Cystic Mediastinal Thymic Lymphangioma Mimicking Echinococcal Cyst

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An otherwise healthy 24-year-old woman presented to our hospital with 12 months of worsening dyspnea, left-sided pleuritic chest pain, nonproductive cough, and hoarseness. She denied weight changes, hemoptysis, and systemic infectious symptoms, such as fever, chills, and sweats. She was born and raised in a small town near Mexico City, Mexico, where she had frequent exposure to cats and dogs, and to farm animals, such as cows, goats, and sheep. Initial examination revealed an afebrile, hemodynamically stable woman with mild tachypnea and hoarseness. Pulmonary examination was notable for decreased breath sounds over the entire left chest. Computed tomography of her thorax demonstrated a large multicystic mass extending throughout the entire left hemithorax (Figs. 1–3). Given her exposure history and the appearance and location of the cystic mass, a presumptive diagnosis of pulmonary echinococcus was made, and she was started empirically on albendazole. An echinoccoccus IgG was sent, which was negative. She eventually underwent clamshell thoracotomy with intact removal of the cystic mass, which measured 15 cm × 12 cm × 8 cm (Fig. 4). Tissue histology revealed thymus attached to a multilocular cyst lined by CD31 and D2-40 staining cells, consistent with a cystic mediastinal thymic lymphangioma. There were no elements favoring a diagnosis of echinococcus.

Lymphangiomas are congenital abnormalities of the lymphatic system[1] and most typically arise in the head/neck and axillary regions, only rarely occurring in the mediastinum.[2] Although the majority of cystic lymphangiomas are diagnosed in children under the age of 5 years, they are rarely incidental findings in adulthood.[3] Furthermore, although most individuals with mediastinal lymphangiomas are asymptomatic, they can present with chest pain, cough, dysphagia, or dyspnea as

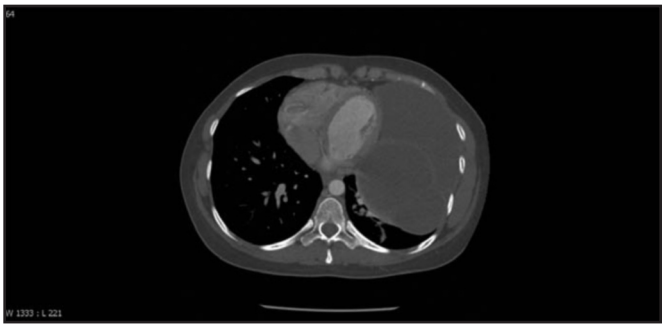

FIGURE 2. Computed tomography scan of the thorax with axial view demonstrating a large multicystic mass taking up the entire left hemithorax.

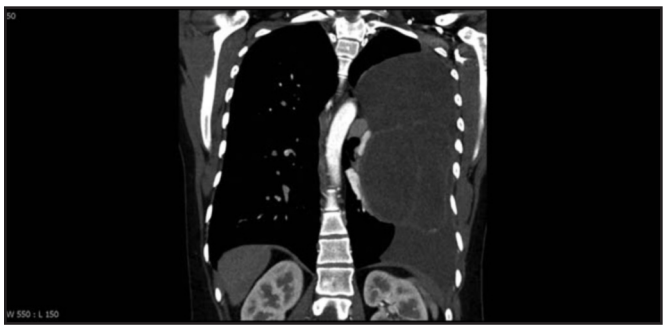

FIGURE 1. Computed tomography scan of the thorax with coronal view demonstrating a large multicystic mass taking up the entire left hemithorax.

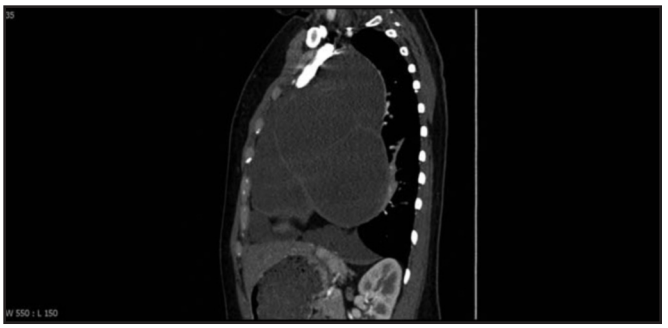

FIGURE 3. Computed tomography scan of the thorax with sagittal view demonstrating a large multicystic mass taking up the entire left hemithorax.

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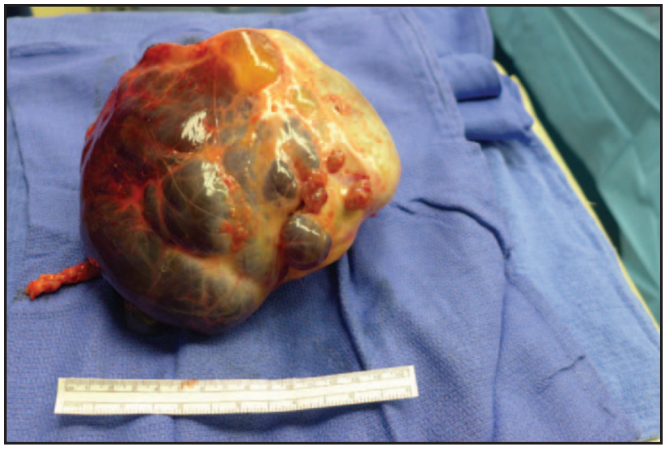

FIGURE 4. The 552 g cystic mediastinal thymic lymphangioma measured 15 cm × 12 cm × 8 cm.

with our patient. Complete surgical resection allows for histologic diagnosis and is usually curative, although recurrence can occur.[4] Although both clinical history and imaging were consistent with a diagnosis of pulmonary echinococcus, our case should prompt clinicians to consider mediastinal lymphangiomas in the differential diagnosis. At last follow-up, our patient was doing well with resolved dyspnea but persistent hoarseness.

REFERENCES

1. Komatsu T, Takahashi Y. Mediastinal cystic lymphangioma in a patient with situs inversus totalis. *Case Rep Surg* 2014;2014:781874.
2. Licci S, Puma F, Sbaraglia M, Ascani S. Primary intrathymic lymphangioma. *Am J Clin Pathol* 2014;142:683–688.
3. Yang B, Jiang C, Zhang B, et al. Giant primary cystic mediastinal lymphangioma: a case report. *Oncol Lett* 2014;8:1246–1248.
4. Park JG, Aubry MC, Godfrey JA, Midthun DE. Mediastinal lymphangioma: Mayo Clinic experience of 25 cases. *Mayo Clin Proc* 2006;81:1197–1203.

