Endoscopic Appearance of Eosinophilic Esophagitis

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Abstract

Eosinophilic esophagitis is rising in incidence. Patients usually present with dysphagia and food impaction. Typical endoscopic features for eosinophilic esophagitis are circular rings, linear furrows, whitish papules, and plaques. Biopsies to confirm the diagnosis should be taken from the distal, mid, and proximal part of the esophagus. This article is part of an expert video encyclopedia.

Keywords

Dysphagia; Eosinophilic esophagitis; Standard endoscopy; Video.

Video Related to this Article

Video available to view or download at doi:10.1016/S2212-0971(13)70011-6

Technique

High-definition white-light endoscopy.

Material

- Endoscope: EG-530 WR and EG-590 WR; Fujinon Europe, Hamburg, Germany.

Background and Endoscopic Procedure

Eosinophilic esophagitis is defined as a chronic, immune- or antigen-mediated, esophageal disease characterized clinically by symptoms related to esophageal dysfunction and histologically by eosinophil-predominant inflammation. The most common symptom of eosinophilic esophagitis in adults is dysphagia. Patients frequently present with dysphagia. Several studies have shown that the incidence is rapidly increasing and the prevalence is estimated to be 55 of 100 000.5-4

Typical endoscopic findings of eosinophilic esophagitis are circular rings, linear furrows, whitish papules as a correlate of eosinophilic microabscesses, and strictures. Some patients present with a small-caliber esophagus.

Diagnosis of eosinophilic esophagitis is a combination of symptoms, typical endoscopic appearance, and a confirmation by histology. Biopsies should be taken after treatment with proton pump inhibitors from the distal, mid, and proximal esophagus (at least two from each level) and should be put into separate containers. For the diagnosis of eosinophilic esophagitis ≥15 eosinophils per high-power field are required.5

Patients are usually treated with topical corticosteroids to decrease inflammation. In case of strictures or small-caliber esophagus, careful bougienage or dilation can be performed. After dilation, mucosal tears are frequently observed. However, the risk of perforation does not seem to be higher than in patients with other indication for dilation therapy.

Tips and Tricks

- In patients with dysphagia, without obvious causes, the endoscopist should look for typical but often subtle signs of eosinophilic esophagitis.
- Biopsies should be taken in the distal, mid, and proximal esophagus.
- Pharmacological treatment usually consists of proton pump inhibitors and topical corticosteroids.
- Dilation or bougienage should be reserved for patients with severe strictures and small-caliber esophagus.

Scripted Voiceover

<table>
<thead>
<tr>
<th>Time</th>
<th>Voiceover text</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00</td>
<td>This is a 41-year-old patient presenting with food impaction and dysphagia. As you can see, several mucosal abnormalities can be found.</td>
</tr>
<tr>
<td>00:12</td>
<td>Linear furrows can be observed in the mid and distal part of the esophagus. Those furrows are typical signs of eosinophilic esophagitis. But be careful. They can also sometimes be seen in patients with reflux esophagitis.</td>
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<tr>
<td>00:35</td>
<td>A further sign of eosinophilic esophagitis are whitish plaques, as seen here in the mid and distal esophagus.</td>
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<tr>
<td>00:57</td>
<td>The third typical feature of eosinophilic esophagitis are circular rings, as seen here in the proximal esophagus. The whitish surface on the rings suggests that this was the site of the food impaction.</td>
</tr>
</tbody>
</table>

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01:12 This is another patient with eosinophilic esophagitis. Multiple small whitish papules can be observed here. These are eosinophilic microabscesses – also a typical sign.

01:24 In addition, longitudinal furrows are also found, as you can see here.

02:04 Furrows can often be very subtle and can easily be overlooked. In patients with typical symptoms, chromoendoscopy with indigo carmine can help to visualize those subtle furrows.

References


