A Unique Endoscopic Finding in an HIV/AIDS Patient with Dysphagia

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Abstract

Esophageal intramural pseudodiverticulosis (EIPD) is an uncommon condition that often presents with dysphagia and esophageal strictures. Here, we present a case of dysphagia due to EIPD in a patient with human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) and opportunistic *Candida* and cytomegalovirus (CMV) infections. Our patient's dysphagia resolved after treatment with PPI, antifungal, and antiviral therapy. Dysphagia is a common symptom that has a broad differential diagnosis, and EIPD should be considered, especially in HIV/AIDS patients.

Introduction

There are many etiologies of dysphagia in patients with HIV/AIDS, including infection, structural issues, or medications. A broad differential is needed to properly diagnose and treat these patients. Here, we present a case of dysphagia in an HIV/AIDS patient related to esophageal intramural pseudodiverticulosis (EIPD).

Case Description/Methods

A 58-year-old man with HIV/AIDS presented with a 2-week history of dysphagia. He had been non-compliant with highly active antiretroviral therapy (HAART), and his CD4 count at presentation was noted to be < 20. His past medical history was notable for hypertension, chronic kidney disease, *Candida* esophagitis, and Mallory-Weiss syndrome. He underwent an esophagogastroduodenoscopy (EGD), which revealed numerous outpouchings and white plaques in the mid esophagus (Figures 1a and b). Esophageal brushings confirmed *Candida* infection, and biopsies were positive for cytomegalovirus (CMV). A barium esophagram showed outpouchings throughout the esophagus, without any evidence of perforation (Figure 1c). No stricture was evident on EGD or barium esophagram. The patient was diagnosed with EIPD and treated with fluconazole, a proton pump inhibitor, and valganciclovir, with improvement in symptoms. It is noteworthy that the patient had undergone EGD 6 years prior to presentation and was diagnosed with *Candida* esophagitis at that time. However, there was no evidence of any esophageal mucosal irregularities at that time, and he did not take the recommended anti-fungal treatment.

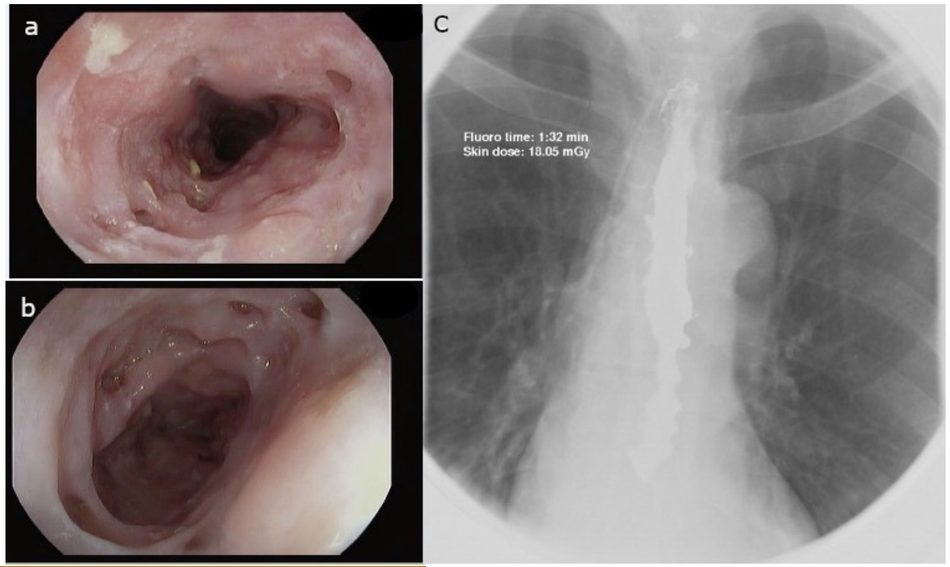

Figure 1. EGD (a and b) and barium esophagram (c) findings.

Discussion

EIPD is characterized by the development of multiple small flask-shaped outpouchings in the esophagus. Patients with reflux esophagitis, *Candida* esophagitis, diabetes mellitus, HIV, and eosinophilic esophagitis are at higher risk for developing EIPD. There are approximately 250 published cases of EIPD in the literature, and the prevalence of EIPD is estimated to be 5-50 per 100,000 cases.[1] Development of pseudodiverticula in the esophagus is suggested to be secondary to chronic inflammation, obstruction of the submucosal glands due to debris, or increased intraluminal pressure proximal to a luminal obstruction.[2] The diagnosis is made with EGD, barium esophagram, or computerized tomography. The treatment for EIPD includes treatment of underlying conditions and endoscopic dilation of strictures when present.[3]

Conclusion

Association of EIPD with *Candida* esophagitis is well-described in the literature. However, it has not been previously reported in patients with CMV esophagitis. While long-standing *Candida* esophagitis was a likely contributor to the development of EIPD in our patient, chronic inflammation by CMV may have also contributed to the gradual development of esophageal diverticula. Our patient's dysphagia resolved with PPI, antifungal and antiviral therapy. This case highlights the importance of considering EIPD in the differential for patients with HIV/AIDS presenting with dysphagia.

References

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