

# Who Knows When It All Began? A Case of Autoimmune Gastritis

Idrees Suliman, MD<sup>1</sup>; Preeyanka Sundar, MD<sup>1</sup>; Suma Harsha Kosuru, MBBS<sup>1</sup>; Abdul Nadir, MD<sup>1</sup>; Spogmai R. Khan, MD<sup>1</sup>; Sara Ancello, DO<sup>1</sup>

<sup>1</sup>Mountain Vista Medical Center, Mesa, Az

## INTRODUCTION

- Gastritis is a common entity that manifests as erythema of the gastric mucosa seen on EGD.
- The most common cause of Gastritis is infection, specifically H pylori. Atrophic gastritis is suggested endoscopically by loss of rugal folds and appearance of the submucosal vessels. (1,2)
- Autoimmune Metaplastic Atrophic Gastritis (AMAG) is a subtype and is suggested pathologically by full thickness chronic inflammation, oxyntic gland destruction, prominent eosinophils, metaplasia, or parietal cell pseudohypertrophy.(3)
- Endoscopic surveillance remains controversial. Management strategies include eradication of H pylori infection. We present a case of AMAG associated with Lupus.(4,5)

## CASE DESCRIPTION

- A 45-year-old Caucasian female with history of Lupus presented with persistent, dull, aching epigastric pain aggravated by solid food intake and anemia.
- She had no previous history of H pylori, no previous use of antacids, NSAIDs, or digestive enzymes.
- Laboratory work up showed mild microcytic anemia.
- EGD showed loss of rugal folds with edematous change in fundus and body. Biopsy showed chronic gastritis with intestinal metaplasia. Repeat EGD in 1 year showed loss of rugal folds(Figure 1) and pallor to the mucosa. Biopsies were done according to mapping protocol for intestinal metaplasia of greater and lesser curvature of antrum, incisura and body showed atrophic/autoimmune gastritis.
- Gastrin level was 1419pg/mL, Antiparietal cell Antibody 108.1 Units ( >24 U being positive), and Intrinsic factor Ab was low 1.0AU/mL (Cut off is 1.1AU/mL).
- She was managed with Iron supplementation, assessment for other vitamin deficiencies (B12 and folate were normal), and with yearly surveillance EGDs with mapping due to presence of intestinal metaplasia.

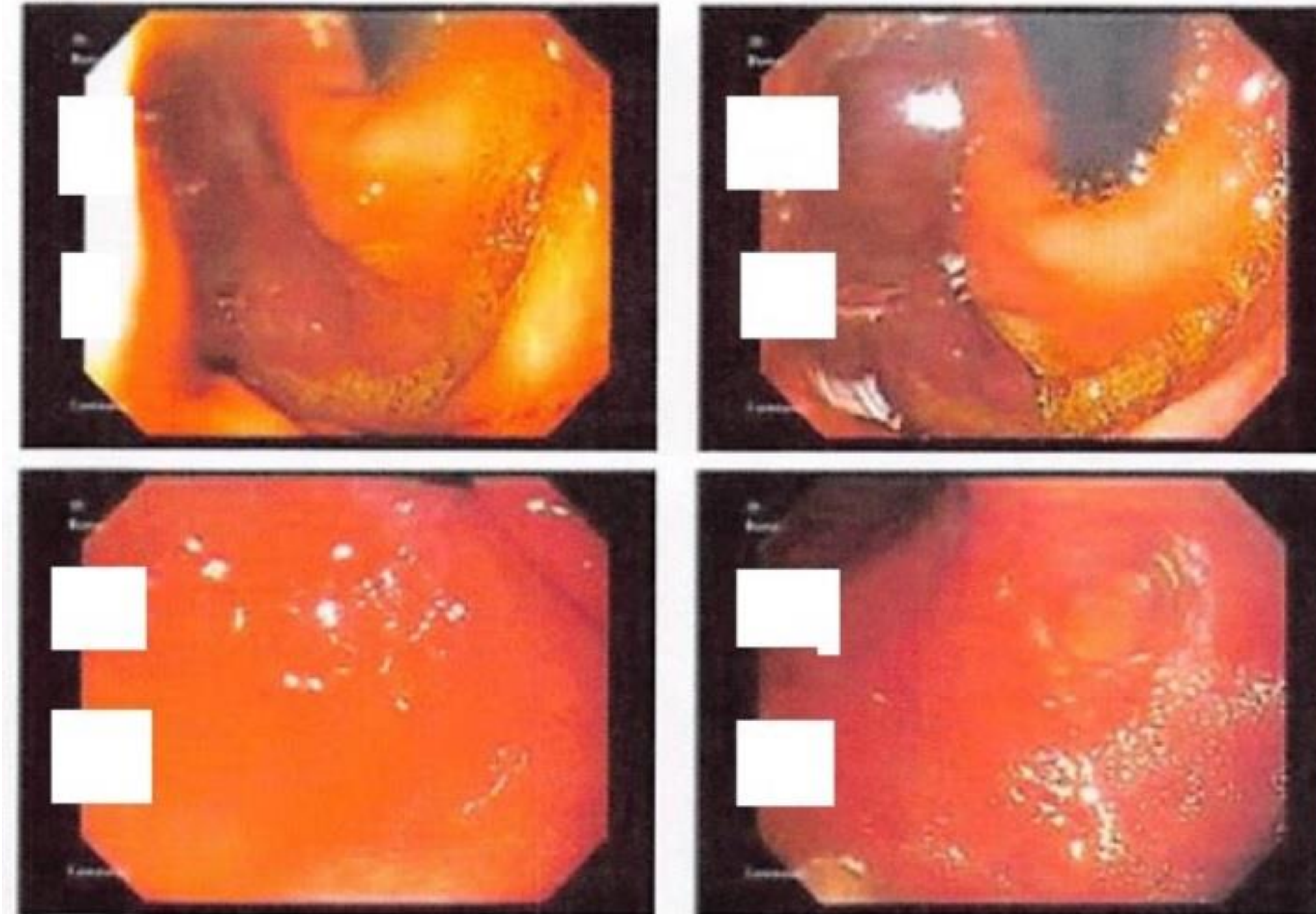


Figure 1: Stomach showing atrophic folds

## CONCLUSION

- The endoscopic findings in Atrophic Gastritis can be very subtle. It is important that endoscopists are aware of these findings in order to better identify this illness.
- Additionally regimented biopsies per protocol ensure that this diagnosis is not missed.
- Beyond eradication of H pylori further surveillance measures remain controversial.
- These should be considered on a case by case basis taking family history, region, smoking history, age, comorbidities, obesity, and alcohol consumption into consideration.
- More research is required to make universal screening guidelines.

## REFERENCES

1. Ayaki M, Aoki R, Matsunaga T, Manabe N, Fujita M, Kamada T, et al. Endoscopic and upper gastrointestinal barium X-ray radiography images of early-stage autoimmune gastritis: a report of two cases. *Intern Med.* 2021 Jun;60(11):1691–6.
2. Choudhuri J, Hall S, Castrodad-Rodriguez CA, Westerhoff M, Jabbour TEI, Jain S, et al. Features that aid identification of autoimmune gastritis in a background of active Helicobacter pylori Infection. *Arch Pathol Lab Med.* 2021;145(12):1536–43.
3. D. Hara, M. Akamatsu, H. Mizukami, B. Kato, T. Suzuki, J. Oshima, et al. A case of subacute combined degeneration of spinal cord diagnosed by vitamin B administration lowering methylmalonic acid *Case Rep Neurol,* 12 (2020), pp. 27-34, 10.1159/000505321
4. Kotera T, Oe K, Kushima R, Haruma K. Multiple pseudopolyps presenting as reddish nodules are a characteristic endoscopic finding in patients with early-stage autoimmune gastritis. *Intern Med.* 2020 Dec;59(23):2995–3000.
5. .W. Htut, K.Z. Thein, T.H. Oo Pernicious anemia: pathophysiology and diagnostic difficulties *J. Evid. Base Med.,* 14 (2) (2021), pp. 161-169, 10.1111/jebm.12435