

TABLE I. Clinical characteristics and EPX measurements

Characteristic	Controls (n = 9)	Active EoE (n = 12)	P*
Age, mean $\pm$ SD	9.68 $\pm$ 3.16	11.79 $\pm$ 4.52	
Males, n (%)	4 (44)	11 (92)	
White, n (%)	7 (78)	12 (100)	
Symptoms at the time of endoscopy, n (%)			
Dysphagia	3 (33)	2 (17)	
Heartburn	0	1 (8)	
Poor weight gain	1 (11)	1 (8)	
Vomiting	0	0	
Abdominal pain	1 (11)	1 (8)	
None*	5 (56)	8 (67)	
Atopic conditions, n (%)			
Asthma	6 (60)	5 (45)	
Dermatitis	2 (20)	0 (0)	
Seasonal allergies	7 (70)	7 (64)	
Food allergies	0	8 (67)	
Tissue eosinophils (max eos/hpf $\pm$ SD)	3.56 $\pm$ 4.77	51.08 $\pm$ 34.8	.001
Throat EPX (μ g/g protein $\pm$ SD)	6.01 $\pm$ 11.95	0 $\pm$ 0	
Nasal EPX (μ g/g protein $\pm$ SD)	5.44 $\pm$ 8.89	5.45 $\pm$ 8.64	

*Some asymptomatic patients with active/inactive EoE were undergoing upper endoscopy for disease surveillance.

Our findings in pediatric subjects are consistent with those reported in the adult cohort from Utah and suggest that eosinophil granule degranulation products do not extend upward into the posterior oropharynx despite their ubiquitous presence in the esophagus of patients with EoE.⁷ The need for a noninvasive biomarker of EoE is critical, particularly for children. Current methods under investigation for minimally invasive detection of EoE disease activity such as the esophageal string test, cytosponge, and transnasal endoscopy still pose significant hurdles for pediatric patients due to the difficulty associated with swallowing capsules and the discomfort associated with procedures/sample collection. Identification and validation of EoE biomarkers from minimally invasive samples remains a high priority.

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Reply



To the Editor:

We thank Schroeder et al¹ for their comments. First, we are pleased that their findings in pediatric subjects confirm our observations in adults with eosinophilic esophagitis in keeping that eosinophil-associated inflammation does not extend into the pharynx.² Second, we appreciate the comments regarding the eosinophil-peroxidase assay. However, we have shown that the assay is quite useful in measuring eosinophil-peroxidase activity from esophageal mucosal brushings and correlates well with the peak eosinophil counts from biopsies.³ Third, the eosinophil-peroxidase assay is relatively simple to perform, inexpensive, and rapid with results within 30 minutes. Last, we share with Schroeder et al¹ the desire to identify minimally invasive markers of eosinophilic esophagitis.

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