Left atrial compression

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Right answer: 3. Bronchogenic cyst

At thoracotomy cystic mass dissected from surrounding tissues and removed. As histopathological examination of the resected cyst confirmed that it was lined by ciliated columnar epithelium, it was diagnosed as a bronchial cyst.

Bronchogenic cysts is a result of abnormal budding of the bronchial tree during embryogenesis. This abnormal bud subsequently differentiates into a fluid-filled, blind-ending pouch (1). Mediastinal bronchogenic cysts are predominantly found in the mid-mediastinum (2). The location of the cyst and size are important in causing symptoms. Most of the symptoms are caused by the compression of the cyst on the adjacent structures. Chest pain was the most common presenting complaint. The reported complications of bronchogenic cysts include infection; compressive symptoms, such as dysphagia or arrhythmia, malignant transformation and the rare but fatal air embolism (3, 4). Bronchogenic cysts are usually found within the lung or the middle or posterior mediastinum.

On CT it is characteristic when the lesion demonstrates a homogeneous fluid attenuation mass with a thin or imperceptible wall (3).

In the present case; the differential diagnoses were cyst hydatid, aneurysmatic descending aorta and pericardial cyst. Hydatid disease is caused by the cystic stage of infestation by Echinococcus granulosus. Hydatid cysts are usually located in the liver, lungs and brain. Mediastinal hydatid cysts are very rare but it should be considered in the differential diagnosis of a cystic lesion of the mediastinum, especially in endemic regions like our country. In hydatid cyst CT scan demonstrates the thickened wall calcifications and intra-cystic fluid content mixed density with internal septa confer a multilocular appearance. CT best demonstrates cyst wall calcification (5, 6).

Descending aorta has close anatomic relationship with left atrium. Thus; aneurysm, dissection or abnormal course of descending aorta may lead to left atrial extrinsic compression. In our case; echocardiografic image can confused with aneurysmatic descending aorta but CT image demonstrates normal descending aorta (7).

A pericardial cyst is an uncommon benign congenital anomaly of the anterior-middle mediastinum. Pericardial cysts usually are found in the right cardiophrenic angle. A pericardial cyst in an unusual location may be indistinguishable from a bronchogenic cyst. Pericardial cysts usually have thin smooth walls without internal septa. They have the same attenuation as water and rounded mass next to the pericardium (8).

Mostly it is very difficult to distinguish bronchogenic cyst from other mediastinal cystic lesions so many times the diagnosis is established by histopathological examination.

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