



Eosinophilic esophagitis in a girl with pollen allergy who showed trachealization

To the Editor,

Because the esophagus is normally devoid of eosinophils, detection of eosinophils in the esophagus often indicates pathological situations (1). Eosinophilic esophagitis (EoE) is a chronic, immune-mediated esophageal disease clinically characterized by esophageal dysfunction related to symptoms and histologically by eosinophil-predominant inflammation. The current incidence rate is almost one in 2,500 individuals in pediatric populations. Pediatric patients with EoE present not only with dysphagia and swallowing difficulties, similar to adults with this disease, but also with abdominal pain and reflux-like symptoms (2). In particular, food allergens are believed to be involved in the pathogenesis of EoE. Furthermore, approximately 50% of EoE patients have coexisting atopic diseases (allergic rhinitis, food allergies, asthma, and atopic dermatitis). In addition, aeroallergens have been implicated as a contributing factor. The possible pollen associated mechanism of EoE may explain following the deposition of pollen into the nares and pharynx and the subsequent swallowing of secretions into esophagus (3). On endoscopic examination, EoE has been associated with a variety of abnormalities, such as linear furrowing, white exudates, and trachealization. There is no consensus regarding the treatment of EoE, although treatment strategies include medical management with topical or systemic corticosteroids and elimination diets (4). We present the case involving a 6-year-old girl with asthma and allergic rhinoconjunctivitis who had EoE. The patient presented with refractory gastroesophageal reflux symptoms along with abdominal pain and intermittent dysphagia. Because of these symptoms, she had been treated with omeprazole for 1 year. After this period, her upper gastrointestinal endoscopy revealed edematous and pale mucosa, with loss of vascular pattern and ringed characteristic trachealized esophagus (Figure 1). EoE was document-

ed by histopathology showing severe eosinophilic esophageal inflammation (Figure 2). From patient's history, we also learned that she suffered from asthma attacks and symptoms of rhinoconjunctivitis, particularly during the spring period over the past 3 years. Her skin prick test was strongly positive for grass pollen. Use of inhaled ciclesonide, omeprazole, and montelukast provided temporary symptom resolution; however, the

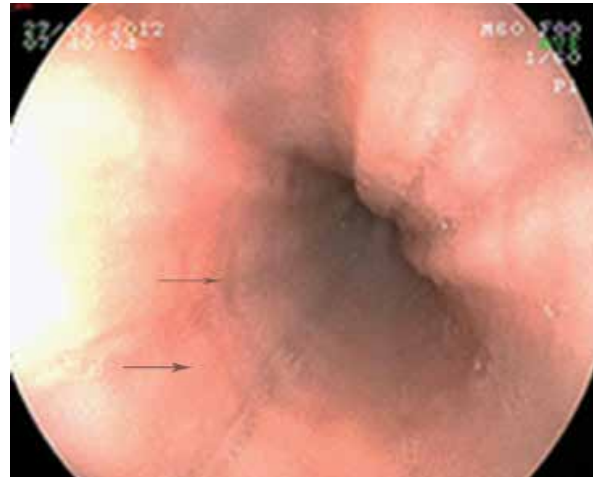


Figure 1. Trachealized signs on endoscopic examination.

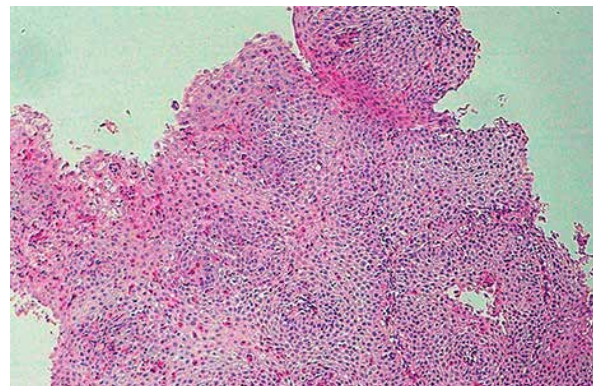


Figure 2. Esophageal biopsy with eosinophilic infiltrate >20 eosinophils (x 100 magnification).

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same complaints, abdominal pain and intermittent dysphagia, re-emerged a few months later. The findings from this case study suggest that endoscopy with a biopsy should be performed in patients that do not respond to standard anti-reflux treatment to detect possible EoE. The compelling evidence shows food and inhalant allergens as main factors involved in the development of EoE and highlight the important role of the allergist during the diagnostic and therapeutic phases.

For this article, written informed consent was obtained from the patient's family.

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