Eosinophilic Esophagitis Presenting with Dysphagia Due to Food (Garlic) Impaction: Report of a Case with Literature Review

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ABSTRACT Eosinophilic esophagitis (EoE) is a chronic disease usually presenting with dysphagia and food impaction. Food allergy has been suggested as a causative trigger for some patients. Diagnosis of EoE is based on characteristic endoscopic and histological features. A ringed appearance referred to as “trachealization” is the classical endoscopic finding. Eosinophil-predominant inflammation is typical in histologic examination. The use of topical steroids is an effective and viable therapeutic option in the management of EoE in adults with relatively few side effects. Herein, we report a case of EoE presenting with severe dysphagia due to garlic impaction. Inhaled corticosteroid (budesonide) was prescribed for treatment due to the patient’s history of long-term proton-pump inhibitor use. Dysphagia complaints resolved after the prescribed treatment.

Key Words: Eosinophilic esophagitis; deglutition disorders; garlic


Anahtar Kelimeler: Eozinofilik özofajit; yutma bozuklukları; sarımsak

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Foreign body ingestion and food bolus impaction is not uncommon. In the United States, more than 100,000 cases of foreign body ingestion are reported annually, occurring predominantly in the pediatric population.1,4 Fortunately, the majority of ingested foreign bodies reaching the gastrointestinal tract pass spontaneously. Pre-endoscopic series revealed that 80% or more of foreign objects pass without any intervention.2,3 Endoscopic removal is needed in only 10% to 20% of cases, and less than 1% require surgical intervention.1,5,6 Despite the very low mortality from foreign body ingestion, deaths have been reported.5,7,8 Eosinophilic esophagitis (EoE) is a disease characterized by eosinophilic inflammation of the esophagus. The
symptoms of EoE including abdominal pain, vomiting, food impaction, dysphagia, and dyspnea are quite similar to gastroesophageal reflux disease (GERD) symptoms. The clinician should have a high index of suspicion for the diagnosis of EoE particularly in the setting of refractory GERD symptoms. Yet there is a paucity of epidemiological data from our country for the prevalence of EoE, however, studies from United States report the prevalence as being 4.3/100,000 in children and 2.5/100,000 in adults.9,10 In a study from our country, out of the 44 patients admitting to the emergency departments with complaints of food impaction, 28 patients were diagnosed with EoE which suggests a close relationship between EoE and food impaction.11 Herein, we report a case of EoE presenting with severe dysphagia due to garlic impaction.

**CASE REPORT**

A 42-year-old male patient was admitted to our clinic with complaints of food sticking in the throat. He had a history of atopic dermatitis and dysphagia. Without any pathological findings being detected in previous assessments, he was prescribed a proton-pump inhibitor and had been using it for about 1 year to relieve his GERD like symptoms. Gastrointestinal endoscopy revealed garlic impaction in mid-esophagus which was then grasped with a snare and removed (Figure 1). During the procedure, red esophageal linings with folds and esophageal rings were observed and multiple biopsies of middle and distal esophagus were performed with a prediagnosis of EoE. Pathological evaluation revealed significantly increased infiltration of eosinophilic leukocytes (>20 eosinophils per high power field). Marked basal cell hyperplasia and elongation of lamina propria papillae was also observed (Figure 2). Gastric biopsies were normal. Histopathological assessment along with detailed evaluation of clinical features and history revealed the diagnosis of EoE. Inhaled corticosteroid (budesonide) was prescribed for treatment due to the patient’s history of long-term proton-pump inhibitor use. Inhaler budesonide was used twice daily at a dose of 2 mg per day by directly puffing into the mouth and then dry swallowing without inhaling. The patient was instructed to avoid eating, drinking, or rinsing his mouth for 30 minutes after using the medication. Dysphagia complaints resolved after the prescribed treatment. Repeated esophageal food impaction was not observed. Follow-up endoscopic assessment at 3 months revealed no pathological findings in the esophagus and his dysphagia resolved completely.

**DISCUSSION**

EoE is a chronic disease usually presenting with dysphagia and food impaction. Food allergy has been
suggested as a causative trigger for some patients. Diagnosis of EoE is based on characteristic endoscopic and histological features. A ringed appearance referred to as “trachealization” is the classical endoscopic finding. Other findings may include strictures, erosions, longitudinal ridging, erythema, white plaques, and a loss of vascularity. Endoscopic findings may not always be present, however, mucosal biopsies are warranted when EoE is a likely diagnosis. Eosinophil-predominant inflammation is typical in histologic examination.

Differential diagnosis of EoE includes a wide spectrum of diseases accompanied by eosinophilic infiltration in the esophagus, such as GERD, eosinophilic gastroenteritis, parasitic and fungal infections, recurrent vomiting, esophageal leiomyomatosis, inflammatory bowel disorders, hyper eosinophilic syndrome, myeloproliferative disorders, periarteritis, allergic vasculitis, drug injury, scleroderma and carcinomatosis.

EoE comprises a well-established cause of dysphagia. Gastroenterologists should have a high index of suspicion for this relatively rare entity when typical clinical and endoscopic features are present. Biopsies of the proximal and distal esophagus are warranted to confirm histopathological diagnosis. Presence of eosinophil-predominant infiltration is necessary for establishing the diagnosis. Dietary therapy is a widely accepted treatment option in children, however, there exists scant evidence supporting the efficacy of such therapy in adults. The use of topical steroids is an effective and viable therapeutic option in the management of EoE in adults with relatively few side effects. The long-term prognosis of EoE is yet to be defined; however, data suggest a benign course.

### REFERENCES