Fine-Needle Aspiration of Peritumoral Lymph Nodes in Esophageal Cancer with Endobronchial Ultrasound

A 70-year-old man underwent esophagogastroduodenoscopy for dysphagia and weight loss. Two islands of abnormal mucosa 22 cm from the incisors were biopsied and found to consist of squamous-cell carcinoma. Four-quadrant biopsies demonstrated severe dysplasia or carcinoma in situ throughout the esophagus. The endoscopic ultrasound (EUS) examination did not reveal a discrete mass. In the mediastinum, 22 cm from the incisors, a diffusely hypoechoic round periesophageal lymph node with sharp margins, 5.2 mm in size, was identified (Figure **1**). This was positioned in the area adjacent to the previously documented patch of carcinoma. EUS-guided fine-needle aspiration (FNA) was not carried out due to concern regarding contamination from the needle as it traversed the cancerous mucosa. Endobronchial ultrasonography (EBUS) was therefore used to sample the suspicious lymph node (Figure **2**). With ultrasound guidance using the EBUS scope, the periesophageal lymph node was identified and sampled, and the cytology findings showed that it was negative for malignancy. The patient underwent a transhiatal esophagectomy. The final pathological assessment revealed severe dysplasia or squamous-cell carcinoma in situ in the esophagus. The periesophageal and perigastric lymph nodes were free of tumor.

The presence of peritumoral lymphadenopathy detected on EUS examination poses a challenge in the staging of esophageal cancer. The endosonographic appearance of the lymph nodes alone cannot reliably predict the likelihood of malignant infiltration, and FNA is often necessary [1–3]. However, as the needle passes through the primary tumor during FNA, a positive result is difficult to interpret.

Since the introduction of EBUS in 1992, the technique has been limited to the staging of pulmonary malignancies [4]. The new indication for EBUS described here allows the detection of malignant cells in lymph nodes without the risk of contamination from the primary tumor and eliminating the risk of tumor seeding into a lymph node. This technique is particularly important during planning for nonsurgical treatments such as photodynamic therapy, as the presence of malignant nodes would preclude such interventions [5].

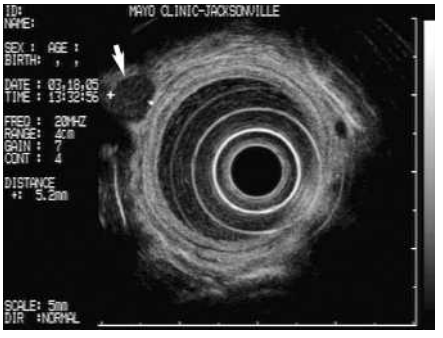

Figure **1** The endoscopic ultrasound image shows a round, hypoechoic lymph node with sharp margins, 5.2 mm in size (arrow).

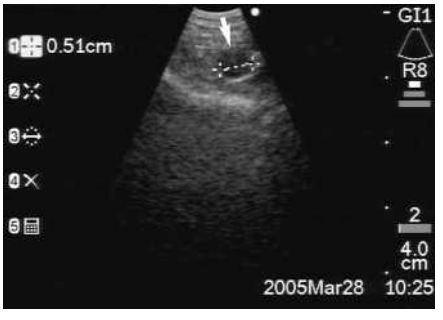

Figure **2** The endobronchial ultrasound image shows a round, hypoechoic lymph node with sharp margins, 5.1 mm in size (arrow).

Competing interests: None

K. W. Noh, M. B. Wallace, J. M. Pascual, H. C. Wolfsen, M. Raimondo, T. A. Woodward
Division of Gastroenterology and Hepatology and Division of Pulmonary Diseases, Mayo Clinic, Jacksonville, Florida, USA.

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Corresponding Author

T. A. Woodward, M.D.
Division of Gastroenterology and Hepatology, Mayo Clinic
4500 San Pablo Road
Jacksonville
FL 32224, USA
Fax: 904-953-7260
E-mail: woodward.timothy@mayo.edu

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