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Clinical Image

Is it Cyst or Neoplasm? The Role of Thorax Magnetic Resonance Imaging



¿Quiste o neoplasia? El papel de la resonancia magnética de tórax

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A 59-year-old male patient was admitted to the chest diseases clinic with complaints of sweating, fever and cough. The chest X-ray showed a uniform limited radiopaque area in the upper zone of the left lung. Then, the patient underwent positron emission tomography (PET)/computed tomography (CT) (PET-CT) imaging. In PET-CT,

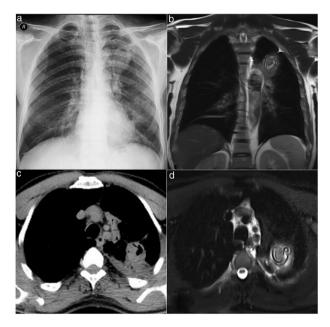


Fig. 1. (a) Chest X ray PA view showing an ill-defined radiopacity in left upper lung field. (b) T2 weighted imagines haste coronal view hyperintense lesion was observed. There was band formation compatible with germinative membrane in the lesion. (c) Positron emission tomography (PET)/computed tomography (CT) showed hypometabolic cavitary lesion was observed in the left lung upper lobe. (d) T2 weighted imagines haste axial view hyperintense lesion was observed. There was band formation compatible with germinative membrane in the lesion.

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 $4\times 5\,\mathrm{mm}$ sized hypometabolic cavitary lesion was observed in the left lung upper lobe. Then the patient was asked for thorax tru-cut biopsy due to suspicion of malignancy. We thought that this lesion may be hydatid cyst. Because our city is one of the endemic regions. The patient was taken a contrast thoracic magnetic resonance imaging (MRI). In thoracic MRI, a $45\times 40\times 40\,\mathrm{mm}$ sized T1 weighted imagines hypointense, T2 weighted imagines hyperintense lesion was observed (Fig. 1). There was band formation compatible with germinative membrane in the lesion. Based on these findings, we diagnosed the patient with perforated cyst hydatid. The biopsy was not taken.

It is difficult to differentiate complicated cysts from tumor, hematoma, congenital cysts, or pneumothorax.¹ Thoracic MRI may be more sensitive than CT especially malign-benign differentiation of lesions.^{2,3} It can be a guide before the interventional procedure.

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Conflict of interest

The authors declare that they have no conflict of interest to the publication of this article.

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