

tigens were identified. Immunoblots showed IgE reactivity to antigens of the same molecular weights in each of the 4 milk samples from unrelated mothers. An immediate-type skin reaction could be elicited with human milk samples in 2 tested patients with IgE reactivity to human milk.

**CONCLUSIONS.** IgE reactivity to human milk in milk-allergic patients may be caused by cross-sensitization and genuine sensitization, causing allergic symptoms. Sensitization to human milk is common in milk-allergic patients and may require diagnostic testing and clinical monitoring.

**REVIEWER COMMENTS.** This is one of the first studies to have addressed the nature and biological relevance of IgE reactivity to human milk. The study demonstrated that sensitization to human milk is common in milk-allergic patients, but additional research is necessary, because it is unclear if patients with positive skin reactions suffered from clinically significant reactions to human milk. One may consider searching for the presence of IgE antibodies to human milk in children who have signs of allergy after breastfeeding. However, the benefits of breastfeeding, including its protective effect against early atopic diseases, must also be considered before advising dietary changes.

URL: [www.pediatrics.org/cgi/doi/10.1542/peds.2008-2139BB](http://www.pediatrics.org/cgi/doi/10.1542/peds.2008-2139BB)

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### Esophageal Subepithelial Fibrosis in Children With Eosinophilic Esophagitis

Chehade M, Sampson H, Morotti R, Magid M. *J Pediatr Gastroenterol Nutr.* 2007;45:319–328

**PURPOSE OF THE STUDY.** To determine the prevalence and specificity of esophageal fibrosis in children with eosinophilic esophagitis (EE) and to correlate its presence with clinical presentation and additional pathologic features.

**STUDY POPULATION.** This was a retrospective review of 1099 upper endoscopy specimens from pediatric patients presenting over a 6-year period with upper gastrointestinal complaints suspicious for possible EE. Patients with known infectious disease, parasitic disease, celiac disease, or inflammatory bowel disease were excluded. Fifty-one patients were included: 21 with EE, 7 with eosinophilic gastroenteritis, 6 with gastroesophageal reflux disease, and 17 controls.

**METHODS.** A normal pattern and extent of collagen and elastin fiber composition in the esophageal lamina propria was established in the control specimens. Extent of

fibrosis was determined on trichrome-stained specimens. Fibrosis was defined as abnormally increased collagen deposition. Hematoxylin and eosin staining, and immunohistochemical staining for tryptase and major basic protein and were used to determine intraepithelial and lamina propria maximum eosinophil counts and extent of eosinophilic degranulation at 400 high-power field as well as mast cell presence and extent of degranulation. Basal thickness and lymphocyte and plasma cell infiltration were also determined.

**RESULTS.** Subepithelial fibrosis was present in 57% of the patients with EE, 1 patient with eosinophilic gastroenteritis, 0 patients with gastroesophageal reflux disease, and 1 control patient. Dysphagia was present in 42% of the patients with fibrosis. Dysphagia was not observed in the absence of fibrosis. Fibrosis was not influenced by increasing eosinophil or mast cell counts; however, fibrosis was significantly associated with eosinophilic degranulation in the epithelium.

**CONCLUSIONS.** Subepithelial fibrosis is both common in EE and specific for this disease in children. There is a strong association between dysphagia and fibrosis in children with EE. The extent of eosinophilic activation seems to be influenced by the degree of fibrosis.

**REVIEWER COMMENTS.** This article provides additional insight into the pathology of EE, an inflammatory disorder that is often associated with food allergy. Although a strong relationship was seen between fibrosis and dysphagia in this study, its impact on motility in this specific disease would be an interesting additional determination. Nevertheless, fibrosis preceded the dysphagia in this study, and it may serve as an early marker of more-severe disease. Fibrosis was associated with eosinophilic activation, which may also serve as a marker for more-severe disease. The presence of 1 or both may indicate a need for more aggressive treatment.

URL: [www.pediatrics.org/cgi/doi/10.1542/peds.2008-2139CC](http://www.pediatrics.org/cgi/doi/10.1542/peds.2008-2139CC)

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### Patterns of Quantitative Food-Specific IgE-Antibodies and Reported Food Hypersensitivity in 4-Year-Old Children

Ostblom E, Lilja G, Ahlstedt S, van Hage M, Wickman M. *Allergy.* 2008;63(4):418–424

**PURPOSE OF THE STUDY.** To investigate the probability of parentally reported food hypersensitivity (FHS) in relation to levels of food-specific immunoglobulin E (IgE) by using a birth cohort at 4 years of age.

**STUDY POPULATION.** The researchers studied a population-based birth cohort of 4089 Swedish children. Parents

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Casey Geaney

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