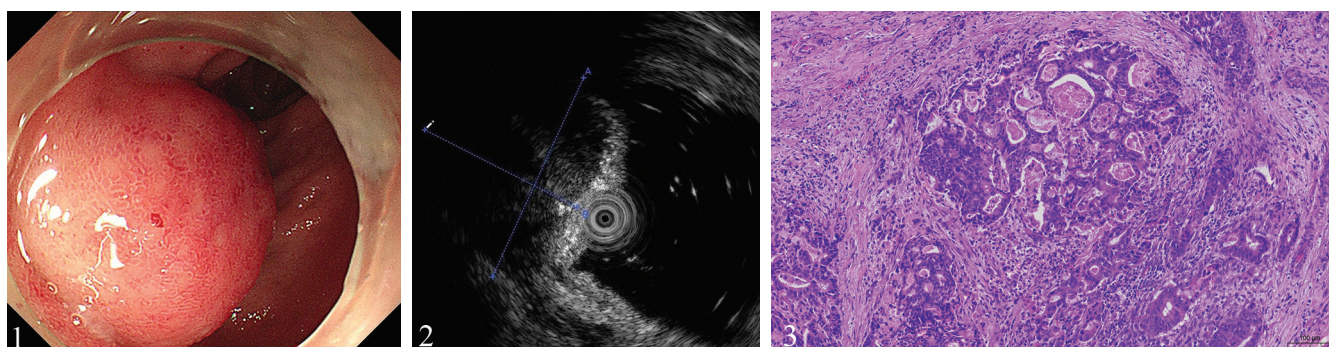


A Rare Submucosal Lesion of the Duodenum

Shuangzhu Yang, Jingjing Lian, Aiping Xu, Meidong Xu

Endoscopy Center, Shanghai East Hospital, Tongji University School of Medicine, Shanghai, China



A 68-year-old male was admitted to our department for the evaluation and treatment of a newly discovered mass in the duodenal bulb, without any symptoms. He had a history of cholecystectomy for cancer 2 years ago. The mass was incidentally identified during an abdominal magnetic resonance imaging (MRI) examination. Further evaluation with gastroduodenoscopy revealed a 2 cm mass in the duodenal bulb (Fig. 1). The physical examination and laboratory tests revealed no abnormalities.

Endoscopic ultrasound identified a hypoechoic mass with a hyperechoic region inside, originating from the muscular layer, with poorly defined borders relative to the surrounding tissues (Fig. 2). The patient underwent successful endoscopic full-thickness resection (EFTR) without complications. Pathological examination confirmed adenocarcinoma infiltrating the muscular layer (Fig. 3), with chronic schistosomiasis (egg calcification). Immunohistochemical staining showed CK7 and CK20 (Supplementary file) positivity, with a Ki67 index of 50%. Considering the patient's history, the tumor was suspected to be a metastasis from gallbladder cancer. Subsequently, the patient underwent additional surgical intervention.

Previously, no adenocarcinoma presenting as a submucosal tumor in the duodenum has been reported. Ectopic tissue has been identified as the most prevalent pathologic diagnosis for duodenal submucosal lesions, followed by neuroendocrine tumors, gastrointestinal stromal tumors, lipomas, Brunner's gland hyperplasia [1, 2]. Gallbladder carcinoma (GBC) is frequently reported to metastasize to the liver, lymph

nodes, and/or peritoneum [3]. This unprecedented case of adenocarcinoma manifesting as a submucosal mass broadens the differential diagnostic spectrum of duodenal lesions and highlights the significance of comprehensive clinical and pathological assessments, particularly in individuals with a history of malignancy.

Corresponding author: Meidong Xu, 1800512@tongji.edu.cn

Conflicts of interest: None to declare.

Supplementary material: To access the supplementary material visit the online version of the *J Gastrointestin Liver Dis* at <http://dx.doi.org/10.15403/jgld-6132>

REFERENCES

1. Zhang YR, Sun C, Cheng CL, et al. Endoscopic submucosal dissection for proximal duodenal subepithelial lesions: a retrospective cohort study. *Surg Endosc*. 2022;36(9):6601-6608. doi:10.1007/s00464-022-09068-2
2. Gao PT, Lin SL, Fu PY, et al. Endoscopic resection and suturing methods for non-ampullary duodenal submucosal tumors: "mini-invasive" treatments that should never be underestimated. *Surg Endosc*. 2023;37(8):6135-6144. doi:10.1007/s00464-023-10013-0
3. Duffy A, Capanu M, Abou-Alfa GK, et al. Gallbladder cancer (GBC): 10-year experience at Memorial Sloan-Kettering Cancer Centre (MSKCC). *J Surg Oncol*. 2008;98(7):485-489. doi:10.1002/jso.21141