

Zhu, M. et al. Brunner's Gland Hamartoma of the Duodenum: A Literature Review. Adv Ther. 2021. 10.1007/s12325-021-01750-6

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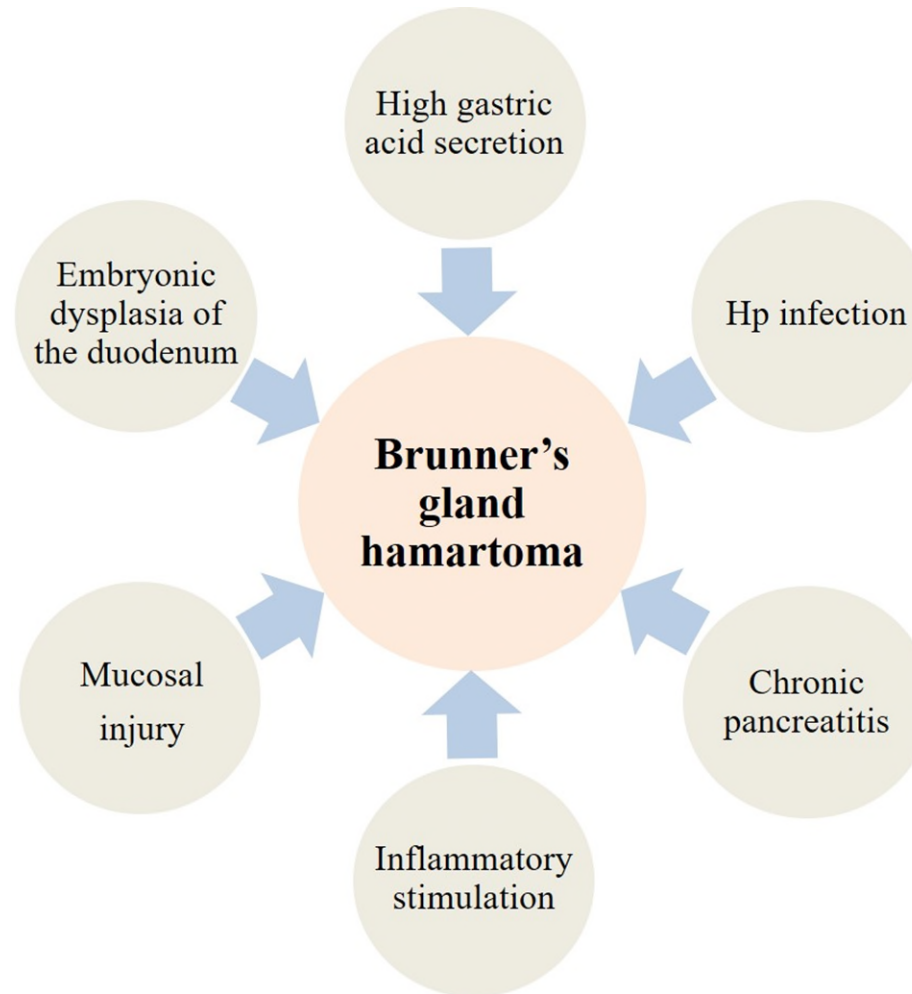
Background

1. Duodenal Brunner's gland hamartoma is a rare benign tumor, which accounts for less than 1% of the primary tumors of the small intestine, and usually does not produce clinical symptoms.
2. Its clinical manifestations are nonspecific, etiology remains unclear, and treatment strategy needs to be further refined.
3. Endoscopic biopsies are mostly negative, because the mass is often covered by intact duodenal mucosa, and the depth of biopsy is usually insufficient to reach the tumor tissue located in the submucosa.
4. This lesion has been insufficiently recognized.

Aims

- This literature review mainly discusses the epidemiology, clinical features, possible etiology and pathogenesis, diagnostic methods, malignant potential, treatment, and prognosis of Brunner's gland hamartoma.

Figure 1. Underlying risk factors of Brunner's gland hamartoma.



Key Findings

- Brunner's gland hamartoma often refers to a benign proliferative lesion of the duodenum.
- Underlying risk factors of Brunner's gland hamartoma include high gastric acid secretion, *Helicobacter pylori* infection, chronic pancreatitis, inflammatory stimulation, and mucosal injury, etc.
- Endoscopic ultrasonographic features are as follows: mucosal and submucosal involvement, variable echogenicity (sometimes mixed with hypoechoic), and multiple cystic changes inside the tumor.
- Endoscopic ultrasonography guided-fine needle aspiration (EUS-FNA) can improve the diagnostic accuracy of Brunner's gland hamartoma.
- With the growth of benign proliferative lesions of Brunner's glands, mucosal ulcers may develop, thereby leading to the repair of gastric foveolar metaplasia with papillary architecture and then malignant transformation.
- For asymptomatic patients with Brunner's gland hamartoma, conservative treatment of small lesions is acceptable, while excision of large lesions is recommended to prevent from bleeding and obstruction. For symptomatic patients, endoscopic or surgical resection should be considered.