Watermelon esophagus: a new visual paradigm

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Abstract

A 35-year-old male with no prior medical history presented for evaluation of multi-year history of dysphagia to both solids and liquids. He underwent esophagogastroduodenoscopy revealing linear furrows with ring-like esophagus. Pathology of biopsies showed findings consistent with eosinophilic esophagitis (EoE). This is a newly recognized disease entity with a rapidly increasing prevalence that cannot be entirely accounted for by the increasing awareness in medicine. All patients with clinical suspicion of EoE should undergo esophageal biopsies regardless of endoscopic findings, as normal endoscopy can be seen in up to 17% of cases. Numerous non-specific endoscopic findings have been described, including trachealization, felinization, linear furrows, crepe paper mucosa, and longitudinal shearing. We present a unique and never-before seen image of EoE that accentuates the findings that may be seen endoscopically.

Case Report

A 35-year-old male with no prior medical history presented for evaluation of multi-year history of dysphagia to both solids and liquids. Laboratory data and modified barium swallow study were unrevealing of a cause of his dysphagia. After failure of an empiric eight-week trial of proton pump inhibitor therapy, he underwent esophagogastroduodenoscopy revealing linear furrows with ring-like esophagus. After biopsies were taken, mild bleeding accentuated the linear furrows, creating a *watermelon esophagus* appearance (Figure 1). Pathology of biopsies showed findings consistent with eosinophilic esophagitis.

Discussion and Conclusions

Eosinophilic esophagitis (EoE) is a primary clinico-pathologic disorder of the esophagus that is defined by clinical symptoms of esophageal dysfunction in addition to ≥ 15 eosinophils/high-power field on esophageal mucosal biopsy specimens.¹ EoE is a newly recognized disease entity with a rapidly increasing prevalence that cannot be entirely accounted for by the increasing awareness in medicine.¹ A high clinical suspicion is needed to make a diagnosis given the non-specific presenting symptoms, which may include dysphagia, food impaction, food aversion, heartburn, and chest pain.² All patients with clinical suspicion of EoE should undergo esophageal

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biopsies regardless of endoscopic findings, as normal endoscopy can be seen in up to 17% of cases.³ Numerous non-specific endoscopic findings have been described, including trachealization, felinization, linear furrows, crepe paper mucosa, and longitudinal shearing.¹ We present a unique and never-before seen image of EoE that accentuates the findings that may be seen endoscopically.

Figure 1. A) Trachealization of the esophagus with subtle linear furrows prior to biopsies; B) Esophagus with watermelon appearance after mid-esophageal biopsies.

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