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Introduction

Eosinophilic esophagitis (EoE) is a chronic allergic- and immune-mediated condition characterized by increased eosinophils (white blood cells), inflammation, and narrowing of the esophagus. Patients can experience various nonspecific symptoms, including trouble swallowing, painful swallowing, heartburn, vomiting, and food bolus impaction, which can all impair one's quality of life. EoE can be diagnosed at any age and usually persists through adulthood.¹⁻³

Either medications or dietary treatment (or both) is usually required to prevent the long-term consequences of EoE, which include esophageal strictures and fibrosis.³ Treating EoE at its early stages is usually less invasive than managing its adverse sequelae, which may require the use of more invasive procedures like esophageal dilation.

Medications for EoE include:

- Proton-pump inhibitors (PPIs)
- Oral viscous budesonide (OVB)
- Fluticasone
- Biologics (investigational)

Dietary treatments for EoE include:

- Elemental diet (oral, gastric (G)-tube, nasogastric (NG)-tube, jejunostomy (J)-tube)
- Empiric dietary elimination (i.e. milk elimination, 4-food elimination diet, 6-food elimination diet)

Rationale

Patients rarely outgrow eosinophilic esophagitis (EoE), and symptoms can worsen over time if not appropriately managed. This study explores whether there is an association between patient age and EoE treatment.

Methods

Ethics approval was obtained. Between July 2012 and June 2019, 187 patients with biopsy-proven EoE (≥ 15 eosinophils per high powered field) seen at the BC Children's Hospital EoE clinic were enrolled. The median age and proportion of patients in each treatment group (medications, dietary treatment, both medications and dietary treatment, or no treatment), were calculated. Kruskal-Wallis tests were performed to determine whether there was a statistically significant difference in median age across treatment groups.

Results

Figure 1: Proportion of patients in each treatment category at EoE Clinic Visit 1

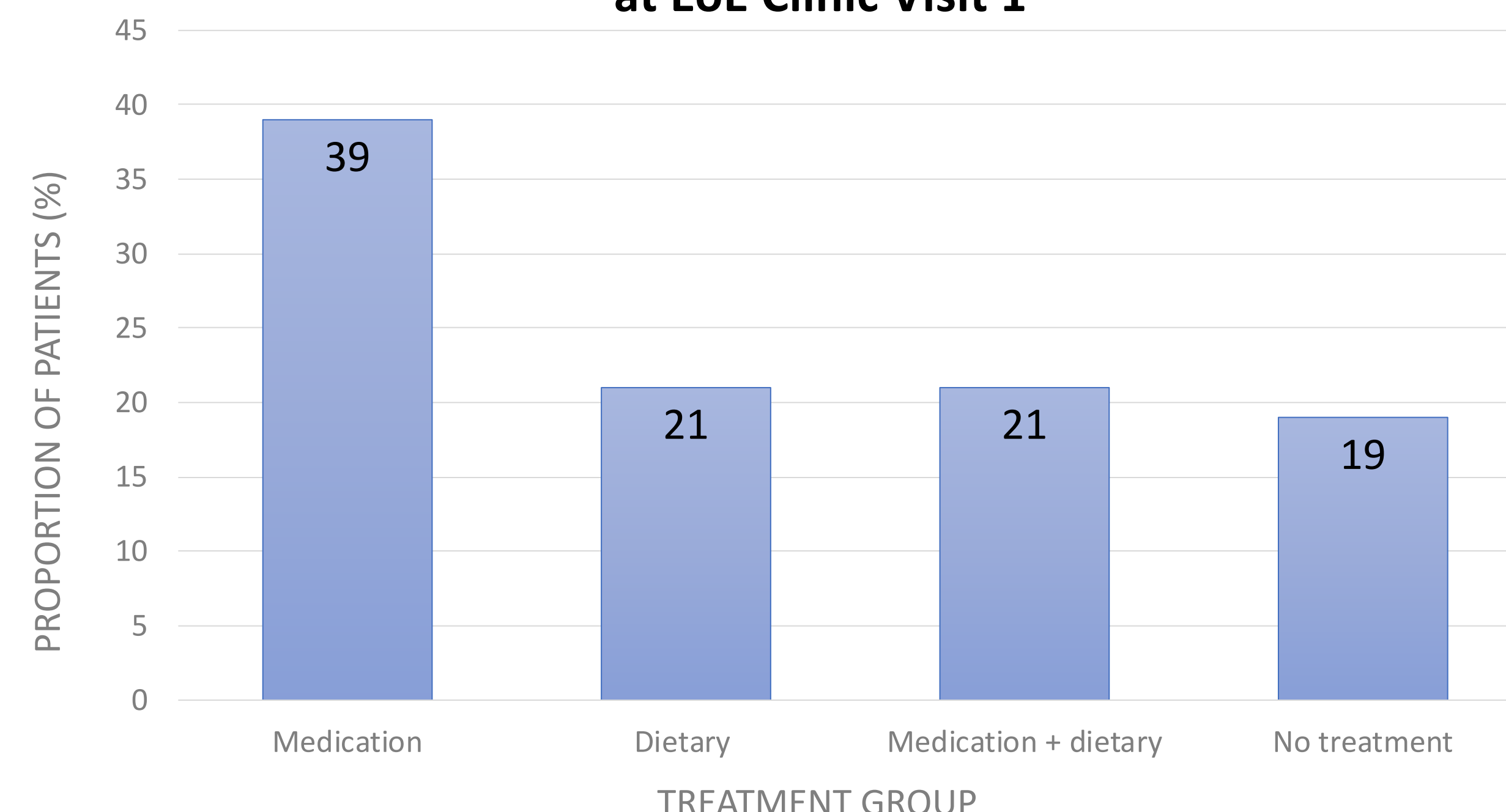


Figure 2: Median patient age for each treatment group

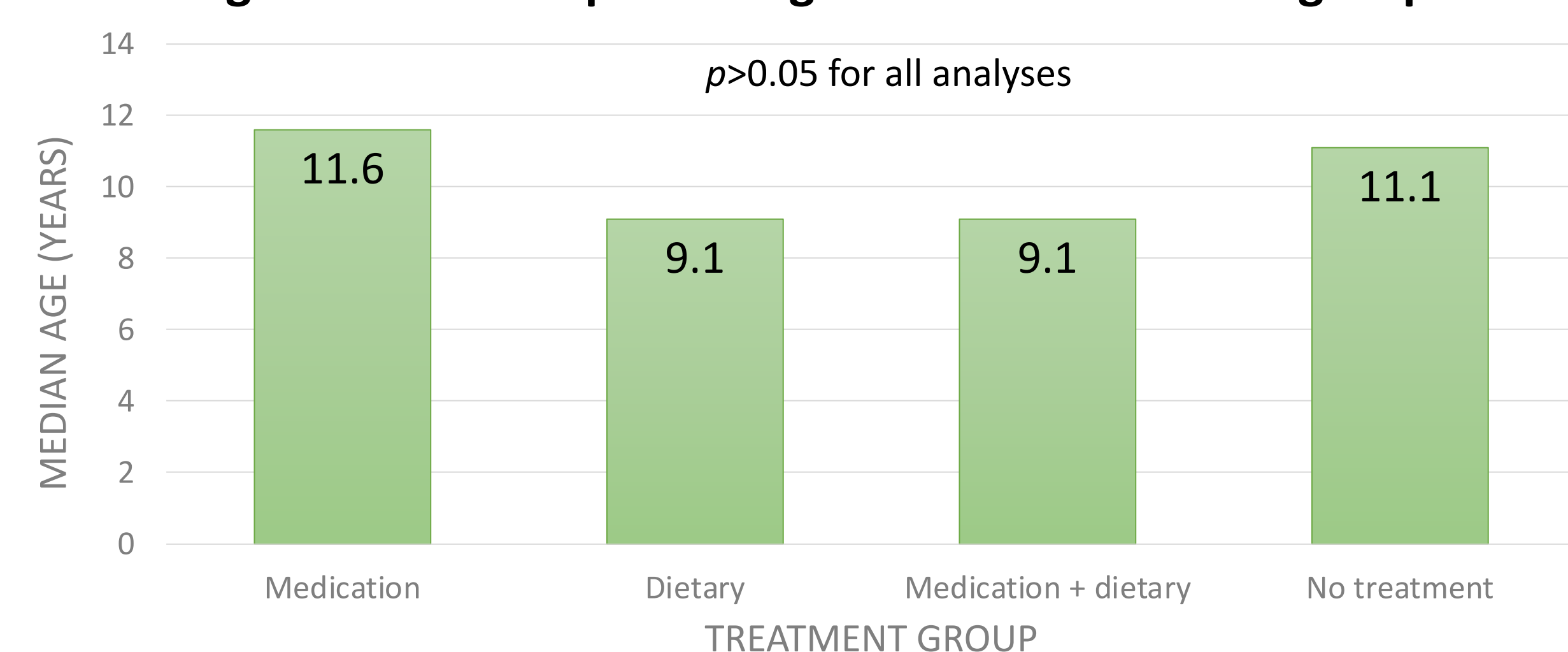
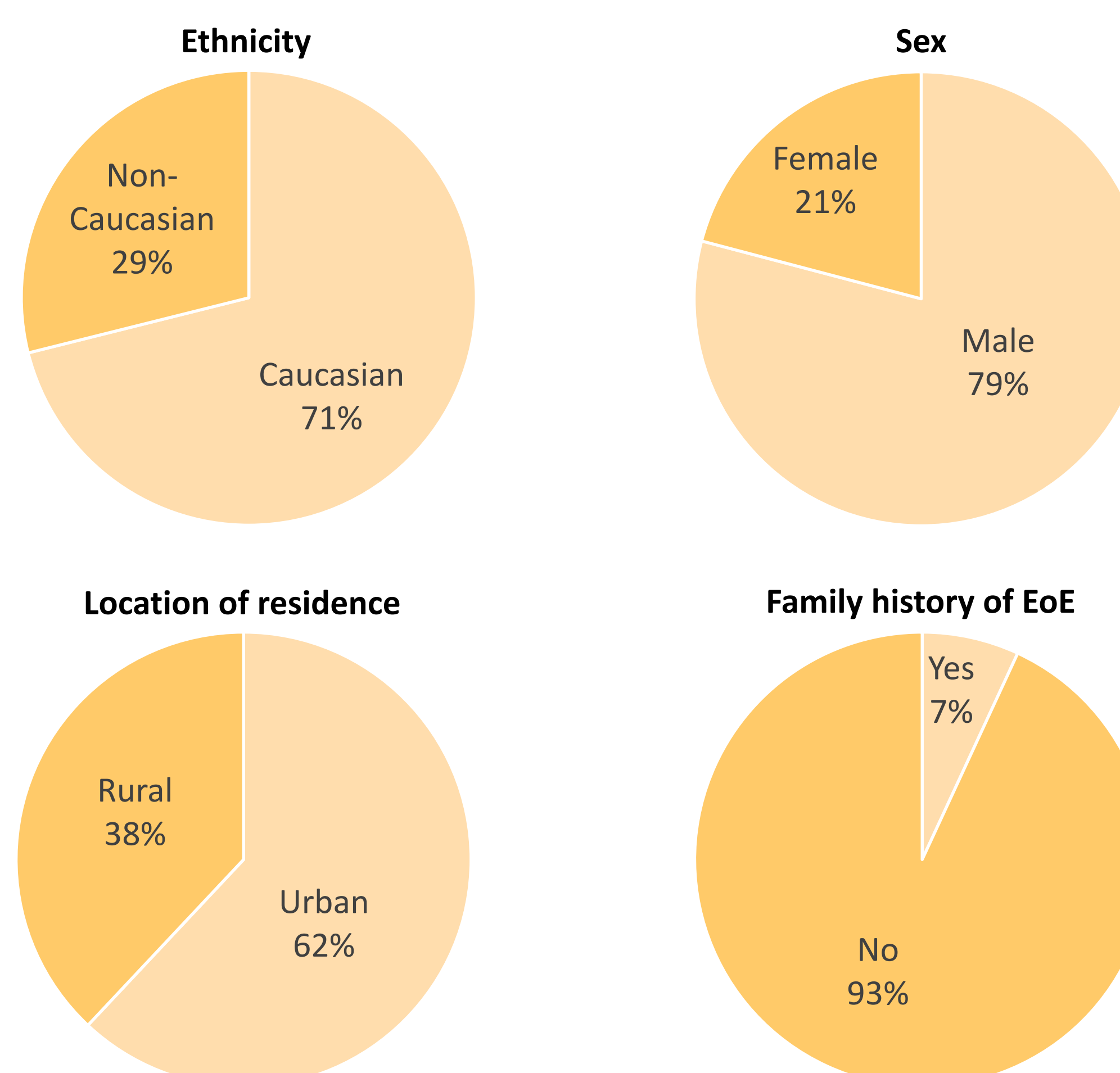


Figure 3: Demographic characteristics of EoE patients



Conclusions

Although we hypothesized that patient age and treatment choice might be associated, our study did not find a significant difference between patient age and treatment choice. However, our sample was small, possibly limiting our ability to detect significant differences.

Future Directions

1. A quantitative study looking at EoE patients' age, prescribed treatment, and treatment preference is currently underway.
2. We are using data collected as part of our EoE Registry, which has enrolled 190 participants as of June 26th, 2019.
3. Our primary purpose is to describe how treatments for patients with EoE evolve over time as the patient ages, and identify associations between treatment and patients' age, for patients enrolled in our EoE Registry at BC Children's Hospital (BCCH).
4. Our secondary purpose is to describe whether EoE patients' treatment preferences are similar or different to the treatment preferences of their parents/guardians.

References

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Acknowledgements

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