Letters to the Editor

TBNA or EBUS-TBNA? That is the Question

Punción transbronquial con o sin EBUS: esta es la cuestión

Dear Editor:

To begin with, we would like to congratulate Sánchez de Cos et al.1 for their initiative and invaluable contribution in the diagnosis of lung cancer extension, which is such an important field of thoracic oncology.

It is undeniable that endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is an important advancement in the diagnosis of mediastinal extension of lung cancer. Nevertheless, occasionally the enthusiasm for this new method can obscure its merits. Some affirmations made by the authors about the role of transbronchial needle aspiration and EBUS in the nonsurgical diagnosis of mediastinal extension have led us to certain contemplations, as explained below.

In a cited publication comparing transbronchial needle aspiration with EBUS-TBNA, it is mentioned that these methods are associated with the same diagnostic precision in the subcarinal station, and the observation made is that, according to authors, EBUS significantly increases the performance of transbronchial needle aspiration in all the stations except the subcarinal region. The data presented in this study do not seem to back this conclusion that favors EBUS.2

In this analysis, two facts are clear. First of all, the article indicates that the lymph nodes at station 5 (aortopulmonary window) were aspirated, which clearly is not possible with EBUS.2

In addition, without a doubt the overall results of a greater precision of EBUS-TBNA are determined by the superiority of EBUS in stations 2, 3 and 5 (APW). The numbers presented for the diagnostic performance in station 4 did not show any difference, regardless of whether transbronchial needle aspiration or EBUS-TBNA was used.2

Furthermore, the research by Sánchez de Cos et al.1 cite a meta-analysis that reviews 11 studies which include 1299 patients and indicate that EBUS is associated with an overall sensitivity of 93%, which increases up to 97% with the immediate availability of a cyologic diagnosis. Although our initial series of 50 cases with EBUS is still not representative, the said levels seem excessively optimistic in favor of EBUS.

The review of the 11 studies included in said meta-analysis shows substantial methodological inconsistencies. One of the studies does not specify what mediastinal lymph node stations were analyzed, while another two affirm having aspirated the lymph nodes of station 5, which is not possible with EBUS, as previously mentioned. Ultrasound of the mediastinum is complex.4

Moreover, ideally the gold standard for confirming the results obtained should be surgical methods. Nevertheless, in 8 of said EBUS studies, part of the patients included had only been followed-up clinically. Although we admit that there are difficulties in subjecting all the patients to a surgical treatment during a series of cases, clinical follow-up may not be the best method for this objective.

Confirming this impression, one of the most consistent studies among those published, developed in our greatly experienced center in a series of 226 cases, accepts a sensitivity of 89% for EBUS and a specificity of 100%, but it reveals that this method is associated with a negative predictive value of 83.5%.5

As all these results were verified twice, first by transcervical extended mediastinal lymphadenectomy and afterwards with mediastinal dissection during surgical thoracotomy, it would be difficult to surpass these degrees of precision.

Once more, we would like to thank the authors for their important contribution.

References


Miguel L. Tedde, a,*, Evelinda Trindade, b Helio Minamoto a

a Departamento de Cirugía Torácica, Instituto de Coração (InCor), Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo, São Paulo, Brazil
b Evaluación de Tecnologías Sanitarias, Dirección Ejecutiva, Instituto de Coração (InCor), Hospital das Clínicas, Faculdade de Medicina, Universidade de São Paulo, São Paulo, Brazil

* Corresponding author.
E-mail address: tedde@usp.br (M.L. Tedde).

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