

Mediastinoscopy: looking beyond lung cancer staging

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While staging of lung cancer remains the leading indication for the use of mediastinoscopy, its utility is equally applicable to diagnosis of mediastinal lesions unrelated to bronchogenic carcinoma (1,2). The authors present a multitude of disease processes presenting with mediastinal adenopathy where obtaining tissue diagnosis is paramount. For these patients, as presented by the authors, expeditious diagnosis prevents further unnecessary evaluation and allows appropriate treatment initiation, few of which are surgical.

Although endobronchial ultrasound-guided fine-needle aspiration (EBUS-FNA) has become more prevalent, occasionally a definitive diagnosis cannot be obtained with this method, particularly in cases of suspected lymphoma (3). EBUS-FNA has proven to be a highly user-dependent modality. In this study, roughly 20% of patients who ultimately received a mediastinoscopy had undergone previous non-diagnostic transbronchial biopsy. Sarcoidosis, on the other hand, is typically readily amenable to EBUS-FNA to achieve the diagnosis. As the authors point out, however, in regions such as theirs where infectious granulomatous diseases such as tuberculosis are prevalent, mediastinoscopy allows for a more definitive diagnosis of sarcoidosis. This manuscript shows that mediastinoscopy has a reliable yield in experienced hands.

Similarly, the authors' documented rate of complications is comparable to low rates reported in other large series. Part of this may have to do with the preferential biopsy of lymph nodes at the right paratracheal stations (2R, 4R), rather than the subcarinal [7] or left paratracheal nodes (2L, 4L). Although this is not stated in the manuscript, experienced mediastino scopists know that the recurrent laryngeal nerve is at risk at the left paratracheal stations, and that the subcarinal nodes are more prone to intraoperative bleeding (4). When not performing a "staging" mediastinoscopy for lung cancer, accessing representative abnormal lymph nodes located in the right paratracheal vicinity likely harbors lower risk than biopsy of the left paratracheal and subcarinal stations, and is sufficient for diagnosis. The authors report no instances of recurrent laryngeal nerve injury, reoperation for hematoma, or need for sternotomy to control bleeding (5). Given their excellent clinical results, we would argue that the routine 24-hour hospital stay advocated by the authors may not be necessary.

Mediastinoscopy can be safely applied to the broad range of inflammatory and infectious etiologies of mediastinal lymphadenopathy (6). Continued practice of and experience with EBUS-FNA will allow for further improvements in the diagnosis of mediastinal lesions. Nevertheless, mediastinoscopy remains a necessary tool in the arsenal of the thoracic surgeon to readily diagnose a variety of benign and malignant diseases of the mediastinum.

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