Antibiotic-associated hemorrhagic colitis with ischemic change

Fig. 1 Contrast-enhanced computed tomography of the transverse colon showing thickening of the intestinal wall in a 67-year-old woman who had presented with abdominal pain and hematochezia.

Fig. 2 On hospital day 4, colonoscopy of the transverse colon revealed a deep longitudinal ulcer with dark purple color change.

Fig. 3 Pathological examination of a biopsy specimen obtained from the lesion in the transverse colon showed necrosis and desquamation of the surface epithelium, along with severe neutrophil infiltration in the lamina propria (hematoxylin and eosin stain).

Fig. 4 Follow-up endoscopy of the transverse colon on hospital day 16 showed that the lesion had completely disappeared.

A 67-year-old woman presented with abdominal pain and hematochezia. She had never used non-steroidal anti-inflammatory drugs, but had been started on amoxicillin, clarithromycin, and lansoprazole 3 days earlier as *Helicobacter pylori* eradication therapy. On admission, white blood cell count was 21 600/ μ L and C-reactive protein level was 2.8 mg/dL. Computed tomography showed thickening of the intestinal wall from the ascending to transverse colon (● Fig. 1). No occlusion of the superior mesenteric artery was found.

We prohibited ingestion and started an intravenous drip without antibiotic. *Klebsiella oxytoca* was detected in culture of a fecal sample taken on admission, and neg-

ative results were obtained for *Clostridium difficile* toxin. On hospital day 4, colonoscopy revealed a deep longitudinal ulcer in the colon with dark purple color change (● Fig. 2). Pathological examination of a biopsy specimen showed necrosis and desquamation of the surface epithelium, along with severe neutrophil infiltration in the lamina propria (● Fig. 3). The patient gradually improved, and follow-up endoscopy was performed on hospital day 16. The lesion had completely disappeared (● Fig. 4), together with her complaints and blood test abnormalities. Antibiotic-associated hemorrhagic colitis (AAHC) is a well-known complication after taking antibiotics, mainly penicillins, however, the underlying mechanism re-

mains unknown. Some reports have suggested *K. oxytoca* as the cause [1,2], but this bacterium has not been consistently isolated [3]. Diffuse mucosal hemorrhage is described as a typical endoscopic finding of AAHC, whereas ulceration is uncommon [3]. Although a variety of histological changes have been reported in AAHC, few reports have described longitudinal ulceration. The major pathological findings seem to be intramucosal hemorrhage with generally little inflammatory cell infiltration [4, 5].

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Bibliography

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