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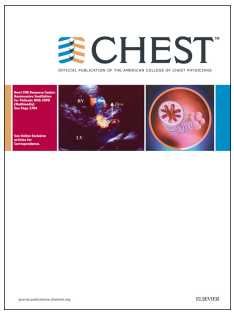

Cystic Lung Diseases: Algorithmic Approach

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Abstract

Cysts are commonly seen on CT scans of the lungs, and diagnosis may be challenging. Clinical and radiographic features combined with a multidisciplinary approach may help differentiate among various disease entities, allowing correct diagnosis. It is important to distinguish cysts from cavities as they each have distinct etiologies and associated clinical disorders. Conditions like emphysema, honeycomb lung and cystic bronchiectasis may also mimic cystic disease. A simplified classification of cysts is proposed. Cysts may be present in greater profusion in the sub-pleural areas, when they typically represent paraseptal emphysema or bullae. Cysts present in the lung parenchyma but away from sub-pleural areas may be classified as simple, i.e. without any other abnormalities on high resolution CT scans (HRCT). These are further categorized into solitary or multifocal/diffuse cysts. Multifocal cysts may be seen with lymphocytic interstitial pneumonia, Birt-Hogg-Dubé syndrome, tracheobronchial papillomatosis or primary and metastatic cancers. Multifocal cysts may be associated with nodules (lymphocytic interstitial pneumonia, light chain deposition disease, amyloidosis, and Langerhan's cell histiocytosis) or with ground glass opacities (*Pneumocystis jiroveci* pneumonia and desquamative interstitial pneumonia). Using the results of the HRCT as a starting point, and incorporating the clinical history, physical examination and laboratory findings are likely to narrow the differential diagnosis of cystic lesions considerably.