Ménétrier disease manifested by polyposis and involved in both the small bowel and entire colon

A Case Report

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Abstract

Introduction: Ménétrier disease (MD) is rare that is involved in both the small bowel and entire colon.

The main symptoms and the important clinical findings: We describe a case of a 76-year-old male patient whose clinical presentations include intermittent diarrhea, epigastric pain, nausea, vomiting, astia, and weight loss. An endoscopy was performed showing a large number of irregular forms and different sizes of polypoid lesions in the gastrointestinal tract, which is rare for MD.

The main diagnoses, therapeutics interventions, and outcomes: Herein, this case was diagnosed as MD, mainly dependent on endoscopic evaluation, typical clinical symptoms, and histopathological examination of biopsy. As this patient was also infected with Helicobacter pylori, the eradication of H pylori was administered. Meanwhile, a high-protein diet was enjoined, the aforementioned patient’s symptoms were alleviated evidently after 1 month.

Conclusion: Although the etiology of MD remained undetermined, we showed that eradication of H pylori in this case might contribute to the disease remission. This study enlarged the present understanding of MD.

Abbreviations: H pylori = Helicobacter pylori, MD = Ménétrier disease.

Keywords: entire colon, Ménétrier disease, small bowel

1. Introduction

Ménétrier disease (MD), a hypoproteinemic hypertrophic gastrointestinal, presents typical clinical symptoms including nausea, vomiting, diarrhea, epigastric pain, weight loss, malnutrition, fatigue, and peripheral edema due to hypoalbuminemia.[1] Although the definite etiology of MD in adults still remains unknown, it often coexists with some specific infections, such as cytomegalovirus, Helicobacter pylori, herpes virus, human immunodeficiency virus, mycoplasma[2–6] as well as nonspecific ulcerative colitis.[7] Nevertheless, MD patients may show no remission when specific therapies are employed in these disorders. In this case, we showed that MD was involved in the stomach, small intestine, and entire colon, which rarely happened.

2. Consent

This study was approved by the Ethics Committee of Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology. The written informed consent was obtained.

3. Case description

A 76-year-old male patient was admitted to Tongji Hospital (Wuhan, Hubei province, China). He presented with intermittent diarrhea, epigastric pain, nausea, vomiting, astia, and weight loss. He had hypoalbuminemia (29.5 g/L), which the normal range of the index is from 35 to 52 g/L, but no obvious peripheral edema. Previous medical history included hypertension; laparoscopic cholecystectomy, common bile duct exploration, and T tube drainage; endoscopic retrograde cholangiopancreatography for the obstruction of the common bile duct. Family history was not contributory. The abnormal findings in laboratory studies were hypoalbuminemia and H pylori infection. The tumor markers test including alpha-fetoprotein, carcinoembryonic antigen, cancer antigen125, and cancer antigen19-9 was negative. The gastroscopy results showed protrusive lesions in the body and the fundus of the stomach (Fig. 1A), with multiple nodular changes in the antrum (Fig. 1B). The diffuse and irregular shapes were seen in duodenum (Fig. 1C), and it was the same to the whole small intestine that identified by capsule endoscopy. The colonoscopy was also performed because of the diarrhea, revealing diffuse elevations of various sizes, which was obvious in the cecum and ascending colon (Fig. 1D).
A histology of biopsy specimens acquired by endoscopic mucosal resection showed marked foveolar epithelial hyperplasia and no epithelial atypia, elongated foveolar epithelium, interstitial edema, and cystic dilation of foveolar glands without increase in inflammatory cells infiltration (Fig. 1E, hematoxylin and eosin staining).

Moreover, infection with *H pylori* has been implicated in MD. Therefore, eradication therapy for *H pylori* was administered, which was composed of pantoprazole (standard dose, b.i.d.), amoxicillin (1000 mg, b.i.d.), and clarithromycin (500 mg, b.i.d.) for 10 days. Meanwhile, a high-protein diet was enjoined. After 1 month, the above patient’s symptoms were alleviated evidently, the hypoalbuminemia had been improved (32.7 g/mL), and his body weight also increased. The telephone follow-up was conducted 3 months afterward, and the patient still did not feel uncomfortable.

4. Discussion

MD is an uncommon condition characterized by protein-losing and hypertrophic gastropathy. In adults (mean age at diagnosis is 55), the disorder of MD usually presents with an insidious onset and a progressive clinical course. The definitive etiology of MD is still unknown, but *H pylori* infection is believed to have some relation with it. [8,9] This viewpoint is also verifiable in this case report. MD should be suspected in cases of upper gastrointestinal tract symptoms and hypertrophied gastric mucosa with or without *H pylori* or hypoalbuminemia. Before MD is diagnosed, some other hypertrophic gastropathies, including lymphoma, polyposis, and suspected gastric malignancies, should discriminate from it. Further, it must be based on a comprehensive collection of data concerning clinical, endoscopic, laboratory, and histopathological findings. MD is generally shown by huge gastric mucosal folds in the body and fundus, with antral sparing. Herein, we describe a patient who bears *H pylori* infection and MD, and this disorder is involved not only in stomach, but also in both the small bowel and total colon. However, as for the colon, the lesion is especially obvious in the cecum and ascending colon. *H pylori* eradication treatment was initiated and provided therapeutic benefit to this patient.

Above all, in order to establish the correct diagnosis of MD, the histological findings, endoscopic and clinical features all should be necessary. Since the knowledge regarding its pathogenesis and effective therapeutic management has been lack so far, MD should be paid more attention to with particular treatment and ruled out of other similar diseases.

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