High-Riding Pericardial Recess Mimicking Metastatic Mediastinal Lymph Node

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Figure 1. Axial view (computed tomography [CT] chest) showing lesion (outlined arrow) at station 2R (high paratracheal).

Figure 2. Endobronchial ultrasound image of the structure (outlined arrow) in paratracheal position.

Figure 3. Coronal view (CT chest) showing the pericardial recess.

A 65-year-old female nonsmoker with a newly diagnosed lung adenocarcinoma in the left upper lobe was referred for mediastinal staging via endobronchial ultrasound guided transbronchial needle aspiration. Her clinical stage was IIIB (T1aN3M0) based on computed tomography findings (Figure 1). Positron emission tomography was unavailable. Endobronchial ultrasound (Figure 2) of that area showed a 1.25-cm-diameter, well-circumscribed, homogeneously isoechoic structure (outlined arrow, Figs. 1 and 2). Cytology of the lesion showed fragments of adipose tissue. Review of the coronal images (Figure 3) confirmed a supra-aortic extension of a pericardial recess mimicking a lymph node at station 2R. The prevalence of a “high-riding” superior pericardial recess is 6.6% (1, 2).

Author disclosures are available with the text of this article at www.atsjournals.org.

References

1. Basile A, Bisceglie P, Giulietti G, Calcara G, Figuera M, Mundo E, Granata A, Runza G, Privitera C, *et al*. Prevalence of “high-riding” superior pericardial recesses on thin-section 16-MDCT scans. *Eur J Radiol* 2006;59:265–269.
2. Truong MT, Erasmus JJ, Gladish GW, Sabloff BS, Marom EM, Madewell JE, Chasen MH, Munden RF. Anatomy of pericardial recesses on multidetector CT: implications for oncologic imaging. *AJR Am J Roentgenol* 2003;181:1109–1113.