Consensus guidelines for the diagnosis of eosinophilic gastrointestinal diseases (beyond the esophagus) are required, as well as randomized controlled trials assessing the efficacy of various treatment approaches for achieving and maintaining remission while ensuring normal growth and quality of life.

Eosinophilic Gastrointestinal Diseases in Childhood
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Key insights
Eosinophilic gastrointestinal diseases (EGIDs) are rare chronic inflammatory disorders that affect different parts of the gastrointestinal (GI) tract. These include eosinophilic esophagitis (EoE), eosinophilic gastritis (EG), eosinophilic gastroenteritis (EGE), and eosinophilic colitis (EC). In some cases, multiple parts of the GI tract can be affected. Although the clinical presentation varies depending on the location, histologically the EGIDs are characterized by dense eosinophilic inflammation. It is important, however, to exclude other potential causes of the GI inflammation prior to arriving at a diagnosis.

Current knowledge
EoE is the most commonly occurring and well described of the EGIDs. Nevertheless, there are no biomarkers, and diagnosis relies mainly on endoscopy and histology. Another difficulty is that the clinical symptoms vary depending on the age of the patient. EG is the second most common EGID after EoE and is characterized by dense eosinophilic infiltration of the stomach wall. EGE is more common in children below 5 years of age and nearly half of the patients have a history of allergic disease. For EC, the clinical presentation with abdominal pain and diarrhea, associated with dense eosinophil infiltration of the ileum and/or the colon in the absence of secondary causes, may aid the diagnosis. It should be noted, however, that, with the exception of EoE, there is no consensus on the diagnostic criteria for the other EGIDs.

Histological features of EGIDs
- Eosinophilic* infiltration of the lamina propria and/or submucosa, muscularis propria, or serosa
- Other findings depending on involved site of the GI tract
  - Eosinophilic surface layering
  - Eosinophilic degranulation
  - Eosinophilic crypt abscesses
  - Basal zone hyperplasia
  - Dilated intercellular spaces
  - Lamina propria fibrosis
*The histological finding of increased numbers of eosinophils per high-power field in a biopsy specimen of the GI tract has no proven biological importance and cannot be used as the only tool for the differential diagnosis of EGIDs from other GI diseases

Practical implications
Elimination diets are often used to identify potential dietary triggers, which can then be avoided. Drug therapy is tailored according to the affected segment of the GI tract. Proton pump inhibitors and topical steroids have been effective for the treatment of EoE. Corticosteroids are effective first-line treatment for EGE and EC. In the EGIDs other than EoE, thiopurines or anti-TNF drugs may be used in cases of refractory disease. Due to the chronic and relapsing nature of these diseases, maintenance treatment is needed to avoid relapses.

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