Refractory Bleeding from Nodular Gastric Antral Vascular Ectasia (GAVE): Is Combination Therapy of Sclerotherapy and Band Ligation the Solution?

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Background

- Gastric antral vascular ectasia (GAVE) is a rare condition that presents in the distal stomach as dilated longitudinal columns of blood vessels prone to bleeding.
- Nodular GAVE is an even rarer variant and is often refractory to standard therapy for GAVE. Endoscopic treatment options widely varies and include rubber band ligation, radiofrequency ablation (RFA), argon plasma coagulation (APC), and resection with hot snare.
- We present a case study of successful treatment of nodular GAVE of a patient who has been refractory to repeated APC with combination therapy of band ligation and sclerotherapy.

Case Description

63 year old female with history of alcoholic cirrhosis and pancreatitis with persistent iron deficiency anemia secondary to chronic blood loss requiring constant transfusions. Initial EGD was performed at age of 60 with evidence of small grade I esophageal varices, portal hypertensive gastropathy, and innumerable gastric polyps in the gastric body and antrum that on biopsy was consistent with nodular GAVE. She then underwent 5 repeat EGDs over a span of 6 months with a combination RFA, APC, snare resection followed by hemostatic clipping, and banding, with continued recurrence of nodular GAVE and transfusion dependent anemia, with total of 17 units of packed red blood cell (pRBC) transfusions required over the same 6 month period.

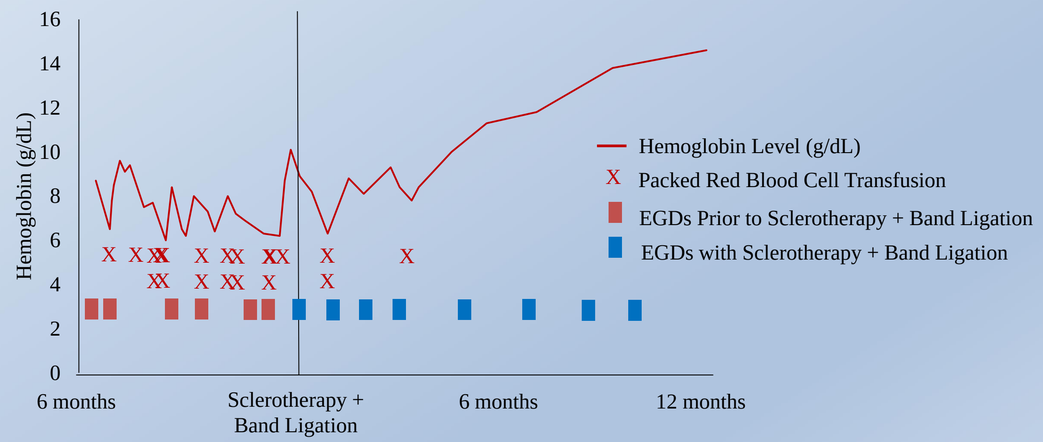
On her 7th EGD, she then underwent sclerotherapy (1% sodium tetradecyl sulfate (STS), 20mL total), which were injected at the base of the nodular areas, along with placement of 12 bands. Her transfusion requirements subsequently subsided after this session, and the patient received additional 6 EGD sessions with repeat combination therapy over the next 12 months, with notable visual improvement endoscopically subsequent to 2 sclerotherapy plus banding sessions. She only required a total of 3 units of pRBC transfusion over the same period.

Results

Before Initiation of nodular GAVE treatments

After several EGDs, but before treatment with sclerotherapy + band ligations

After multiple sessions of sclerotherapy + band ligations



Discussion

We described the first known case of combination sclerotherapy and band ligation therapy for treatment of refractory nodular GAVE. The treatment resulted in significant reduction in transfusion requirements with concomitant improvement of the appearance of nodular GAVE even after just 2 sessions, and may be particularly useful in patients who have failed more conventional treatments. Additional studies will need to be performed to determine the safety and efficacy of this combination treatment modality.