

Background

- The prevalence of eosinophilic esophagitis (EoE) in children in the USA is between 10 and 50 per 100,000.
- Both symptoms and treatments can have negative impact on quality of life (QOL) for children with EoE.
- The Pediatric QOL Inventory™ (PedsQL) survey measures health-related QOL in children with chronic health conditions.
- The primary purpose of this study is to examine QOL in pediatric patients with EoE at their initial clinic visit based on their pre-visit treatment.

Methods

- The PedsQL survey was given to 107 children aged 4-18 years referred for food allergies or EoE seen for initial consultation in the Texas Children's Hospital Allergy/Immunology Clinic from October 2014-September 2017.
- Measured outcomes included physical, social, emotional, and school functioning domain scores.
- Higher scores correlate with better QOL.
- Independent t-tests, Fisher's exact tests, Chi-square tests and multiple logistic regression were used for analysis.

Results

- Twenty-four child surveys were completed at initial visit with an EoE diagnosis.
- Prior to initial visit, 19 were treated with elimination diet, 9 with steroids, and 15 with proton pump inhibitors (PPI).
- Children treated with PPIs had an initial school functioning score 16 points lower (95% CI: -28.77, -3.23) than those who were not treated with PPIs.
- No statistically significant differences were found in the other domains between those treated with diet, steroids, and/or PPIs versus untreated children.

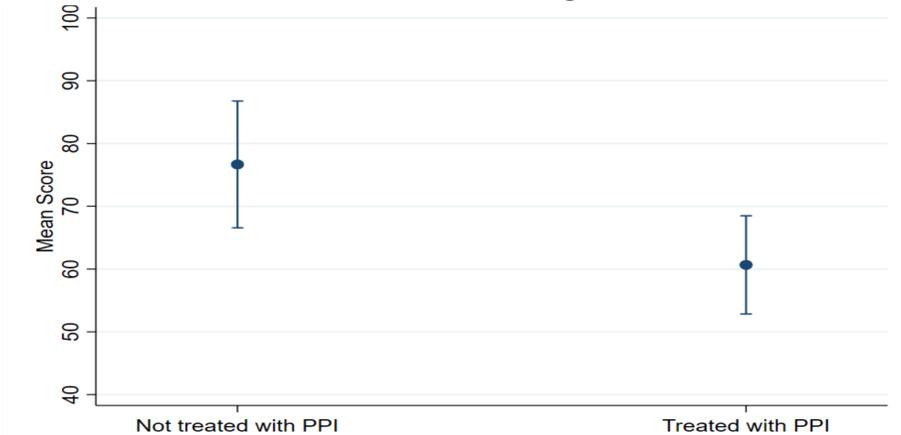
Table 1: Child summary statistics for EoE patients

	N total	N	(%)
Proton Pump Inhibitors			
No	24	9	(37.5)
Yes	24	15	(62.5)
Steroids			
No	24	15	(62.5)
Yes	24	9	(37.5)
Elimination Diet			
No	24	5	(20.8)
Yes	24	19	(79.2)

Table 2: P-values for association with child initial school functioning score (Independent simple linear regression)

	p-value
Proton Pump Inhibitors	0.016
Steroids	0.901
Elimination Diet	0.691

Figure 1: Predicted child initial school functioning score with 95% CIs



DISCUSSION

- In this study, QOL survey scores were significantly lower in patients with EoE who were treated with PPI prior to initial allergy clinic visits.
- Possible reasons for this finding include:
 - symptom severity
 - the burden of taking medications
 - lack of improvement on medication
- Further investigation is warranted to address what drives the initial low QOL score in PPI-treated patients.

REFERENCES

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