

Letters to the Editor

Transesophageal Endobronchial Ultrasound-Guided Fine-Needle Aspiration[☆]***Punción-aspiración transesofágica guiada por ecobroncoscopio****Dear Editor:*

The methodology for the diagnosis and mediastinal staging of lung cancer has evolved considerably with the introduction of digestive endoscopic ultrasound (EUS-FNA) and later on with endobronchial ultrasound (EBUS-TBNA). However, the use of two different instruments requires the purchase and maintenance of expensive equipment, and two different specialists are needed. In order to resolve these problems and simplify the procedure, the use of one single instrument, endobronchial ultrasound, has recently been proposed in both its tracheal as well as esophageal approaches.^{1,2} Transesophageal endoscopic ultrasound with bronchoscope-guided fine-needle aspiration, also known as EUS-B-FNA,³ can be done by the bronchoscopist at the same time as the endobronchial ultrasound. We present the first experience

with transesophageal endobronchial ultrasound published in our country.

EUS-B-FNA was carried out in three patients with conscious sedation using a BF-UC160F model (Olympus, Tokyo, Japan). The first case corresponded with a 69-year-old male with a history of COPD and chronic respiratory insufficiency, in whom there was suspicion for esophageal neoplasm in spite of two negative endoscopies. Computed axial tomography (CAT) found evidence of a subcarinal adenopathy, measuring 1.79 cm × 1.01 cm, in addition to thickening of the wall in the distal third of the esophagus. The endobronchial ultrasound directed at the adenopathy in area 7 had to be suspended due to intense dyspnea and desaturation. EUS-B-FNA was carried out a second time, identifying a periesophageal mass measuring 2.35 cm at 35 cm from the dental arch, as well as the subcarinal lymphadenopathy. After transesophageal aspiration of both lesions, the cytological diagnosis was esophageal epidermoid carcinoma with mediastinal lymph node extension. The other cases were two males, aged 68 and 81, each with lung masses in the upper left lobe near the esophagus. In these two patients, both the bronchoscopy as well as the endobronchial ultrasound offered,

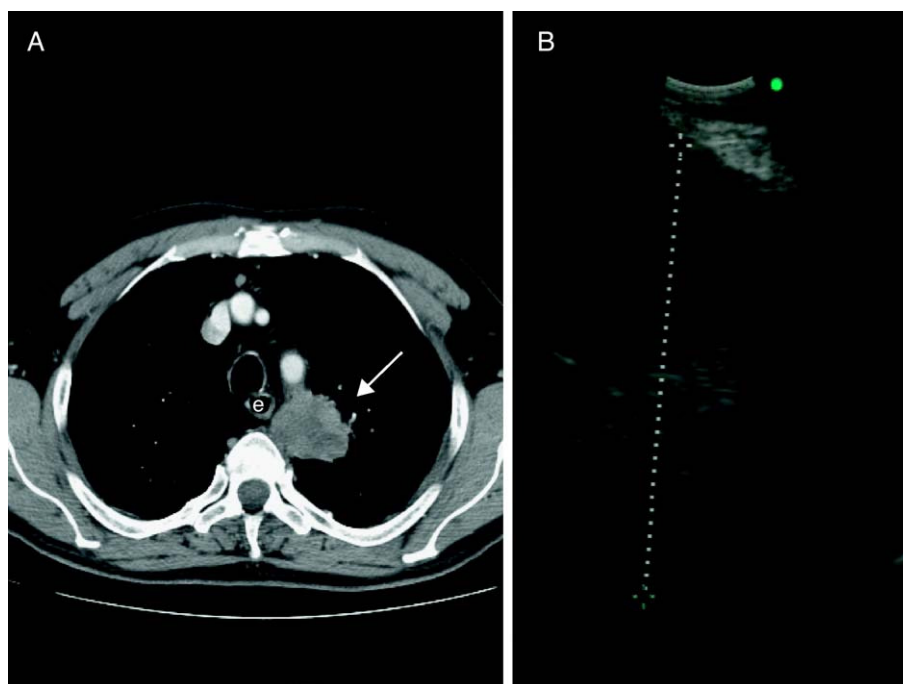


Fig. 1. (A) Computed tomography showing a mass (arrow) in the left upper lobe, next to the esophagus (e). (B) Ultrasound image of the mass through the esophagus.

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a priori, a low probability of the diagnosis. Therefore, in the same session, EUS-B-FNA was performed. By means of this technique, lung lesions were identified at 24 and 21 cm, respectively, from the dental arch. The results of the transesophageal needle biopsy revealed epidermoid carcinoma in the first case (Fig. 1) and adenocarcinoma in the second.

EUS-B-FNA has a diagnostic performance similar to digestive endoscopic ultrasound in staging the mediastinum^{1,2} while reducing the initial investment, costs of the procedure and technique time.⁴ However, current endobronchial ultrasound is not able to access extrathoracic locations and has less ultrasound resolution and penetration than digestive endoscopic ultrasound, whose scan range is much wider.¹ Therefore, it has been proposed to develop a specific hybrid endobronchial ultrasound that is somewhat longer and incorporates some minor design changes, such as the variable adjustment of the needle.²

In addition to the benefits from a logistic standpoint, another advantage of the esophageal use of the endobronchial ultrasound is its being better tolerated than the tracheal approach in patients with severe cough despite adequate sedation and in individuals with compromised lung function,⁴ as in the case number 1 that we have provided. Currently, EUS-FNA constitutes the preferred method for the staging of esophageal cancer,⁵ and the possible role of EUS-B-FNA in this situation is not known. The use of the endobronchial ultrasound through the esophagus for the needle aspiration of lung masses has only been reported in three cases of the first series by Hwangbo et al.³ In the latter two cases of our paper, the diagnosis of bronchogenic carcinoma was obtained by means of EUS-B-FNA in the same session as the bronchoscopic techniques and with one single operator, which avoided further explorations.

Endobronchial ultrasound, used with both tracheal and esophageal approaches, offers almost complete staging of the

mediastinum with one instrument and in just one session.⁴ In addition, in the same way that endobronchial ultrasound has demonstrated its utility in establishing the primary diagnosis of lung cancer,⁶ transesophageal needle aspiration guided by endobronchial ultrasound could be applied to the same end, either as an initial technique or after performing bronchoscopic explorations.

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Exposure to Second-hand Smoke and Dental Caries in Children[☆]

Exposición pasiva al tabaco y caries dental de los niños

Dear Editor:

In 1986, the report of the US Surgeon General and the National Research Council showed the available evidence about the adverse effects of passive exposure to tobacco smoke and health in children.¹ Later reports identified more effects of second-hand smoke in children and indicated that this exposure was the cause of numerous consequences in exposed children.²

There is conclusive evidence of the relationship between the passive exposure to tobacco smoke and the presentation of respiratory symptoms.^{3,4} We present in this study the increased risk for dental caries in both primary as well as permanent teeth in children whose parents are smokers.

In a sample of 281 children aged 5–14 who were seen consecutively in a primary care center and in whom we initially were studying the relationship between the presence of caries with dental hygiene and dietary habits,⁵ we would like to show the results that we have found with regards to the exposure to parental tobacco

smoke and the presence of caries in their children. The dental examination was done by two dentists in accordance with the methodology of the World Health Organization. By means of structured questionnaires, we determined the frequency of brushing, consumption of sweets and tobacco use of the children's parents. After the descriptive study, a multivariate logistic regression analysis was done, using the presence or absence of caries as a dependent variable, both in primary as well as in permanent teeth. Table 1 demonstrates that the prevalence of caries in the univariate analysis increases progressively as tobacco habit increases among the parents of the children, going from 12.4% in children whose parents do not smoke to 28.3% if both parents smoke, in permanent teeth. The same phenomenon is observed in primary teeth, going from 21.6% to 34.8%. After the multivariate analysis, adjusting for age, consumption of sweets, frequency of brushing and exposure to second-hand smoke, a progressive increase in the risk for caries is observed, which, although did not reach statistical significance, is consistent with studies that show the increase in the risk for caries with the exposure to tobacco smoke.⁶ These data suggest a dose–response effect between the tobacco habit of the parents and the probability of having caries consistent with what is known regarding physiopathological mechanisms of and their biological plausibility.

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