Accuracy of diagnosis of eosinophilic esophagitis by endoscopic appearance

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BACKGROUND

Eosinophilic esophagitis (EoE) is a chronic gastrointestinal disease characterized by an eosinophil-predominant inflammatory response. A variety of characteristic findings visualized during endoscopy are suggestive of a diagnosis of EoE, including linear furrows, felinization, white plaques, and strictures, however, esophageal biopsy is required for definitive diagnosis of EoE. In this study, we retrospectively analyzed the accuracy of diagnosis of EoE based on esophageal endoscopic appearance as compared to esophageal biopsy results.

METHODS

A retrospective chart review of endoscopy and histology results was obtained from a single center. Endoscopies and esophageal biopsies performed on patients with suspected diagnosis of EoE were included in this study. 596 endoscopies and resultant histology were reviewed.

RESULTS

<table>
<thead>
<tr>
<th>Endoscopic Evaluation</th>
<th>&gt;15 eosinophils per hpf on histology</th>
<th>&lt;15 eosinophils per hpf on histology</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endoscopic evaluation suspicious for dx of EoE</td>
<td>284</td>
<td>159</td>
<td>443</td>
</tr>
<tr>
<td>Endoscopic evaluation not suspicious for dx of EoE</td>
<td>88</td>
<td>65</td>
<td>153</td>
</tr>
</tbody>
</table>

- Sensitivity of endoscopic evaluation to detect a diagnosis EoE = 76.34%
- Positive predictive value = 64.10%
- Negative predictive value = 42.48%

CHARACTERISTIC ENDOSCOPIC FINDINGS OF EOE

- Esophageal rings
- Esophageal rings with focal stricture
- Exudates
- Longitudinal furrows

CONCLUSIONS

Although characteristic findings of EoE may cue an endoscopist toward a possible diagnosis of EoE, esophageal biopsies are necessary in order to obtain a definitive diagnosis. The results of this study support obtaining esophageal biopsies during upper endoscopy for complete evaluation of EoE.

REFERENCES


