

References

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Endoscopic Ultrasound in the Diagnosis of Sarcoidosis: A Forgotten Tool?

To the Editor:

With keen interest, we read the guidelines for the diagnosis and detection of sarcoidosis by Crouser and colleagues in a recent issue of the *Journal* (1). We congratulate the authors for achieving this daunting task of formulation of guidelines for sarcoidosis. The authors have extensively elaborated on the role of endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) in the diagnosis of sarcoidosis. However, the document lacks the discussion on the utility of fine-needle aspiration using endoscopic ultrasound (EUS-FNA) as well as endoscopic ultrasound using echobronchoscope (EUS-B-FNA).

EUS-FNA is a real-time fine-needle aspiration procedure, through the esophagus, providing access to left paratracheal, subcarinal, and paraesophageal lymph node stations. It is a highly sensitive, accurate, fast, safe, and minimally invasive method. Its diagnostic yield for sarcoidosis varies between 77% and 94% (2, 3). Randomized trials comparing EBUS-TBNA and EUS-FNA have either shown a similar yield or a higher yield of EUS-FNA (4, 5). EUS-B-FNA has also been demonstrated to have a comparable yield as EBUS-TBNA in a randomized trial (6). The sensitivity of the endosonography for diagnosing sarcoidosis was 85% overall, 84% for EBUS-TBNA, and 87% for EUS-B-FNA. Oki and colleagues also demonstrated a diagnostic yield of 86% with EUS-B-FNA in 29 patients for the diagnosis of stage I and II sarcoidosis (3). The procedure is better tolerated in patients with reduced lung function and intractable cough. The reduced need for sedatives and topical anesthesia as well as reduced procedure duration are the added advantages of EUS-B-FNA compared with EBUS-TBNA (6). The training required for EUS-B-FNA is also

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minimal for a trained interventional pulmonologist, and the procedure can be performed using the same echobronchoscope circumventing the additional expenditure of involving a gastroenterologist.

Meta-analysis comparing overall diagnostic yield and safety of EUS-B-FNA combined with EBUS-TBNA in the diagnosis of mediastinal lymphadenopathy demonstrated an additional diagnostic gain of 7.6% in EUS-B-FNA over EBUS-TBNA (7). The procedure is also considered safe, and a meta-analysis demonstrated a complication rate of 0.30% after EUS as compared with 0.05% in the EBUS group. Most of the reported complications were in patients with lung cancer, and the complication rate was even lower for sarcoidosis (8). The advantage of EBUS-TBNA over EUS-B-FNA is its higher reach for mediastinal lymph node stations so that a multistation sampling can be done.

Keeping these points in mind, we are of the view that sampling of mediastinal lymph nodes for the diagnosis of sarcoidosis may be performed with either EBUS-TBNA or EUS-(B)-FNA depending on the operator's comfort, the patient's general status, involved lymph node stations (7 and 4L), and equipment availability. ■

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8 Tissue Sampling in Suspected Sarcoidosis: Can We Avoid Mediastinal Procedures?

To the Editor:

We read with interest the recent American Thoracic Society clinical practice guidelines (1) for the diagnosis and detection of sarcoidosis. We are grateful to the guideline group for producing an important evidence-based document to guide clinicians across the world.

We would like to comment on the recommendation about tissue sampling for patients with suspected sarcoidosis on the basis of mediastinal and/or hilar lymphadenopathy, which forms Question 2 of the document: Should Patients with Suspected Sarcoidosis and Mediastinal and/or Hilar Lymphadenopathy, for Whom It Has Been Determined That Tissue Sampling Is Necessary, Undergo EBUS-guided Lymph Node Sampling or Mediastinoscopy as the Initial Mediastinal and/or Hilar Lymph Node Sampling Procedure?

The committee has recommended endobronchial ultrasound (EBUS)-guided lymph node sampling—rather than mediastinoscopy—as the initial procedure of choice to use the relatively less invasive of the two procedures. However, we believe that there is scope for an even lesser invasive approach in the scenario addressed in Question 2, applicable to a significant fraction of patients.

We have recently evaluated our experience (2) of performing ultrasound-guided core-needle biopsy of cervical lymph nodes in 25 patients suspected of sarcoidosis who had mediastinal and/or hilar lymphadenopathy on thoracic computed tomographic scans. It is important to note that the lymph nodes sampled following ultrasound were not generally enlarged, many with a short axis dimension <10 mm, and that in many cases, the lymph nodes were sonographically normal. Where a neck node could be biopsied, granulomatous inflammation was nearly always confirmed.

This technique is considerably cheaper than either EBUS-transbronchial needle aspiration or mediastinoscopy and less invasive than either. We therefore would strongly recommend that neck ultrasound be considered a first-line tool when pulmonologists are confronted with a patient with lymphadenopathy and tissue sampling is considered necessary to confirm granulomatous inflammation.

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Moreover, the approach may have value (on a case-by-case basis) in the scenario posed in Question 1: Should Lymph Node Sampling Be Performed in a Patient Presenting with Asymptomatic Bilateral Hilar Lymphadenopathy? As these patients may be reluctant to undergo mediastinal procedures because of invasiveness and risk of complications, ultrasound assessment with a view to cervical lymph node sampling would be more acceptable.

We would recommend that pulmonologists and radiologists be more widely aware of the advantages of this approach and feel that dissemination of this option as an initial diagnostic modality could benefit a large number of patients and offer cost savings.

Finally, and importantly, it provides an attractive option during the current coronavirus disease (COVID-19) pandemic as a diagnostic modality with a lower crossinfection risk. ■

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Confirmatory Tissue Sampling in Clinical Stage I Sarcoidosis



To the Editor:

A policy of tissue verification of stage I sarcoidosis (S1S) in subjects presenting with asymptomatic bilateral hilar lymphadenopathy (ABHL) to identify an alternative diagnosis (AD) simulating S1S that might be materially benefited by earlier diagnosis (lymphoma or tuberculosis [TB]) appears to be a self-evident, categorical good. This view was challenged by Winterbauer and colleagues on grounds that ABHL is such a stereotypical feature of sarcoidosis that one can

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