Case report - Esophagus

Spontaneous circumferential esophageal dissection in a young man with eosinophilic esophagitis

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Abstract

Spontaneous esophageal dissection is a rare condition that may happen in patients with eosinophilic esophagitis. Conservative management is an important therapeutic option to be considered. We describe an unusual case of a young man with eosinophilic esophagitis who presented complaining of acute retrosternal pain, fever and vomiting. After a thorough evaluation including CT-scan and esophagogram, circumferential esophageal dissection and mediastinal abscess without visible perforation was observed. Abscess resolution and oral nutrition reintroduction was achieved with non-surgical management. Corticoid therapy was initiated for esophagitis treatment.

Keywords: Eosinophilic esophagitis; Esophageal dissection; Mediastinal abscess

1. Introduction

Idiopathic eosinophilic esophagitis is an underdiagnosed and well-recognized entity, and one of the most common causes of dysphagia and esophageal food impaction in adults [1]. Complications can either be attributed to the clinical manifestations (like nausea, vomiting or food impaction) or to diagnostic and therapeutic interventions. Spontaneous (Boerhaave’s syndrome) and iatrogenic esophageal rupture and dissection during diagnostic or therapeutic endoscopic evaluation has been reported [2], but there are few cases of spontaneous esophageal dissection. We report a case of spontaneous circumferential esophageal dissection complicated with a mediastinal abscess, that was successfully treated with conservative management in a young man with eosinophilic esophagitis.

2. Case report

A 24-year-old man was admitted complaining of progressive chest pain, nausea, vomiting and fever. He had no dysphagia. The patient had a previous history of allergy to pollen and an esophageal stricture (3 cm in length) due to eosinophilic esophagitis in the middle thoracic esophagus, treated with endoscopic dilation eight years previously with no new symptoms and without corticoid treatment.

Complementary test included: blood test (leukocytosis and neutrophilia); a no-multi-slice spiral CT-scan after contrast swallow identified an intramural circumferential dissection of thoracic esophagus and periesophageal mediastinal abscess formation (Fig. 1). A contrast swallow study was done to obtain more information about the possibility of an esophageal perforation; it has demonstrated an extra lumenal pool of contrast in a well-defined tubular false lumen with no evidence of contrast leak in the mediastinum (Fig. 2). Endoscopy was not performed because of the high risk of perforation.

Without an esophageal perforation demonstrated in a previous pathologic esophagus, conservative management was initiated (broad spectrum antibiotics and parenteral nutrition). After abscess resolution demonstrated on CT-scan, corticoid therapy was introduced. Enteral nutrition was carefully reintroduced without complications and the patient was finally discharged. A control contrast swallow study revealed a false lumen without clinical implications. After five months of follow-up, the patient is asymptomatic and control endoscopic procedures have been done. Topical steroids are the current treatment with no more complications to date.

3. Discussion

Eosinophilic esophagitis is an isolated inflammation of the esophagus defined as a primary clinicopathologic disorder of the esophagus, characterized by esophageal and/or upper gastrointestinal tract symptoms in association with esophageal mucosal biopsy containing 15 eosinophils or more per high-power field and absence of other disorders associated with similar clinical, histological, or endoscopic features, especially gastroesophageal reflux disease [3]. It has not been associated with increased risk of premalignant or malignant conditions [4].

This chronic disease can present acutely as dysphagia, food impactions, nausea, vomiting, heartburn, chest pain or abdominal pain, and an association of esophageal symp-
toms with exposure to certain foods can be found. Patients may also have additional symptoms of asthma, allergies or atopic dermatitis [5], like our patient.

The diagnosis is suggested by an unexplained dysphagia (93% of patients) or by a food impaction (62%) in a young adult with a personal or family allergic history (51.6%). Findings in the endoscopic exploration are mucosal fragility, oedema, rings, strictures, exudates and small calibre esophagus whereas other patients have a normal endoscopy [6].

Treatment includes pharmacological (acid suppression – not considered as a primary treatment-, systemic and topical steroids, leukotriene inhibitors, immunomodulators, monoclonal antibodies), dietary or endoscopic procedures.

There are two kinds of complications. Those that are direct sequelae of the ongoing inflammation related to the natural history, and those that are related to medical or endoscopic interventions. The first one includes food impaction, short and long segment esophageal narrowing, secondary gastroesophageal reflux disease, esophageal infections predisposition and spontaneous rupture or dissection. There are few cases of Boerhaave’s syndrome [4] and to date there are only two cases of spontaneous dissection (total esophagectomy in a perforated esophagus [7] and metal stent insertion [8] were the chosen treatments). To our knowledge, this is the first reported case of spontaneous esophageal dissection in an eosinophilic esophagitis, successfully treated without surgery or endoscopic procedures. We do not recommend endoscopic procedures for diagnosis at admission time because of the high risk of esophageal perforation. In the absence of food impaction, CT-scan after contrast swallow can lead to the diagnosis of dissection (double-barrelled esophagus sign, mucosal flap separating the true and false lumen and an entry point of dissection [9]). If a perforation is demonstrated, surgery must be borne in mind, whereas with the presence of a paraesophageal abscess without mediastinal disseminated infection, conservative treatment is a very important option to be considered.

Patients with no-perforated esophageal dissection may improve with proper pharmacological and dietary management within a few weeks and only occasional cases require endoscopic or surgical treatment.

References


