

### Introduction

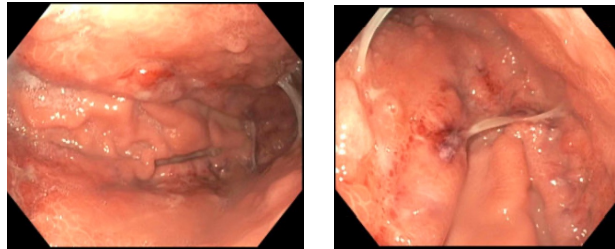
- Eosinophilic gastrointestinal diseases (EGIDs) are a spectrum of rare, chronic, immune-mediated gastrointestinal disorders histologically characterized by eosinophilic-predominant tissue inflammation and GI symptoms.
- Here we describe a pediatric case of new-onset eosinophilic gastroenteritis with hyper-eosinophilic syndrome.

### Case Presentation

- Our patient is a 15 y/o male who presented with a 3-week history of abdominal pain, intermittent episodes of non-bilious, non-bloody emesis and accompanying 13-pound weight loss over 3 months.
- He had no notable past medical history and lack of apparent trigger for the GI symptoms.

### Hospital Course

- CT Abdomen revealed extensive diffuse wall thickening of distal esophagus and stomach.
- Initial EGD showed several ulcerations of the esophagus and stomach and mild eosinophilia in the esophagus and duodenum.



- He was urease positive and discharged on triple therapy for a likely *H. Pylori* infection.
- He presented again in one month with worsening abdominal pain and hematemesis.
- Repeat EGD was notable for eosinophils > 30/HPF in the duodenum and eosinophils > 100/HPF in the stomach and distal esophagus.
- His peripheral eosinophil count was 5370. He met criteria for hypereosinophilic syndrome with eosinophilic gastroenteritis and was initiated on parenteral steroids.

### Management and Complications

- In the outpatient setting, he followed up with pediatric allergy and GI.
- He was initiated on mepolizumab, steroids, PPI, gabapentin, and dairy-free diet and his symptoms appeared to be well-controlled.
- Repeat EGD showed stable to improved gastric eosinophilic inflammation.

- However, he was re-admitted in the following months for worsening symptoms including feeding intolerance and unintentional weight loss.
- His diet was restricted to elemental formula and eventually weaned to an oral diet with exclusion of dairy, wheat, soy, eggs, nuts, and seafood.
- He achieved complete remission of symptoms with adequate weight gain and improved feeding tolerance.
- Full regular diet was gradually reintroduced, and medications were stopped, only requiring a monthly mepolizumab injection.
- His symptoms continue to be well controlled with no interim hospitalizations since previous admission

### Conclusion

- Therapy for EGIDs is complicated and involves a multimodal approach including management of abdominal pain, steroids, biologic agents, and diet restrictions.
- This case demonstrates complete remission of symptoms related to eosinophilic gastritis in a pediatric patient following therapy with PPI, steroids, mepolizumab, elemental diet and maintenance treatment with mepolizumab alone.