



For patients with  
unresolved GI symptoms,

# DIVE DEEPER

**Eosinophilic gastritis and/or eosinophilic duodenitis (EG/EoD) is more common than you think**

New research indicates that **EG/EoD may be a common cause of chronic, moderate-to-severe gastrointestinal (GI) symptoms** and is frequently misdiagnosed as a functional GI disorder<sup>1,2</sup>

# EG/EoD IS MORE COMMON THAN YOU THINK



**EG/EoD has a nonspecific clinical presentation that is often mistaken for gastroesophageal reflux or a functional GI disorder such as irritable bowel syndrome (IBS) or functional dyspepsia<sup>1-3</sup>**

Many patients do not exhibit additional clinical clues, such as peripheral eosinophilia or concomitant allergic conditions<sup>1,4,5,a</sup>

Patients often go undiagnosed or misdiagnosed for several years before finally receiving a definitive diagnosis of EG/EoD.<sup>1,2</sup>

## A constellation of chronic GI symptoms<sup>6</sup>

### Characteristic symptoms

- Early satiety<sup>3</sup>
- Abdominal pain/cramping<sup>3</sup>
- Bloating<sup>3</sup>
- Loss of appetite<sup>3</sup>
- Nausea<sup>3</sup>
- Diarrhea<sup>3</sup>

### Other potential symptoms

- Heartburn/acid reflux<sup>7</sup>
- Dyspepsia/indigestion<sup>7</sup>
- Food aversion<sup>8,b</sup>
- Constipation<sup>8</sup>
- Vomiting<sup>1,3,7</sup>

EG/EoD is an inflammatory GI disease characterized by elevated eosinophil counts in the stomach and/or duodenum, and new evidence suggests that overactive mast cells also play a role in disease pathogenesis.<sup>1,9-12</sup> Aberrant accumulation and activation of eosinophils and mast cells drive inflammation in EG/EoD, which may result in alterations in normal GI physiology and chronic nonspecific GI symptoms.<sup>2,4,6,10,12-16</sup>

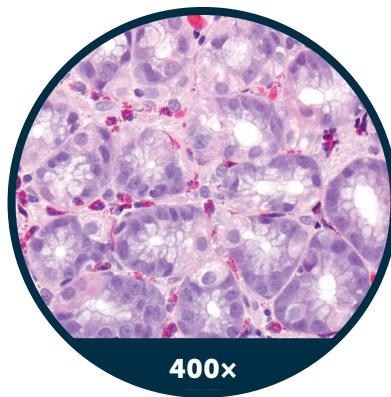
Gastroenterology and pathology experts involved in recent EG/EoD clinical studies have designated  $\geq 30$  eosinophils per high-power field (hpf) in gastric and/or duodenal biopsies as the histologic threshold for diagnosing EG/EoD.<sup>1,17,18</sup>

## Histologic criteria for EG/EoD diagnosis<sup>1,17,18</sup>

**$\geq 30$  eos/hpf**

(EOSINOPHILS PER HIGH-POWER FIELD)

IN 5 HPFS IN GASTRIC BIOPSIES AND/OR 3 HPFS IN DUODENAL BIOPSIES



<sup>a</sup>More serious signs such as GI bleeding, weight loss, or malabsorption may occur but are rare.<sup>2,19</sup>

<sup>b</sup>Food aversion may also include food refusal and/or food avoidance.

# EG/EoD IS MORE COMMON THAN YOU THINK



**EG/EoD may be a common cause of chronic GI symptoms<sup>1</sup>**

**In a prospective study of 405 patients with chronic, moderate-to-severe GI symptoms or a prior diagnosis of IBS or functional dyspepsia**

**45% MET HISTOLOGIC CRITERIA FOR EG/EoD AFTER UNDERGOING EGD WITH BIOPSY<sup>1,a</sup>**

**This study utilized a standardized approach involving:**

- Collection of 12 biopsies (8 gastric and 4 duodenal)<sup>1</sup>
- Systematic counting of eosinophils in multiple high-power fields (hpfs) per biopsy<sup>1,18</sup>
- Consensus histologic threshold of  $\geq 30$  eosinophils per hpf to define a case of EG/EoD<sup>1,17,18,b</sup>

## Diagnosis of EG/EoD can be easily missed<sup>1,2,4</sup>

A systematic approach may help improve detection.<sup>1,18</sup>

### Challenge

Patchiness of disease



### Systematic approach to help address

Routine collection of **multiple biopsies**<sup>2,9,17,18,20</sup>

Normal mucosal appearance



Collection of biopsies **even in the absence of endoscopic abnormalities**<sup>2,9,17,18,21,22</sup>

Subtlety of eosinophilic inflammation



Systematic counting of tissue eosinophils under **high-power magnification**<sup>5,9,17,18,22</sup>

<sup>a</sup>Abbreviation: EGD, esophagogastroduodenoscopy.

<sup>b</sup>In 5 hpfs in gastric biopsies and/or 3 hpfs in duodenal biopsies.<sup>1,17,18</sup>

# EG/EoD HOW TO DETECT



**Diagnostic algorithm for eosinophilic gastritis and/or eosinophilic duodenitis (EG/EoD)**  
used in recent clinical studies<sup>a</sup>

## 1. IDENTIFY

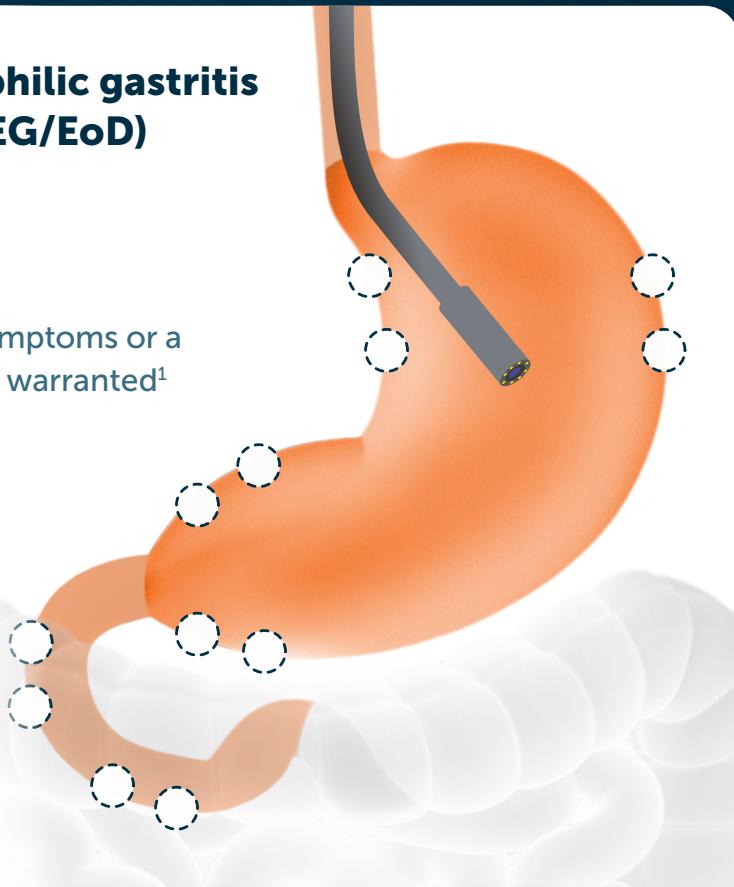
patients with chronic, unresolved GI symptoms or a functional GI disorder in whom EGD is warranted<sup>1</sup>

## 2. BIOPSY

from at least 12 locations in the stomach and duodenum<sup>1,18,20</sup>

## 3. COUNT

eosinophils and ask to be notified if there are  $\geq 30$  eosinophils per high-power field (hpf)<sup>1,17,18,b</sup>



## DEFINITIVE DIAGNOSIS OF EG/EoD<sup>1,17,18,c</sup>

### Your pathologist plays a crucial role in the detection of EG/EoD

Partnership with your pathologist can help avoid missing cases of EG/EoD by aligning on a systematic approach to the evaluation of gastric and duodenal biopsy specimens, including<sup>18,20</sup>:

Evaluating eosinophilic inflammation under **high-power magnification**<sup>18,22</sup>

**Counting eosinophils** in multiple hpf's per specimen<sup>1,9,17,18</sup>

Utilizing the histologic threshold of  **$\geq 30$  eosinophils per hpf** to indicate a possible diagnosis of EG/EoD<sup>1,9,17,18</sup>

Visit [divedeeper.com](http://divedeeper.com) to learn more about EG/EoD and the steps to diagnosis

<sup>a</sup>Allakos does not provide medical advice and assumes no liability for medical care decisions made using this approach. Medical care decisions for individual patients are to be made by patients' healthcare professionals, including decisions regarding diagnosing EG/EoD and how to evaluate biopsy samples.

<sup>b</sup>In 5 hpf's in the stomach and/or 3 hpf's in the duodenum.<sup>1,17,18</sup>

<sup>c</sup>In the absence of other causes of eosinophilia (eg, infection).<sup>9</sup>

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