

## A rare cause of dysphagia in a HIV patient – esophageal pseudodiverticulosis

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### Abstract

Esophageal pseudodiverticulosis is a rare clinical entity with a slight male predominance (1). The condition is caused by cystic dilation of the sub mucosal glands and hence is not true diverticulosis. This is usually a benign condition, affecting the distal third of esophagus. It has been associated with reflux esophagitis, strictures and candidiasis. Patients with esophageal pseudodiverticulosis may present with progressive dysphagia, though most cases are asymptomatic. Perforation (2), bleeding (3) and mediastinitis have rarely been described. To the best of our knowledge, the occurrence of this rare disease in HIV patients has been described only once before (4). We report the second case of esophageal pseudodiverticulosis occurring in a HIV patient. (*Acta gastroenterol. belg.*, 2013, 76, 340-341).

Key words :

### Introduction

HIV related dysphagia is usually caused by opportunistic infections. The degree of underlying immunosuppression, mirrored by the CD 4 count predicts the likelihood of opportunistic infections. Candidiasis caused more than 50% of esophageal symptoms in most studies (5). Asymptomatic colonization of the esophagus with candida is also common. Other opportunistic infections causing dysphagia include HSV, CMV, and idiopathic esophageal ulcerations. Often, empiric treatment with fluconazole can be both diagnostic and therapeutic when a patient initially presents with dysphagia. Poor response to treatment is often considered an indication for endoscopy, to look for other opportunistic infections. With the advent of HAART, there has been a decline in the incidence of these opportunistic infections while non-AIDS defining illnesses are being encountered more frequently in everyday practice (6). These include pill-associated esophagitis, eosinophilic esophagitis, and primary esophageal cancers and less-described entities like pseudodiverticulosis.

### Case report

A 60 year old African American man with HIV presented with worsening dysphagia for 2 weeks prior to admission. Dysphagia was limited to solids and he was able to swallow liquids without discomfort. He denied odynophagia. His past history was significant for a stomach gastrointestinal stromal tumor, which was resected successfully.

He had been experiencing dysphagia and odynophagia intermittently for several years prior to admission. Five years ago, an EGD showed distal superficial esophageal ulcerations, histologically consistent with GERD. A repeat EGD one year later showed candidal esophagitis and another EGD two years ago showed mucosal nodularity and friability in the lower third, with a hiatal hernia and some resistance at the level of the upper esophageal sphincter.

He reported worsening of symptoms with HAART medications (Truvada and Edurant) and hence stopped taking his HAART medications. At the current presentation, his CD4 count was 192, and he had oral thrush. He was started on fluconazole, which failed to improve his symptoms. An EGD was performed which showed two non obstructing strictures at 24 cm and 18 cm. Adequate dilatation was achieved with the scope itself. Multiple pseudodiverticula were seen during EGD (Fig. 1). There was also a small hiatal hernia. Gastric exam showed altered anatomy consistent with a Billroth II gastrectomy.

Proton pump inhibitors and anti-reflux measures were recommended at discharge. At follow up a few weeks later, his dysphagia had significantly improved.

### Discussion

Esophageal intramural pseudodiverticulosis was first described by Mendl *et al.* (7), and was initially thought to be pulsion diverticula analogous to Rotkowsky-Aschoff sinuses in the gall bladder. Localized esophageal motility disorders causing increased intraluminal pressure was also postulated (7) as a cause. Further studies have arrived at a general consensus that chronic inflammation predates duct obstruction leading to cystic dilation of the submucosal glands (1,8). Contributing factors include gastroesophageal reflux disease (GERD), downstream strictures which increase intramural pressure (9,10) and opportunistic infections like candidiasis.

EGD is not a sensitive modality for diagnosing pseudodiverticulosis (11). Radiographic evaluation including barium esophagogram and computerized tomography are

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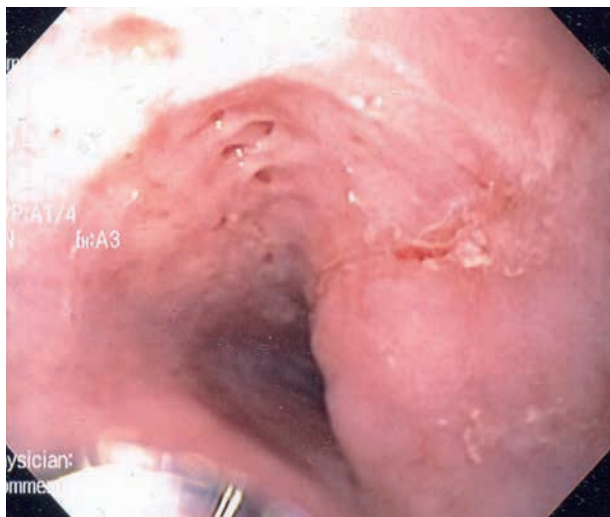


Fig. 1. — EGD revealing multiple esophageal pseudodiverticula.

considered more sensitive (12,13). Barium esophagogram demonstrates flask or collar button-shaped outpouchings that project perpendicular to an otherwise smooth mucosal surface. Pseudodiverticulosis is associated with strictures in most cases (1), and esophageal dilatational therapy has shown to be particularly effective (13). This was also observed in our patient with significant improvement in his dysphagia after dilatation.

Given that our patient complained of exacerbation of symptoms with HIV medications, pill induced esophagitis could also have contributed to his symptoms (14). ‘Medication bezoars’ and esophagitis due to HAART medications have been described in two earlier case reports (4,15). The resultant non-compliance to HAART medications led to low CD4 count making him susceptible to opportunistic infections like candidiasis. Our patient probably had multiple factors including reflux esophagitis, candidal esophagitis and possibly pill-induced esophagitis causing chronic esophageal inflammation which led to stricture and pseudodiverticulosis formation.

In conclusion, one must also consider causes other than opportunistic infections in HIV patients who present with recurrent dysphagia. Though radiological evaluation is sensitive in making the diagnosis of pseudodiverticulosis, EGD would usually be the first choice investigation in a patient who failed fluconazole therapy. Esophageal manometry might also aid in diagnosing motility disorders. Pill induced esophagitis should also be considered in this era of increasing medication use.

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