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BRIEF REPORT

Unusual abscess formation in colon cancer with mucinous components

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Introduction

Mucinous colorectal adenocarcinoma is characterized by the accumulation of extracellular mucin.[1,2] The incidence rate of mucinous colorectal adenocarcinomas has been lower in Asian populations and higher in Western populations.[3] However, a mucinous colorectal adenocarcinoma with abscess has rarely been reported.[4] Here, we report our rare experience of abscess formation in colon cancer with mucinous components.

Case Report

A 55-year-old man presented with high fever and upper abdominal pain. Laboratory tests revealed a high white blood cell count (24, 020/mm^3) and elevated levels of C-reactive protein (30.30 mg/dL). Abdominal enhanced computed tomography showed a large tumor and a small amount of gas in the transverse colon (Fig. 1a). Contrast enhancement was weak at the edge of the tumor and poor in the central region. Colonoscopy revealed a large tumor with necrotic tissue in the transverse colon (Fig. 1b), a biopsy of which showed a mucinous and well-differentiated adenocarcinoma with abscess (Fig. 1c). The patient underwent fasting therapy and total parenteral nutrition. In addition, he received broad-spectrum antibiotics for 2 weeks, which resolved the abdominal pain and inflammation. He chose not to undergo surgery.

Discussion

Mucinous adenocarcinomas are characterized by the accumulation of extracellular mucin and account for 10–15% of colon adenocarcinomas.[1,2] Mucinous colorectal adenocarcinomas are commonly located in the proximal side and are diagnosed at an advanced stage.[3] This case was concordant with these clinical features. On the other hand, abscess formation in a mucinous colorectal adenocarcinoma is rare. The small amount of gas in the transverse colon suggests the presence of a gas-producing infection, and pathological findings revealed abscess formation with necrosis and neutrophil accumulation. These results suggest that colon cancer with mucinous components was accompanied by bacterial infection and abscess formation. Some bacteria such as *Streptococcus bovis* and Clostridium septicum are possibly related to colorectal cancer.[5,6] However, fecal and blood cultures were negative in our case. In the literature, Hosaka *et al*. reported a case of mucinous adenocarcinoma in the descending colon accompanied by abscess formation and solitary metastasis.[4] The case also showed exacerbated inflammatory responses, and antibiotics were administered because of abscess formation. Therefore, colon cancer with mucinous components should be considered a differential diagnosis in colorectal cancer patients presenting with intra-abdominal abscess formation.

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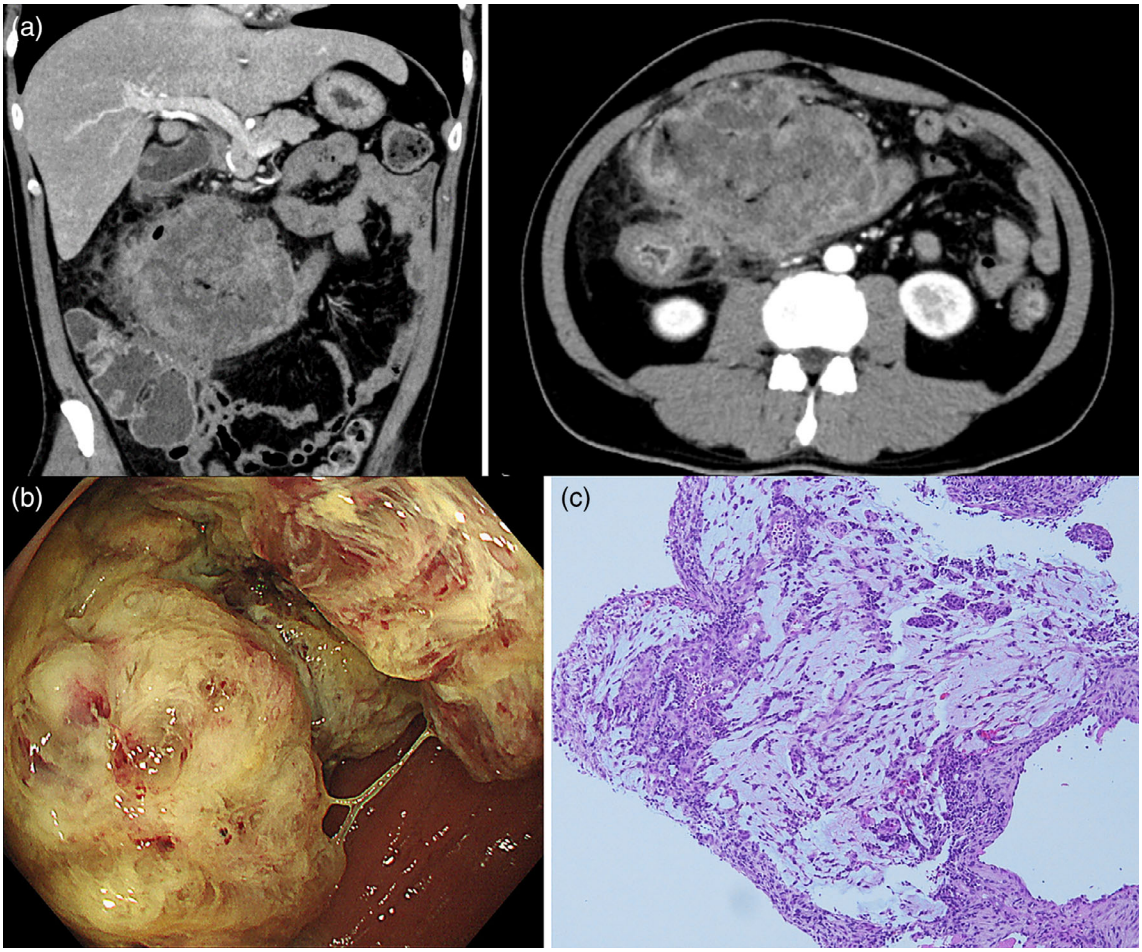

Figure 1 (a) Abdominal enhanced computed tomography shows a large tumor with a small amount of gas in the transverse colon. (b) Colonoscopy reveals a large tumor with necrotic tissue. (c) Biopsy specimens show a mucinous and well-differentiated adenocarcinoma with abscess (hematoxylin and eosin staining ×10).

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