

Are We at the Dusk of Mediastinoscopy in Modern Clinical Practice?

To the Editor:

We read with great interest the article by Um et al.,¹ reporting on a prospective trial in a tertiary referral center to compare the diagnostic performance of endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) with that of mediastinoscopy for nodal staging of patients with non-small-cell lung cancer (NSCLC).

Treatment and prognosis in lung cancer is critically dependent on stage. In the absence of distant metastases, mediastinal staging becomes vital for the correct management of NSCLC. By the way, according to recent American College of Chest Physicians and European Society of Thoracic Surgeons guidelines, minimally invasive endoscopic techniques are the first choice if local expertise with EBUS/endoscopic ultrasound (EUS) needle aspiration is available.^{2,3}

Although mediastinoscopy is considered the diagnostic standard, several meta-analyses^{2,4} stated the diagnostic sensitivities of EBUS-TBNA range from 88% to 93%, comparable to those of traditional mediastinoscopy (78%) and video-assisted mediastinoscopy (89%).

In this setting, the abovementioned study strongly supports the diagnostic performance of EBUS-TBNA in mediastinal staging of cN1–N3 with a sensitivity and negative predictive value (NPV) of 88% and 85.2%, respectively, versus 81.3% and 78.8% of mediastinoscopy.

Accordingly, we wish to submit our reflections to foster brainstorming on the strategy for proper work up in mediastinal staging of NSCLC.

Recently, Evison et al.⁵ proposed and validated a risk stratification model

for lymph nodes classified as negative by EBUS-TBNA. This model combined positron emission tomography (PET)-computed tomography and EBUS data to stratify patients into high and low risk for nodal malignancy. According to the authors, this model could aid lung cancer multidisciplinary teams in deciding which patients need further staging procedures after a negative EBUS and which not.

But staging pathway is heavily marked by local expertise and proficiency of EBUS operators.

So, while in referral center for NSCLC, EBUS-TBNA should be the first-choice procedure performed in nodal staging and more invasive mediastinoscopy should be reserved to fewer patients (those with a negative TBNA but high suspicion of malignancy according to PET-computed tomography/EBUS data—high-risk patients in Evison's model—and multidisciplinary team decision), in case of less-experienced groups the sensitivity of EBUS could be lower. Therefore, mediastinoscopy is still recommended in this contest.

Are we at the dusk of mediastinoscopy in staging of cN1–N3 NSCLC in modern clinical practice in experienced center?

Or is mediastinoscopy still a diagnostic standard above all in cN0?

By the way, though recent guidelines also recommended nodal sampling in case of centrally located tumor with PET-negative nodes or in case of 5 mm nodes, the diagnostic performance of EBUS-TBNA is not yet proven in these. So mediastinoscopy could be an important validation tool of EBUS-TBNA results.

On the basis of the data reported, we would really appreciate the authors' reflections and reaction on the impact of EBUS-TBNA in NSCLC staging and the role of mediastinoscopy on modern clinical practice.

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Reply to “Are We at the Dusk of Mediastinoscopy in Modern Clinical Practice?”

An Irresistible Trend

In Response:

At 2010, the lung cancer team of Samsung Medical Center agreed to begin the prospective study to directly compare the endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) with mediastinoscopy

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