Lymphocytic esophagitis mimicking eosinophilic esophagitis

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Abstract
A 74-year-old male with a history of dysphagia for 3 years presented with acute food impaction. Endoscopy showed a tight distal stricture with course rings at the middle third of the esophagus. Biopsies taken from the middle third of the esophagus showed marked infiltration of the intraepithelial lymphocytes mainly in a peripapillary distribution. The immunostains showed presence of CD3 and CD5 lymphocytes (T cell markers) in the epithelium. Lymphocytic esophagitis is a histologic phenotype of esophagitis diagnosed by marked esophageal lymphocytosis mostly in a peripapillary distribution with no or only rare intraepithelial granulocytes and presenting similar to eosinophilic esophagitis with dysphagia and esophageal rings.

Keywords lymphocytic esophagitis, eosinophilic esophagitis, dysphagia

Introduction
A novel histologic subset of chronic esophagitis, called lymphocytic esophagitis, has been recently reported. Lymphocytic esophagitis is a histologic phenotype of esophagitis characterized by high numbers of intraepithelial lymphocytes gathered mainly in a peripapillary distribution and by none or occasional intraepithelial granulocytes. Rubio et al. was the first to describe lymphocytic esophagitis as an independent entity. In his study he found high numbers of intraepithelial lymphocytes (IELs) in the peripapillary fields in esophageal biopsy specimens of patients with lymphocytic esophagitis [1]. Much lower numbers of IELs were found in the interpapillary fields. This contrasted with the distribution of IELs in reflux, radiation, and Candida albicans esophagitis in his study; in such cases the number of interpapillary IELs highly exceeded that recorded in peripapillary areas. The true causes for this apparently site-related chronic mucosal inflammation remain unknown. We present a case of a 74 year old man having recurrent dysphagia who presented with acute food impaction with endoscopy showing rings in the esophagus with high number of intraepithelial lymphocytes in the peripapillary fields in the biopsy. Thus the clinical and endoscopic findings were mimicking that of eosinophilic esophagitis.

Case report
A 74-year-old male with a history of 3 years duration of dysphagia presented with acute food impaction. The patient had a history of lymphoma and esophagitis with stricture...
middle third of the esophagus showed marked infiltration
of exclusive intraepithelial lymphocytes in a peripapillary
distribution (Fig. 2). There was no eosinophilic component,
thus ruling out eosinophilic esophagitis.

The immunostains showed presence of CD3 and CD5
lymphocytes (T cell markers) in the epithelium (Fig. 3). The
specimen was negative for CD 20 lymphocytes (B cell marker).
The esophageal manometry showed diffuse esophageal spasm
with partial relaxation of the lower esophageal sphincter.
The patient had prior chemotherapy for non-Hodgkin
lymphoma present in his nostril and leg. The lymphoma was
monoclonal B-cell CD20 positive. Thus, the lymphocytes
(CD3 and CD5) present in the esophageal epithelium are
distinct from the lymphoma (CD20). Four year follow up
with 5 endoscopies shows persistence of the endoscopic
and biopsy findings. The patient was dilated each time and
received botox twice.

Discussion

Lymphocytic esophagitis is a histologic phenotype of
esophagitis characterized by high numbers of intraepithelial
lymphocytes gathered mainly in a peripapillary distribution
and by none or occasional intraepithelial granulocytes [1,2].
The minimum number of lymphocytes per high power field
necessary to establish the diagnosis of lymphocytic esophagitis
has not been defined. Intraepithelial lymphocytosis of the
esophagus has been studied to a limited extent in the context
of specific diseases mainly in the pathology literature. Rubio
et al was the first to describe lymphocytic esophagitis as an
independent entity [1]. He concluded that the cause of this
apparently site related chronic mucosal inflammation remains
unknown. The presence of a high number of intraepithelial
lymphocytes especially peripapillary in location along with
the absence or presence of occasional granulocytes is an
important criterion distinguishing this condition from other
causes of esophagitis. In a recent pathology database from a
group of gastrointestinal pathologists, lymphocytic esophagitis
was seen in 119 patients out of 129,252 patients while 3745
patients had eosinophilic esophagitis and 40,665 had normal
mucosa [3]. Dysphagia was as common in the patients having
lymphocytic esophagitis as those in eosinophilic esophagitis
(53% vs. 63%, not significant). Endoscopic findings of rings
in the esophagus were seen in lymphocytic esophagitis and
eosinophilic esophagitis [3].

In the present patient, endoscopic features, rings,
mucosal fragility, mucosal splitting and perforation are
similar to those in eosinophilic esophagitis. We believe that
lymphocytic esophagitis is an emerging condition. It may
be under-reported by pathologists and under-recognized
by gastroenterologists and confused with eosinophilic
esophagitis. It may be considered in the evaluation of chronic
dysphagia. There are no published studies on therapy for
lymphocytic esophagitis.
References

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