

Answer to Medical Quiz

ANSWERS

1. Right upper lobe 'giant' bulla, but without emphysema
2. a. Right Pneumothorax
b. Bronchogenic Cyst
3. Surgical resection

The frontal film shows a hyperlucent and an avascular upper part of the right hemi-thorax. The narrow dense curvilinear shadow demarcating this abnormality from the rest of the right lung is concave upward. The differential diagnosis is that of a hole in the lung; most importantly, pneumothorax. The interface between the air in the pleural cavity and the lung casted by the 'edge' of the lung in pneumothorax is always convex outward (Fig. 1), differentiating it from the intrapulmonary location of 'holes' in the lung. Although many conditions can produce single or multiple localized avascular hypertranslucency in the lungs, the clinical story and the associated radiologic features should suggest the correct diagnosis. A bronchogenic cyst may produce an appearance similar to that of a bulla but it is more

likely that it will be located closer to the mediastinum and its peripheral boundary will be clearly demonstrated on the radiograph. In infants, congenital lobar emphysema of the right upper lobe can produce a similar picture.

The risk of complicating pneumothorax is always there, even in smaller bullae which are usually associated with emphysema.

Pulmonary perfusion and ventilation isotope studies, C.T. or bronchography may be considered before surgical resection of a giant bulla.

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