PUERTO RICO PATHOLOGY
...your expert lab since 1954

GI PATHOLOGY UPDATE

E-SCOPE TO M-SCOPE

EOSINOPHILIC ESOPHAGITIS

Manuel A. Marcial, MD
mmarcial@prpathlab.com

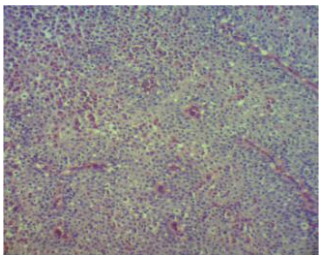

Figure 3. Active esophagitis with basal cell hyperplasia and abundant eosinophils (10X).

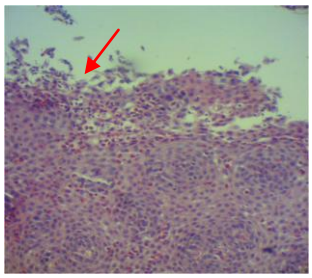

Figure 4. Eosinophils are more prominent on the mucosal surface. Superficial sloughing/desquamation is noted (arrow).

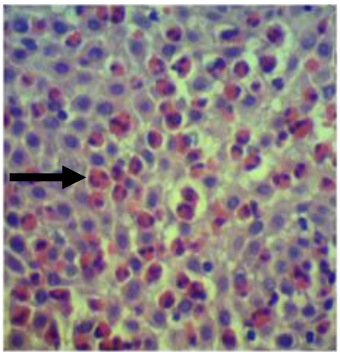

Figure 5. Eosinophils, greater than 20 per high power field, clustering into microabscesses (40X) (arrow).

Humberto Muñoz Rodriguez, MD
humberto_munoz@hotmail.com

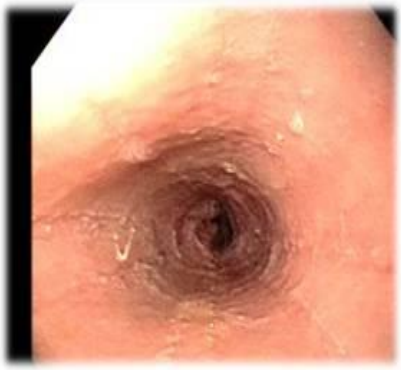

Figure 1

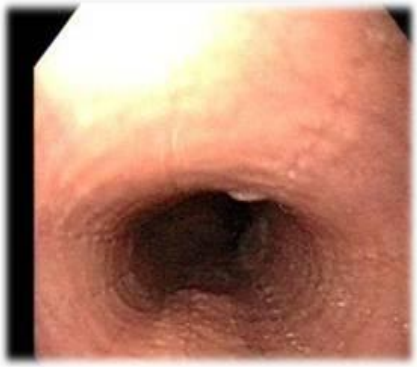

Figure 2

Case History:
33 year old male patient with a chief complaint of heartburn and belching for the past year. He refers occasional use of Zantac without complete resolution of the symptoms. The patient has a history of high blood pressure treated with Avalide and Toprol.

Endoscopic Findings: Mild antral erythema.Multiple tiny rings and linear furrows noted throughout the esophagus. (See figures 1 and 2)

Histologic Findings: Both proximal and distal esophageal biopsies revealed an esophagitis characterized by basal cell hyperplasia and increased eosinophils. (Fig. 3).Surface sloughing was present (Fig. 4). Eosinophils were greater than 20 per high power field and microabscesses were noted (Fig.5). The diagnosis of eosinophilic esophagitis was confirmed.

Discussion: Eosinophilic esophagitis (EoE) is a chronic, immune mediated, esophageal disease[1]. The clinical features in adults include a predominant young male population presenting with symptoms of heartburn, dysphagia and/or food impaction.

The endoscopic findings usually include either esophageal rings, linear furrows, strictures or whittish plaques. However, due to the poor diagnostic sensitivity of these endoscopic findings, their absence should not be relied upon to rule out a diagnosis of EoE (variable negative predictive value)[2]. Therefore, with the correct clinical index of suspicion, proximal and distal esophageal biopsies should always be procured. Furthermore, because of the focal or patchy nature of the histopathologic lesions, multiple biopsies should be obtained from both sites in order to ensure an accurate diagnosis[3].

The histologic finding of an esophagitis with increased intraepithelial eosinophils, many of them either degranulated or forming microabscesses, is confirmatory for the diagnosis of EoE. Increased eosinophils require at least 15-20 eosinophils in one microscopic high power field.

---

[1] Liacouras, CA. et.al Eosinophilic esophagitis:updated consensus recommendations for children and adults. J Allergy Clin Immunol. 2011; 128:3-20

[2] Kim, H. et. al The Prevalence and Diagostic Utility of Endoscopic Features of Eosinophilic Esophagitis: A Meta Analysis. Clinical Gastroenterology and Hepathology

[3] Shah A. et.al. Histopalogic variability in children with eosinophilic esophagitis. Ame. J Gastroenterol 209; 104:7116-721.