Host-Related Gastritides: Diagnostic Footnotes or Neglected Diseases?

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Background and Hypothesis

While the Kyoto Global Consensus Report on Gastritis (1) focused on *H. pylori*, it also discussed those gastritides that, for lack of a better understanding of their etiology, appear to stem from immune mediated imbalances within the host. These include autoimmune atrophic gastritis (AIG), lymphocytic (LyG), eosinophilic (EoG), collagenous (CG), idiopathic granulomatous (GrG), and *Hp*-negative chronic active gastritis (*Hp*-neg CAG). The purpose of this study was to determine how frequently these conditions were diagnosed in a large US database of patients who had gastric biopsies over a period of 12 years.

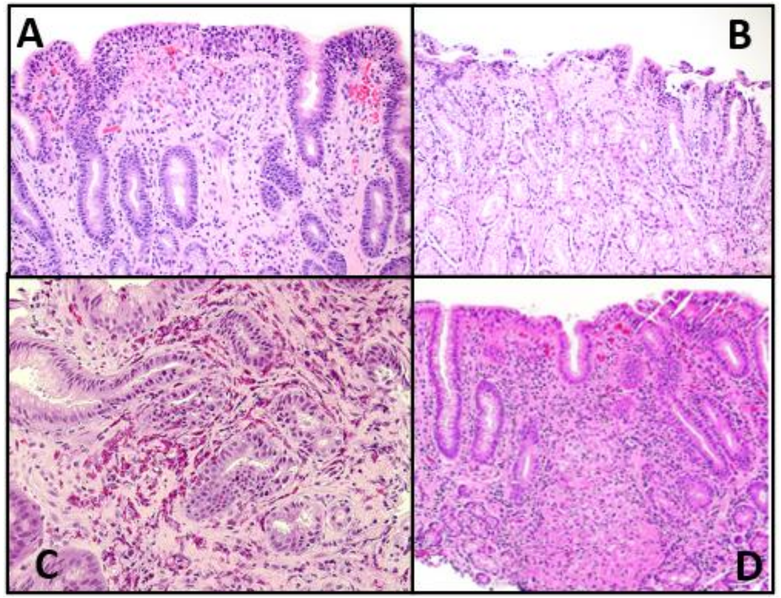

Figure 1. Photomicrographs of lymphocytic gastritis (A), collagenous gastritis (B), eosinophilic gastritis (C), and granulomatous gastritis (D).

Methods

We extracted all patients with a gastric biopsy between 2008-2020 from Inform Diagnostic's IDEA database, a large database of codified pathology reports. We then calculated the frequency of AIG, LyG, EoG, CG, GrG, and Hp-neg-CAG and their corresponding age and gender statistics.

Results

The frequency of the diagnoses of the host-related gastritides is depicted in Table 1. Of 1,510,775 unique patients who had gastric biopsies, these gastritides accounted for <2% of all diagnoses, in contrast, for example to 9.5% for *H. pylori* gastritis.

Gastric phenotype	Patients (%)	Median age (range)	Males (%)
Atrophic autoimmune	4,338 (0.29)	65 (14 - 99)	1,101 (25.4)
Lymphocytic	2,936 (0.19)	58 (1 - 95)	1,175 (40.0)
Eosinophilic	416 (0.03)	47 (1 – 89)	193 (40.3)
Collagenous	217 (0.01)	59 (10 – 90)	60 (46.4)
Hp-negative active	17,599 (1.16)	56 (1 – 99)	6,491 (36.9)
All patients	1,510,775	57 (0 – 102)	573,308 (37.9)

Table 1. The prevalence, age range, and gender of patients with various gastritides in a large histopathologic database

Conclusion

In spite of their low prevalence, these forms of gastritis need to be recognized, followed up, and in some cases treated. Thus, their rarity should not make them any less relevant to the clinical community. The reported frequencies are based exclusively on the diagnoses generated by gastrointestinal pathologists using predetermined diagnostic keys in one large, specialized laboratory. A very small number of diagnoses may have been missed because some pathologists may occasionally use an uncoded phrase of a descriptive diagnosis. This may be particularly true in the case of AIG, which some pathologists prefer to diagnose descriptively, and EoG, which has no accepted diagnostic guidelines.

Highlights

- Autoimmune gastritis, lymphocytic gastritis, eosinophilic gastritis, collagenous gastritis, and *Hp*-negative chronic active gastritis are rare entities, collectively constituting a little over one percent of gastric diagnoses in our database.
- Although rare, these conditions may require workup, treatment, and/or follow up and therefore should be readily recognized and reported.

References

1. Sugano K, Tack J, Kuipers EJ on behalf of faculty members of Kyoto Global Consensus Conference, *et al* Kyoto global consensus report on *Helicobacter pylori* gastritis *Gut* 2015;**64:**1353-1367