

Title:

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Unexpected submucosal lesion with malignant potential

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Author contributions

Wei-Na Jing and Du He contributed to the drafting and submission;

Zhu Wang and Jin-Lin Yang contributed to study design, acquisition of data, analysis of data and revision of manuscript.

Conflict-of-interest

The authors declared that they have no conflicts of interest to this work.

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Dear Editor,

A 71-year-old male complained of recurrent abdominal pain for more than 4 years and had a protruding gastric fundus mucosa for more than 3 years. Esophagogastroduodenoscopy (EGD) showed a 1.5-cm submucosal lesion with a pinhole-like orifice in the fundus (Figure 1A). Endoscopic ultrasound (EUS) showed a heterogenous hypoechoic lesion located in the submucosa with distinct margin and anechoic tubular structure inside (Figure 1B). The preprocedural EUS found the central anechoic area diminished though its size slightly increased to 1.8 cm. The pathological findings revealed inverted growth of glands and smooth muscle boundaries in the submucosa, covering by normal surface (Figure 2A). Surprisingly, the submucosal glands mixed with high-grade intraepithelial neoplasia and adenocarcinoma, with positive burnt edge of vertical cutting edge (Figure 2B). The inverted hyperplastic polyp (IHP) is known as hyperplastic gastric mucosa growth into submucosa and endoscopically presented as sessile or pedunculated submucosa lesion. It occurs in between 3.1% to 20.1% of cases, while its malignant transformation rate is just 0.02% [1]. The measurement of the cancerous IHP depth of invasion is controversial. Thus, how to define the depth of lesion invasion in this patient needs to be seriously considered.

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References

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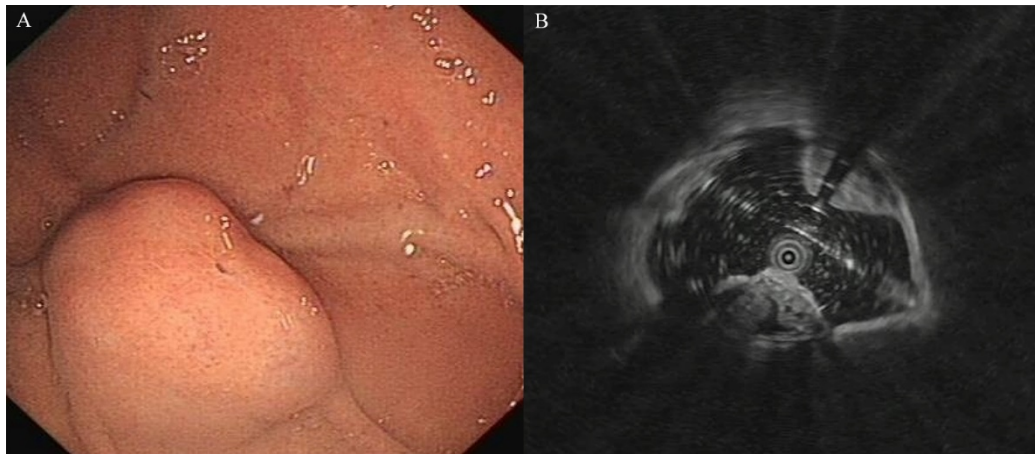


Figure 1. Endoscopic presentation of the lesion

A. A pinhole-like orifice above the 1.5-cm submucosal lesion was found in the fundus.

B. A well-defined lesion with anechoic tubular structure inside located in the submucosa layer.

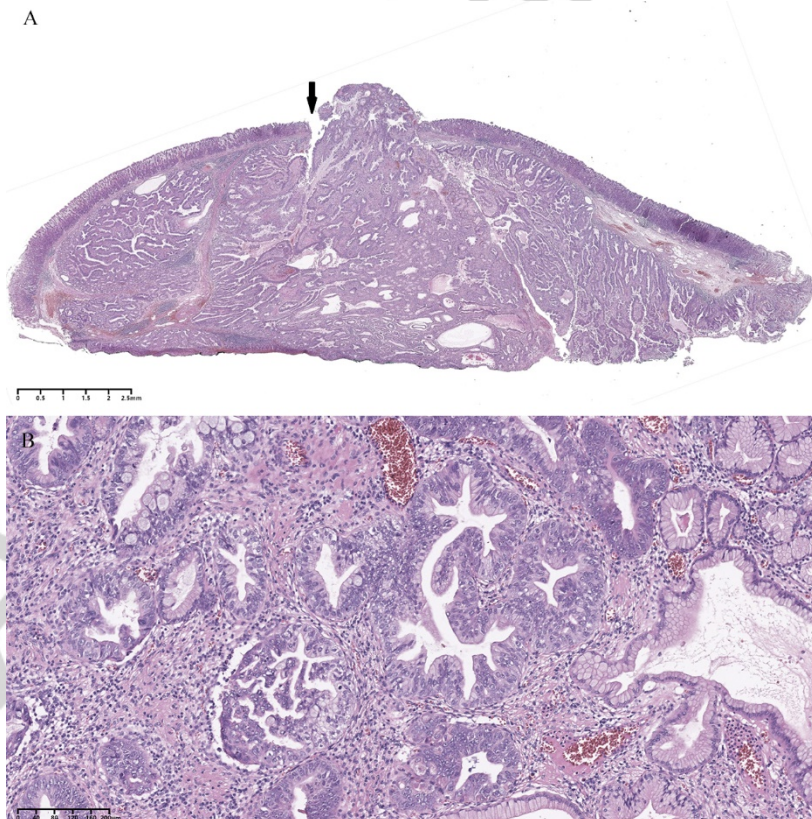


Figure 2. Pathology revealed that the lesion was an inverted hyperplastic polyp with cancerization.

A. The glandular proliferations with smooth muscle bundles inversely grew into submucosa, with discontinuous mucosa layer in the central orifice (black arrow). (HE-stain, $\times 0.7$)

B. The disorganized glands and increased cytoplasmic ratio indicated formation of high-grade intraepithelial neoplasia and adenocarcinoma. (HE-stain, $\times 9.1$)

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