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Boy with an unusual oral allergy syndrome

Question

A 14 year-old male was evaluated for a history of allergic rhinitis and sensitization to several foods. The patient had a history of mouth and pharyngeal itching when eating several kinds of fresh fruit (such as apple, pear and peach) and tree nuts (hazelnut, walnut and almond). His Immuno Solid-phase Allergen Chip test showed mild-elevated IgE values only for secondary food allergens (Profilins, PR-10 proteins), classical cause of oral allergy syndrome. The patient sought consultation because in the last 2 years he reported repeated episodes of chest tightness and hypersalivation without oral itching, hives, respiratory distress, emesis or diarrhoea after ingestion of foods usually tolerated (such as meat, pasta or bread). Twice in course of these episodes, he presented at the emergency department, where a diagnosis of 'food impaction' was made. An EGDS (esophagogastroduodenoscopy) was performed showing 'trachealization' of the oesophagus with several mucosal white plaques (Fig. 1a,b). What is the diagnosis? (Answer on page 1837)

Dr Michele Mazzolai[1]
Dr Laura Badina[2]
Dr Grazia Di Leo[2]
Dr Matteo Bramuzzo[2]
Professor Andrea Taddio[1,2]
Professor Egidio Barbi[1,2]
Department of Medicine, Surgery, and Health Sciences, University of Trieste
Institute for Maternal and Child Health, IRCCS Burlo Garofolo, Trieste, Italy

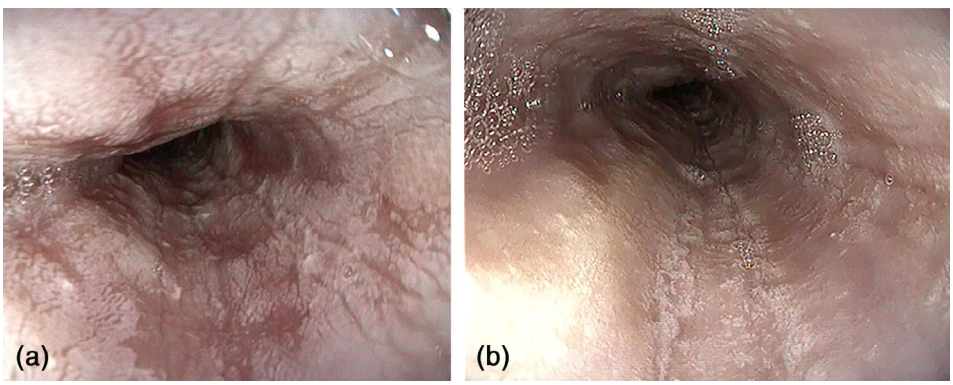


Fig 1 (a,b) Oesophagogastroduodenoscopy showing trachealization of the oesophagus with the presence of several mucosal white plaques.

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Answer

Eosinophilic esophagitis (EoE). EoE is a Th2-antigen disease characterised by an eosinophilic inflammation of the oesophagus. EoE frequently coexists in a patient with other allergies. Moreover, children with IgE mediated food allergies may manifest EoE to the same foods as adolescents via a non-IgE mediated process. Foods that typically cause EoE are wheat, diary, egg and soy. Classic symptoms are dysphagia, emesis, chest pain and heartburn. Food impaction episodes are typical, and EoE diagnosis should always be considered in an atopic patient with upper digestive symptoms after food intake.[1,2]

EGDS with at least five biopsy specimens obtained from different locations in the oesophagus is the gold standard. Typical endoscopic findings are helpfully remembered using the EREFS scoring system: oedema, trachealization, white plaques, linear furrows and strictures of the oesophagus. Biopsies show eosinophilic inflammation of the mucosa with 15 or more eosinophils per high-power field.[1,2] First line treatments include proton pump inhibitor for 8 weeks, topical corticosteroids (Fluticasone or Budesonide) for 2–3 months or dietary therapy (elemental diet, six food elimination diet, four food elimination diet) for 6–8 weeks. Any change of therapy requires an EGDS with biopsies to assess for histological response, as symptoms and endoscopic appearance are unreliable.[1,2]

References

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