

## Introduction

- Gastric antral vascular ectasia (GAVE), also known as watermelon stomach due to its endoscopic appearance, is characterized by ectatic mucosal vessels in the gastric antrum.
- The clinical presentation is similar to that of portal hypertensive gastropathy (PHG) with chronic slow GI blood loss.
- Though associated with cirrhosis, unlike PHG it is not caused by portal hypertension.
- These lesions are typically flat, linear, red stripes and so the diagnosis and treatment are based on this classic appearance which may be confirmed on biopsy.
- Serial treatments with argon plasma coagulation can reduce transfusion requirements and restore hemoglobin levels in these patients.
- Below we present a case of nodular GAVE, a rare variant, which requires a high level of clinical suspicion for appropriate and timely therapy.

## Case Description

- This is an 84-year-old female patient with a past medical history of chronic kidney disease who presented for endoscopic evaluation of iron deficiency anemia.
- Initial, upper endoscopy and colonoscopy showed a frond-like/villous linear series of non-bleeding masses in the gastric antrum.



- Pathology demonstrated hyperplastic/inflammatory changes.
- She was referred to an advanced endoscopist for endoscopic ultrasound (EUS) and management.
- EUS showed findings consistent with nodular GAVE given vascular flow within each of the columns.
- Endoscopic band ligation (EBL) was then performed successfully.

## Discussion

- Nodular GAVE can easily be mistaken for hyperplastic polyps, a misdiagnosis that would delay treatment.
- The first-line treatment of GAVE is the endoscopic application of argon plasma coagulation (APC), a type of thermal therapy that is applied to the affected area causing localized necrosis.
- However, EBL has been recently used as an alternative therapy especially for refractory cases.
- A recent meta-analysis<sup>1</sup> of 10 studies showed that treatment response to EBL was 81% with a 15.4% recurrence rate.
- EBL was also associated with a decrease in RBC transfusion requirement and hospital length of stay.
- Therefore, further research studies on the role of EBL should be considered.

Figure 1: Endoscopic band ligation in the gastric antrum