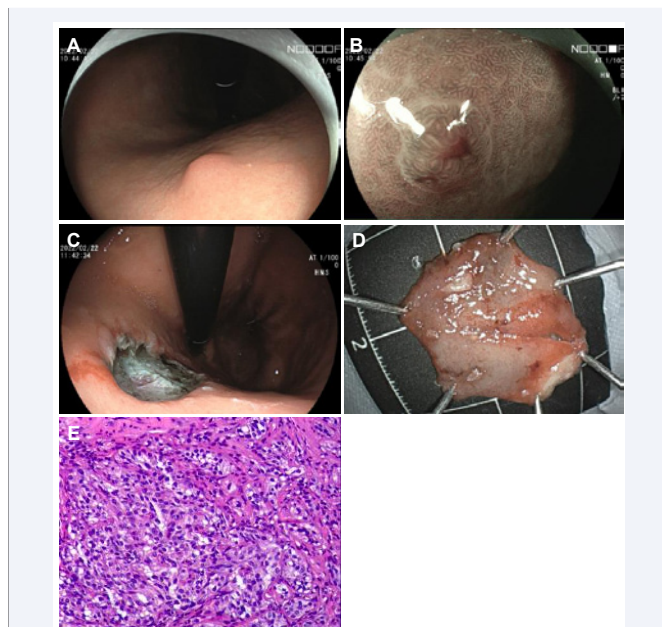


## Clinical Image

# An Unexpected Finding: Gastric Neuroendocrine Neoplasm

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A 43-year-old woman was admitted to the gastroenterology clinic because of a 1-year history of epigastric pain. She had no documented medical history. Her physical examination and *Helicobacter pylori* antigen detection revealed no remarkable abnormalities. Gastroscopy demonstrated a 0.8 cm nodule in the gastric greater curvature (Figure 1A, B). Endoscopic ultrasound demonstrated a hypoechoic intramural structure in the second layer corresponding to the submucosal layer of the gastric wall. Endoscopic submucosal dissection was performed to remove the lesion (Figure 1C, D). Histopathology of the specimen by hematoxylin and eosin staining (Figure 1E) and the lesion staining strongly immunoreactive for chromogranin and synaptophysin were consistent with a well-differentiated



**Figure 1** An Unexpected Finding: Gastric Neuroendocrine Neoplasm. A: Conventional endoscopic image with white light revealed a hemispherical reddish submucosal tumor; B: Magnifying endoscopic image with narrow band imaging revealed gastric pit structures present on the surface of the tumor; C, D: Endoscopic submucosal dissection was performed to remove the lesion; E: Histopathology of the specimen by hematoxylin and eosin staining.

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grade 2 neuroendocrine neoplasm type 1 based on clinical characteristics of the patient, which was featured by a moderate proliferation index Ki67 around 5% in neoplastic cells. No etiology for her epigastric pain was found on gastroscopy examination. Gastric neuroendocrine neoplasms (g-NENs) are a heterogeneous group of tumours arising from enterochromaffin like cells and showing different clinicopathological features and behaviour, which increase in frequency partially due to increased use of endoscopy imaging [1]. The diagnosis of g-NENs depends on histopathological investigation characterized by positively staining with chromogranin A and synaptophysin, which is taken by upper gastrointestinal endoscopy [2]. Mitotic index and ki-67 proliferation index contribute to grading. The management, treatment and prognosis differ significantly between subtypes of g-NENs. Treatment options for g-NENs include endoscopic and surgical resection, and medical treatment with somatostatin analogues and chemotherapy. Type I g-NENs are managed with local endoscopic resection and surveillance, which usually have a good prognosis [3]. Follow-up endoscopic after 1 year confirmed no recurrence. However, the patient needed to be aware of potential occurring autoimmune gastritis due to the positive anti-parietal cell antibody although no signs of vitamin B12 deficiency anemia emerging.

**ETHICAL STATEMENT**

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this "GI Image".

**AUTHOR'S CONTRIBUTIONS**

Collection of data: Sheng-Lan Du; Manuscript preparation and writing: Yan Zhang; Final approval of the manuscript: Wei Liu.

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