

Title:

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Authors:

Guangwu Chen, Wenxi Jiang, Min Yue

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Colitis cystica profunda of the rectum diagnosed by endoscopic submucosal dissection

Guangwu Chen<sup>1</sup>, Wenxi Jiang<sup>2</sup>, Min Yue<sup>2\*</sup>

1 Center of Endoscopy. The First Affiliated Hospital, College of Medicine, Zhejiang

University, Hangzhou, China.

2 Department of Gastroenterology. The First Affiliated Hospital, College of Medicine,

Zhejiang University, Hangzhou, China.

\*Correspondence:

Dr. Min Yue, Department of Gastroenterology. The First Affiliated Hospital, College

of Medicine, Zhejiang University, Hangzhou, China. Email: yuemin@zju.edu.cn.

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Conflicts of interest:

The authors declare no conflict of interest.

Dear editor,

A 62-year-old man was admitted to our hospital with complaints of rectal

submucosal eminence for half a year. The patient had a history of hypertension and

cholecystectomy. He had no family history of colorectal diseases. Laboratory tests,

including complete blood count, tumor markers and stool were normal. A computed

tomography (CT) enhancement scan showed no obvious mass in the rectum. A

colonoscopy was performed revealing a 7-mm submucosal eminence in the lower

rectum about 5 cm to the anus, whose surface was smooth without swelling, erosion

and ulcer (Fig. 1a). An endoscopic ultrasonography (EUS) showed a hypoechoic lesion

of  $4.7 \times 3.2$  mm located in the submucosa (Fig. 1b). The boundary of the lesion was

clear and the internal echo was uneven with local hyperechoic shadows. There was



no obvious enlarged lymph nodes around the intestine. We performed endoscopic submucosal dissection (ESD) for en bloc resection of this lesion (Fig. 1c-f). The resected specimen was about  $12 \times 8 \times 4$  mm with a  $9 \times 7 \times 3$  mm nodule under it (Fig. 1g). When we fixed the specimen, a little viscous liquid flowed out of the specimen (Fig. 1h). Histologic examination revealed ectopic and cystic dilated glands in the submucosa with retention of mucus and other secretions and focal shedding of epithelium (Fig. 1i), suggesting the diagnosis of colitis cystica profunda (CCP).

## Discussion

CCP is a rare and benign lesion characterized by mucus-containing cysts under the mucosa of the colon and rectum. It appears endoscopically as pedunculated or villous polypoid lesions, covered by a normal, edematous or ulcerated mucosa. According to the distribution of lesions, the disease is divided into diffuse types and localized types. Patients with CCP may be asymptomatic or present with blood and/or mucus discharge, altered bowel habits, abdominal pain and rectal pain [1]. The pathogenesis of CCP are still unclear, but it is considered that congenital or acquired weakness of the muscularis mucosa, which is caused by inflammatory, infectious, traumatic or ischemic, leads to the embedding of the mucosal epithelium into the submucosa [2]. Treatment of CCP is mostly conservative and surgery is only suggested in patients with complications such as obstruction and bleeding. However, case reports recently showed that it not only mimicked well-differentiated rectal adenocarcinoma [3], but also accompanied by adenocarcinoma on the surface [4]. Therefore, for indistinguishable lesions, early ESD and postoperative biopsy are critical for diagnosis and treatment.

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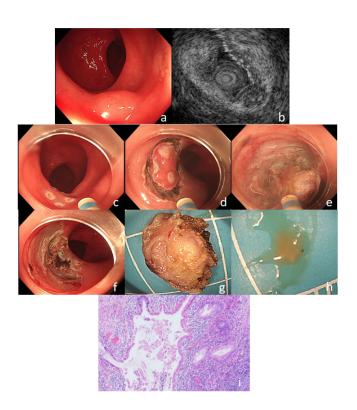


Fig. 1a. Colonoscopy showing a 7-mm submucosal eminence in the lower rectum. b. Endoscopic ultrasonography showing a hypoechoic lesion of  $4.7 \times 3.2$  mm located in the submucosa. c-f The process of endoscopic submucosal dissection. g. The resected specimen was about  $12 \times 8 \times 4$  mm with a  $9 \times 7 \times 3$  mm nodule under it. h. There was a little viscous liquid flowing out of the specimen. i. Histological image showing ectopic and cystic dilated glands in the submucosa.