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Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is a minimally invasive procedure for tissue sampling of mediastinal lesions. One important indication is the differentiating between benign and malignant causes of mediastinal lymphadenopathy among patients with extra-thoracic malignancy. It is recommended by guidelines as the technique of choice for the preoperative invasive mediastinal staging of nonsmall cell lung cancer (NSCLC)¹. EBUS-TBNA can provide both a diagnosis and mediastinal lymph node stage for patients with suspected advanced NSCLC.

The diagnostic yield of EBUS-TBNA depends on several factors. So, it is important to have uniform guidelines regarding technical aspects and optimal performance of EBUS-TBNA²⁻⁴. An increase of sensitivity of EBUS-TBNA in mediastinal staging of NSCLC was noted when performing a systematic sampling over a more limited approach⁵⁻⁶. EBUS sampling must be initiated at N3 regions, followed by N2 and N1 regions. There are different studies focused on the use of Rapid On-Site Evaluation (ROSE) in EBUS-TBNA in patients with suspected lung cancer⁷. ROSE is highly concordant with the final diagnosis, and it may reduce the number of additional procedures⁸.

The possibility to perform molecular testing on most cytological samples obtained by EBUS has been demonstrated in several studies⁹⁻¹¹.

In conclusion, EBUS-TBNA is a widely accepted tool for the diagnosis, staging and molecular analysis of lung cancer patients.

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