervical level. It was suggestive of lymphatic malformation with significant mass effect on the trachea.

Isolated mediastinal cystic lymphangiomas are rare. These lesions are mostly asymptomatic until they grow large enough to cause compressive symptoms to neighbouring structures. This case illustrates the importance of recognising mediastinal mass on chest X-ray.