EUS-guided biopsy (EUS-TCB) in patients with a suspicious of lymphoma referred from an hematology-oncology ward

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Background (I)

- EUS-guided trucut biopsy (EUS-TCB) was recently developed to overcome some of the limitations of EUS-FNA.

- The available studies have largely been performed on heterogeneous patient populations, leading to controversial opinions on the utility of this procedure.
Background (II)

- It would be important to characterize the subset of patients who would benefit from EUS-TCB the most.

- In patients with mediastinal or abdominal findings suspicious for lymphoma, EUS-TCB may represent a minimally invasive procedure to retrieve a tissue specimen that can allow for an accurate diagnosis and subtype classification.
Aims

- To evaluate the efficacy of EUS-TCB in patients with suspected mediastinal or abdominal lymphoma referred from an hematology-oncology ward
Patients and Methods

- All consecutive patients with mediastinal or abdominal findings suspicious for lymphoma who were referred to us over 1 year period.

- Transesophageal or transgastric EUS-TCB using the QuickCore trucut 19-gauge needle (Cook Endoscopy, Winston-Salem, NC) was performed as previously described\(^1\).

- EUS-TCB malignant histology was considered diagnostic. In all the other cases further procedures were used to establish the definitive diagnosis.

Fourteen patients (mean age 47 ± 15; M/F 8/6) with mediastinal (9) or abdominal (4) lymphadenopathy and with a pancreatic body mass (1) underwent the procedure. Mean size of the lesions was 32 ± 17 mm (range 13 to 70). Mean number of needle passes performed per patient was 2 (range 1 to 3). Tissue was obtained in all patients. No complications occurred.

Results (I)
Results (II)

<table>
<thead>
<tr>
<th>EUS-TCB</th>
<th>Malignant</th>
<th>Benign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malignant</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Benign</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Definitive Diagnosis

Overall Diagnostic accuracy: 86%

True positive: Lymphoma (5), mesenchimal tumor, poorly differentiated adenoCa.
True negative: Sarcoidosis (2), reactive (3)
False negative: Lymphoma (2)
Conclusions

- EUS-TCB is a safe and highly effective modality for the evaluation of patients with suspected mediastinal or abdominal lymphoma.

- In this patient population, minimally invasive EUS-TCB should be considered the first-line procedure to obtain a definitive diagnosis.