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Jan. 07, 2010

Dear editors,

We submitted our manuscript entitled **“A rare cause of bloody stools in a 57-year-old woman patient with hepatocellular carcinoma”** to clinical challenges and images in GI of **“Gastroenterology”**. It has not been submitted for publication nor has it been published in whole or in part elsewhere. All authors listed on the title page meet criteria for authorship. I attest to the fact that all authors listed on the title page have read the manuscript, attest to the validity and legitimacy of the data and its interpretation, and agree to its submission to your journal. We believe the paper may be of particular interest to the readers of your journal.

To the best of our knowledge and belief, there is no document correlated with possible conflicts of interest, sources of financial support, corporate involvement, and patent holdings for each author needing attaching.

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Thanks very much for your attention to our paper .

Sincerely yours,
Dr. Jen-Wei Chou

A rare cause of bloody stools in a 57-year-old woman patient with hepatocellular carcinoma

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No conflicts of interest exists

Keywords: endoloop, hepatocellular carcinoma, rectal metastasis

Question

A 57-year-old woman was admitted to our hospital because of a 1-day history of bloody stools. She had several decades' medical history of hepatitis C virus infection and type 2 diabetes mellitus. One and half years ago before this admission, a hepatic mass in the right lobe was found by abdominal ultrasound. She then underwent a right segmentectomy for the liver tumor. The histological examination of the resected tumor revealed a hepatocellular carcinoma (HCC). Three months prior to this admission, she suffered acute onset of right limb weakness. Brain computed tomography scan demonstrated a mass lesion in the left frontal lobe. She underwent a craniotomy for removal of the brain tumor. The histological study of the resected brain tumor revealed a metastatic HCC. This time, bloody stools developed one day before this admission. Chest X-ray demonstrated a 5 cm-size mass in the left lower lung, suggestive of metastasis (Figure A). Colonoscopy demonstrated a 1.0 cm-sized ulcer in the rectum (Figure B). Moreover, a giant soft tissue-like lesion with adherent blood clots was identified in the rectum, suggesting the bleeding point (Figure C). The soft tissue-like lesion could not be removed by water flushing. We decided to remove it by endoscopic polypectomy. In order to prevent the postoperative bleeding, we first applied an endoloop (MAJ-254, Olympus, Tokyo, Japan) to ligate the base of this rectal lesion. However, the rectal lesion was dissected into two parts after ligation. The resected part of rectal lesion was sent for a histological study. What is the diagnosis of this rectal lesion?

Answer

On histological examination, the resected rectal lesion demonstrated small amount freely floating nests of atypical epithelial tumor cells with moderate nuclear anaplasia and granular eosinophilic cytoplasm in the mucoid exudates and blood clots (Figure *D*, arrows, hematoxylin and eosin; original magnification, $\times 400$). The immunohistochemical stain of the tumors cells showed positivity for Hep Par-1 (Figure *E*, arrows; original magnification, $\times 400$). Therefore, a diagnosis of metastatic HCC was made. Due to HCC with multiple metastases, the patient received palliative treatment. HCC is a very common cancer worldwide with a frequent intrahepatic and extrahepatic metastasis. Extrahepatic metastasis of HCC usually occurs in the lungs, lymph nodes, musculoskeletal system, adrenal glands, and peritoneum.^{1,2} In contrast, the gastrointestinal (GI) tract is a rare metastatic site of HCC, especially in the colon and rectum.¹ Poor performance status, portal vein thrombosis, untreated patient, and Child-Pugh score C were the predictors of extrahepatic metastasis of HCC at the initial diagnosis of HCC.³ The clinical manifestations of GI metastasis of HCC include abdominal pain, hemorrhage, intussusception, and intestinal obstruction. Endoscopic examination is the major diagnostic modality for GI metastasis of HCC, including esophagogastroduodenoscopy, colonoscopy, and enteroscopy. In the treatment of HCC patients with extrahepatic metastasis, most patients mainly undergo treatment for the primary HCC.³ Treatment of extrahepatic metastases is only indicated in HCC patients who have

good hepatic reserve, intrahepatic tumor stage (T0-T2), and are free of portal venous invasion.³

References

1. Katyal S, Oliver JH 3rd, Peterson MS, et al. Extrahepatic metastases of hepatocellular carcinoma. *Radiology* 2000;216:698-703.
2. Natsuizaka M, Omura T, Akaike T, Clinical features of hepatocellular carcinoma with extrahepatic metastases. *J Gastroenterol Hepatol* 2005;20:1781-1787.
3. Uka K, Aikata H, Takaki S, et al, Clinical features and prognosis of patients with extrahepatic metastases from hepatocellular carcinoma. *World J Gastroenterol* 2007;13:414-420.

Figure Legends

Figure A. Chest X-ray revealed a 5 cm-sized mass in the left lower lung, suggestive of metastasis.

Figure B. Colonoscopy demonstrated a 1.0 cm-sized ulcer in the rectum.

Figure C. Colonoscopy also demonstrated a giant soft tissue-like lesion with adherent blood clots in the rectum, suggesting the bleeding point.

Figure D. On histological examination, the resected rectal lesion demonstrated small amount freely floating nests of atypical epithelial tumor cells with moderate nuclear anaplasia and granular eosinophilic cytoplasm in the mucoid exudates and blood clots (Figure *D*, arrows, hematoxylin and eosin; original magnification, $\times 400$).

Figure E. The immunohistochemical stain of the tumors cells showed positivity for Hep Par-1, indicative of metastatic hepatocellular carcinoma (arrows, original magnification, $\times 400$).

Figure A
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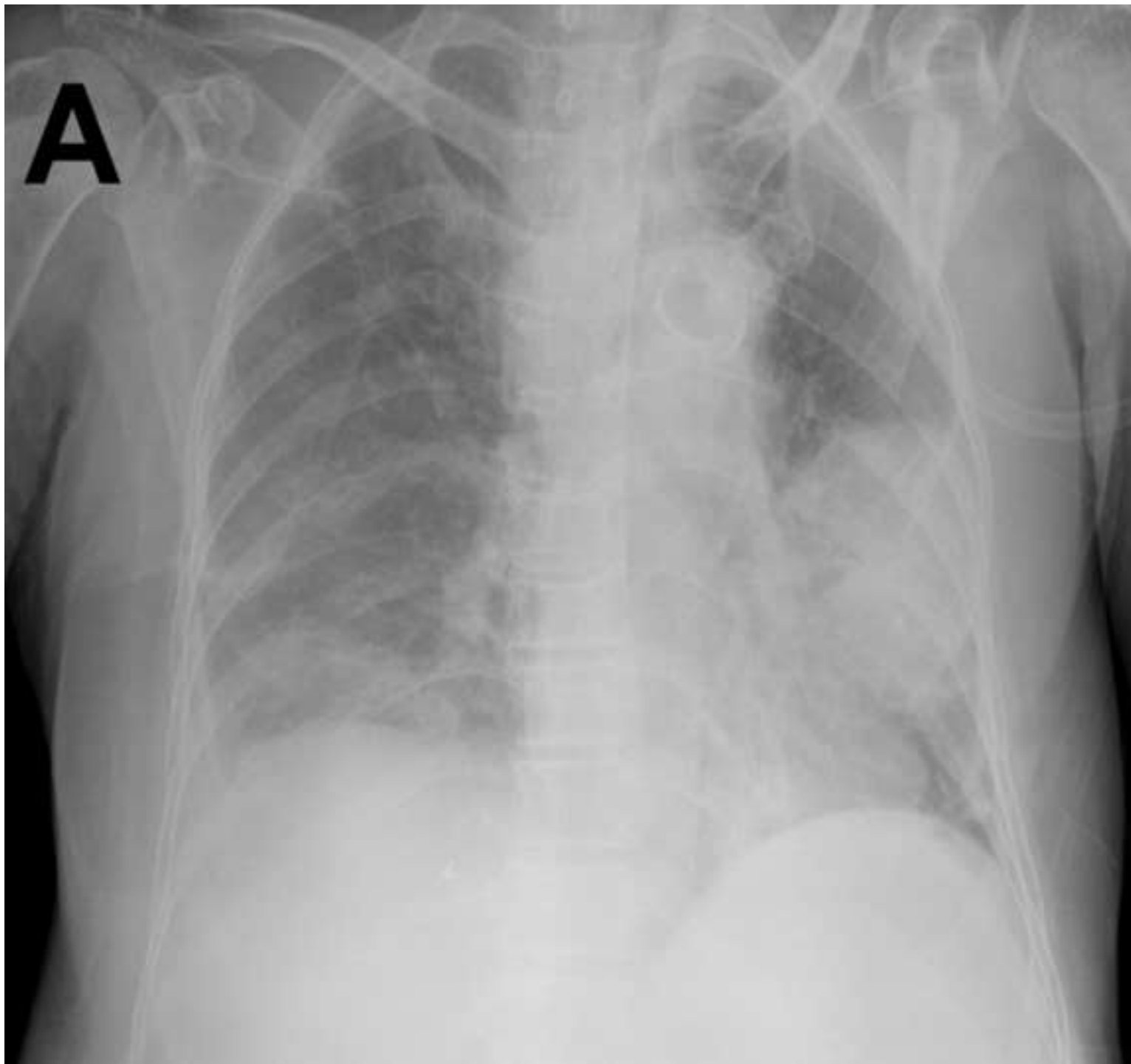


Figure B
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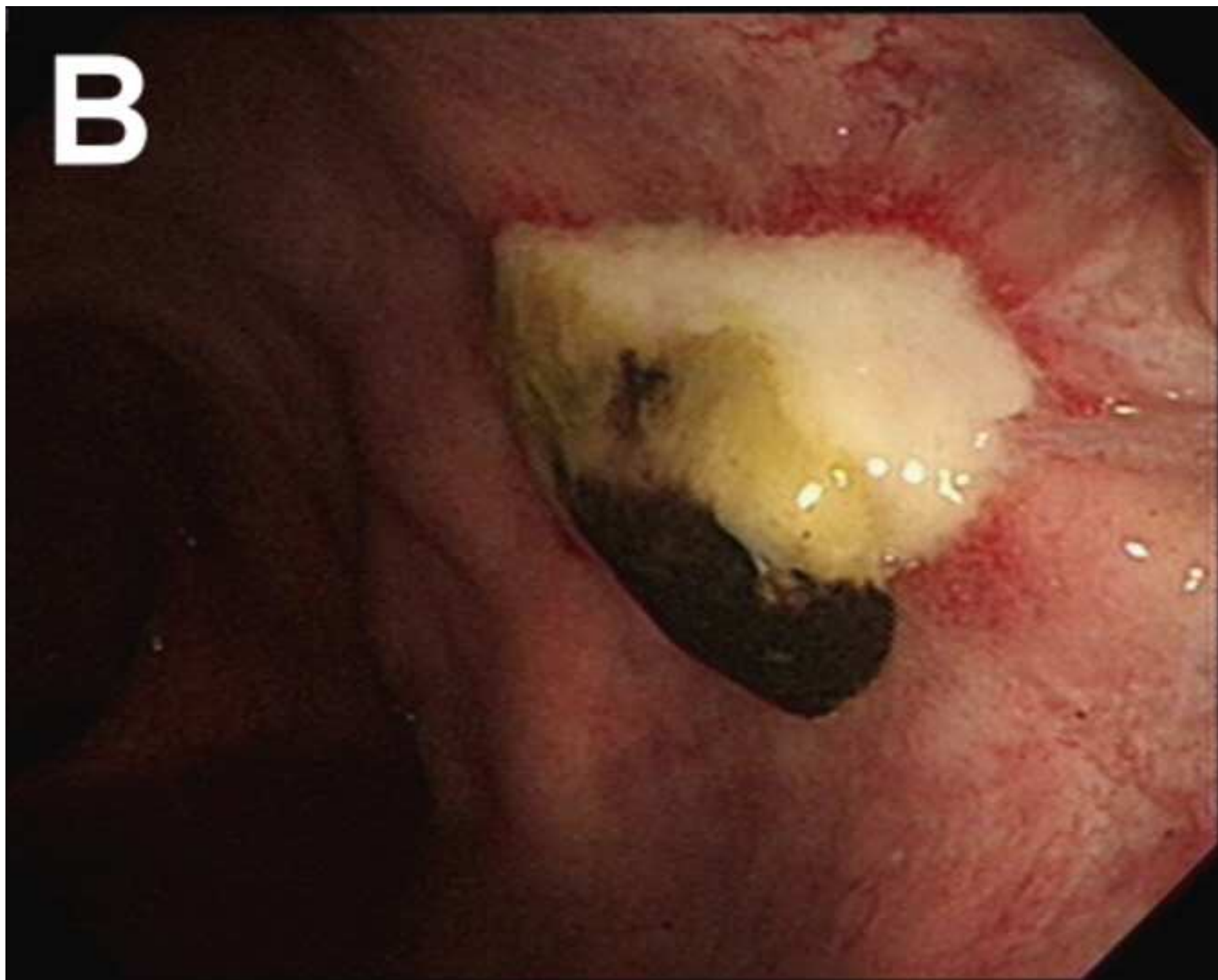


Figure C
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Figure D
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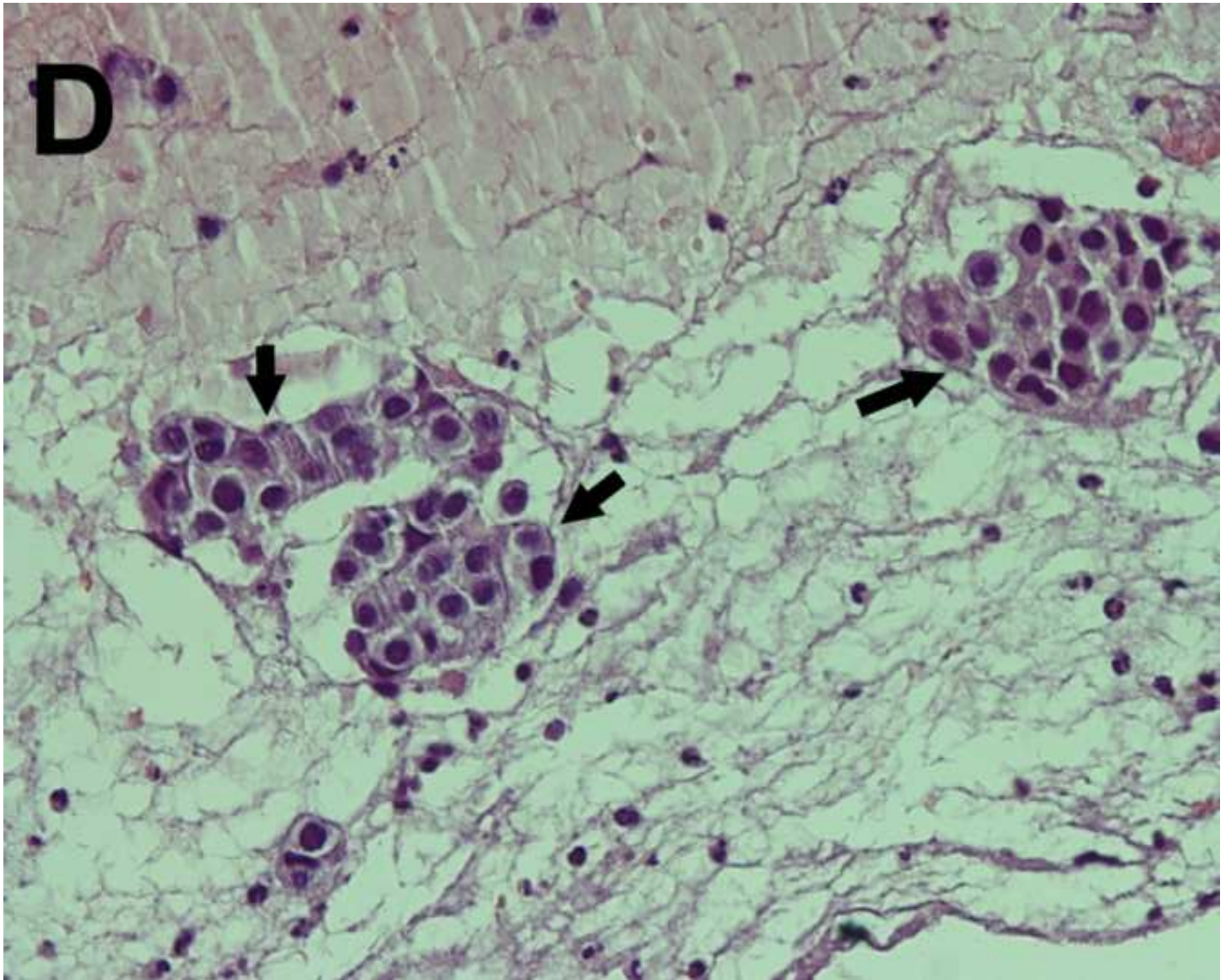
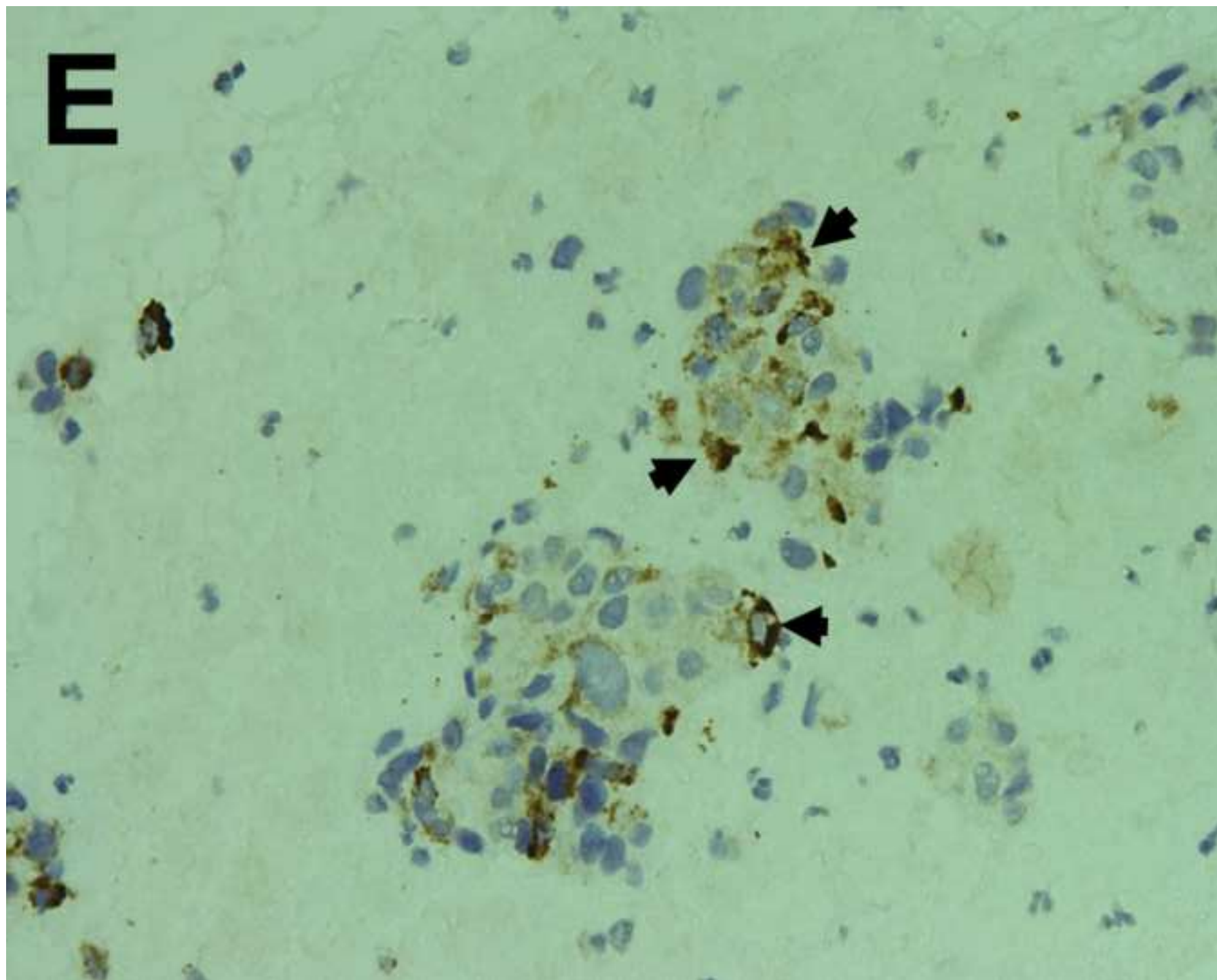


Figure E
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**A rare cause of bloody stools in a 57-year-old woman patient with
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