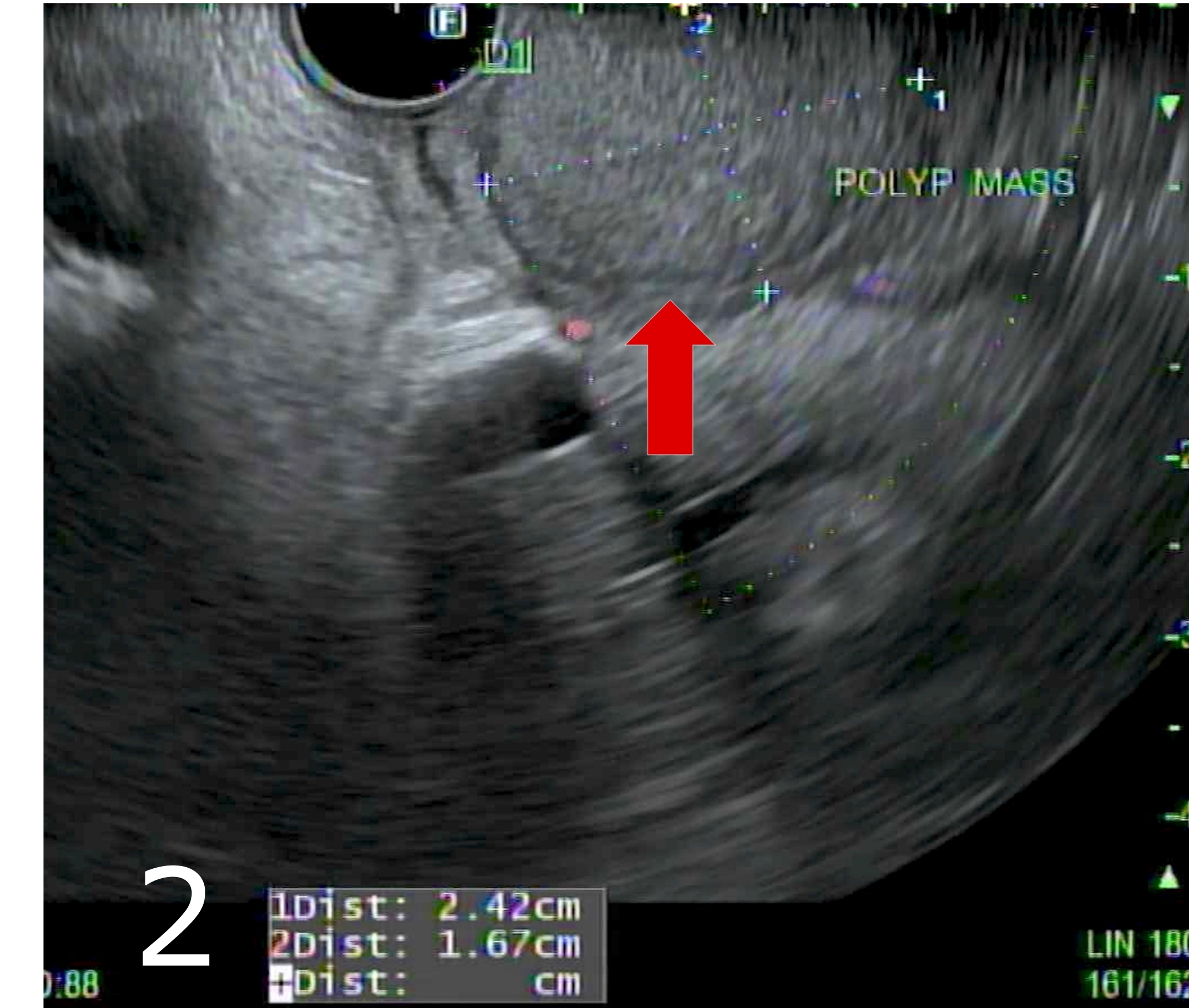
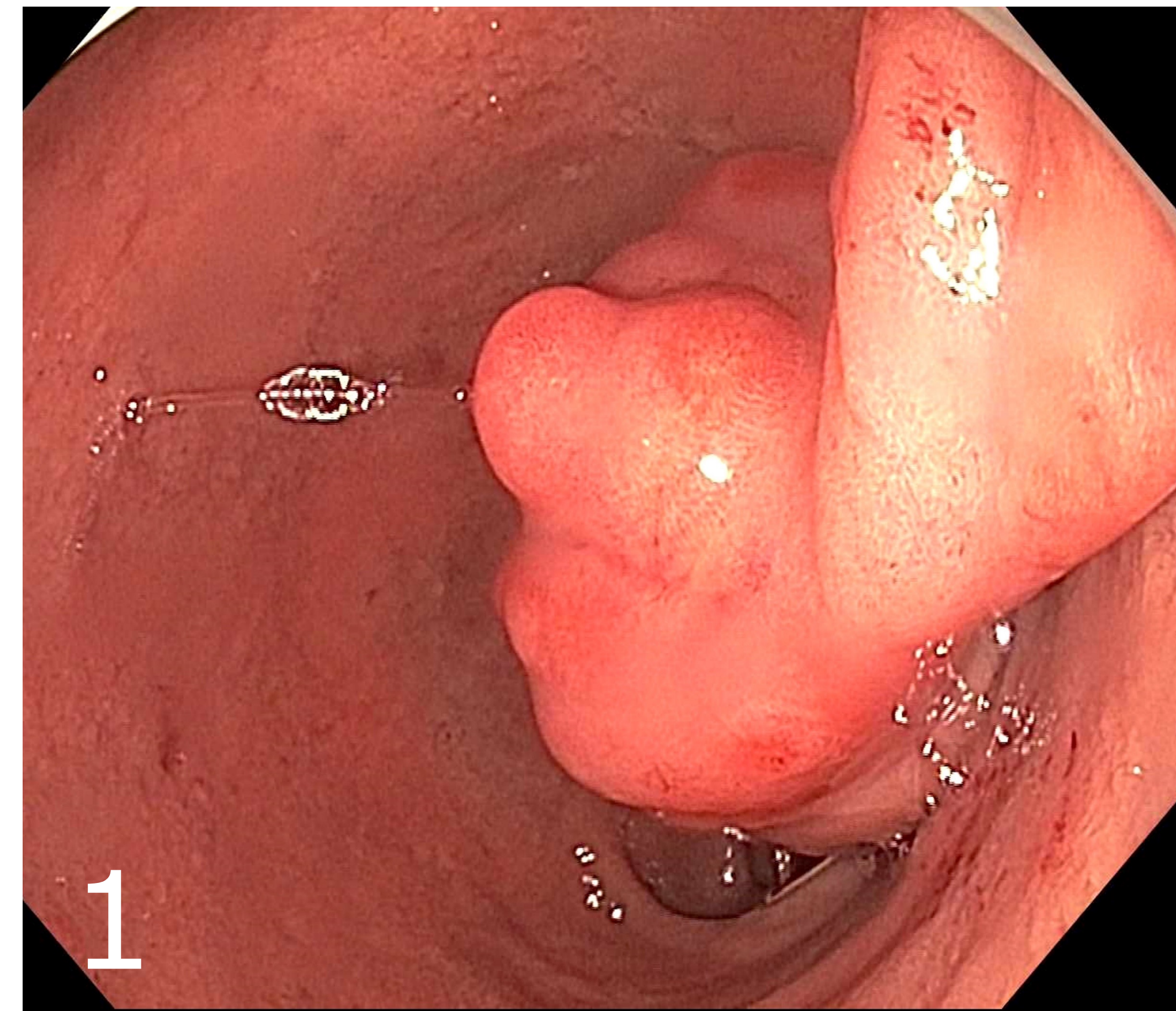


## Introduction

Brunner's gland hamartoma is a rare benign duodenal tumor. It is usually found incidentally on the esophagogastroduodenoscopy (EGD), but some patients present with gastrointestinal bleeding.

## Case Description

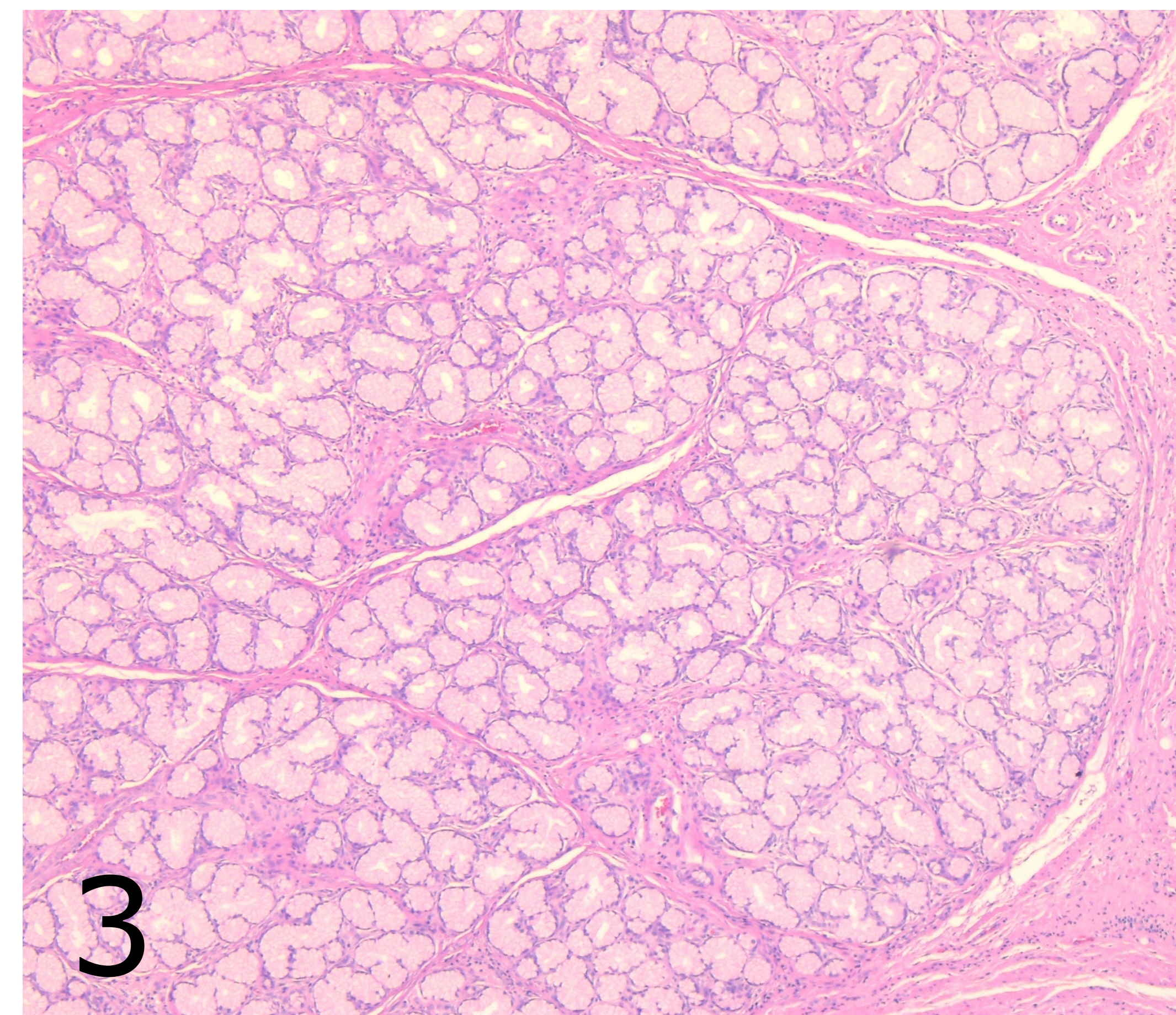
- A 77-year-old man with hypertension presented with melena and LUQ pain for 4 months.
- No nausea, vomiting, weight loss, or diarrhea. Denies NSAIDs.
- Physical examination and lab tests were normal.
- EGD showed a single 30 mm pedunculated polyp with no bleeding in the duodenal bulb (Figure 1).
- EUS showed a 24.2x16.7 millimeters, hypoechoic, homogeneous mass originating from the muscularis mucosa layer at the duodenal bulb with low flow on Doppler (Figure 2).
- En bloc endoscopic mucosal resection (EMR) of the mass was performed with endoloop placement followed by electrocautery-assistant resection.
- Histology showed hyperplasia of the Brunner's glands (Figure 3).
- Follow up EGD at 6 months showed no evidence of recurrence.
- Patient has not had and abdominal pain after the resection of the Brunner's gland hamartoma.



**Figure 1:** EGD showed a single 30mm pedunculated polyp at the duodenal bulb.

**Figure 2:** EUS showed 24.2x16.7 mm, homogenous mass at the duodenal bulb.

**Figure 3:** Histopathology (H&E stain) showing hyperplasia of the Brunner's glands.



## Discussion

- Brunner's gland hamartoma is an extremely rare duodenal tumor with an estimated incidence of 0.008%.
- The majority are asymptomatic and have an incidental finding from imaging or EGD.
- Patients can present with gastrointestinal bleeding or obstructive symptoms.
- EUS should be performed to assess the lesion as well and its vascularity.
- Endoloop placement prior to EMR should help prevent significant bleeding during the resection of the lesion as described in our case.
- Malignant potential has been reported to be extremely rare, but dysplastic changes and invasive carcinoma can be seen.

## Conclusion

Brunner's gland hamartoma is a rare benign duodenal tumor. Patient can be asymptomatic at presentation. The diagnosis relies on endoscopic finding and imaging.

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## References:

1. Rocco A, Borriello P, Compare D, et al. Large Brunner's gland adenoma: case report and literature review. World J Gastroenterol 2006;12(12):1966-8. DOI: 10.3748/wjg.v12.i12.1966.
2. Sorletto M, Timmer-Stranghöner A, Wuttig H, Engelhard O, Gartung C. Brunner's Gland Adenoma - A Rare Cause of Gastrointestinal Bleeding: Case Report and Systematic Review. Case Rep Gastroenterol 2017;11(1):1-8. DOI: 10.1159/000454711.
3. Levine JA, Burgart LJ, Batts KP, Wang KK. Brunner's gland hamartomas: clinical presentation and pathological features of 27 cases. Am J Gastroenterol 1995;90(2):290-4.
4. Vyas S, Skipworth JR, Lytras D, et al. Rare presentation of Brunner's gland adenoma: another differentiation in patients with recurrent "idiopathic" pancreatitis. Hepatobiliary Pancreat Dis Int 2012;11(1):107-10. DOI: 10.1016/s1499-3872(11)60133-1.
5. Liang M, Liwen Z, Jianguo S, Juan D, Ting S, Jianping C. A case report of endoscopic resection for the treatment of duodenal Brunner's gland adenoma with upper gastrointestinal bleeding. Medicine 2020;99(52) ([https://journals.lww.com/md-journal/Fulltext/2020/12240/A\\_case\\_report\\_of\\_endoscopic\\_resection\\_for\\_the.3.aspx](https://journals.lww.com/md-journal/Fulltext/2020/12240/A_case_report_of_endoscopic_resection_for_the.3.aspx)).