Pyogenic granuloma mimicking a colon cancer

Fig. 1 Colonoscopy showed a reddish, irregular shaped, semipedunculated polyp in the rectum, approximately 10 mm in diameter.

Fig. 2 Magnifying endoscopy with indigo carmine revealed a smooth surface without mucosal pits.

Fig. 3 Using narrow band imaging, many microvessels with a congested network pattern were seen.

Fig. 4 Endoscopic ultrasound revealed that the lesion was confined to the mucosal layer (arrow) and that the submucosal layer (arrow heads) was intact.

Fig. 5 Low-power microscopic view of the resected specimen. The lesion consisted of inflammatory granulation tissue and was covered with regenerating epithelium.

Fig. 6 High-power microscopic view of the resected specimen. Proliferation and lobular arrangement of capillaries with an inflamed and edematous stroma were seen.

A 59-year-old man with a history of chronic myelogenous leukemia underwent colonoscopy because of altered bowel habit. Conventional colonoscopy showed a reddish, irregular shaped, semipedunculated polyp in the rectum, approximately 10 mm in diameter (● Fig. 1). Magnifying endoscopy with indigo carmine revealed a smooth surface without mucosal pits (● Fig. 2). Magnifying endoscopy with narrow band imaging showed many microvessels with a congested network pattern (● Fig. 3). A colon cancer was considered by colonoscopic findings. However, histopathology of biopsies showed inflammatory granulation tissue and no evidence of cancer. Endoscopic ultrasound revealed that the lesion was confined to the mucosal layer and that the submucosal layer was intact (● Fig. 4). The lesion was removed by endoscopic muco-

sal resection for accurate diagnosis. Histopathologically, the lesion consisted mainly of inflammatory granulation tissue and was covered with regenerating epithelium. It was diagnosed as a pyogenic granuloma (● Fig. 5 and ● Fig. 6).

Pyogenic granuloma is a benign lesion of unknown etiology [1]. It is common on the skin and oral mucosal surfaces, but ex-

tremely rare in the gastrointestinal tract, especially in the colon [2]. Clinically, it can mimic a colon cancer because of the irregular shape [3]. Gastrointestinal pyogenic granuloma is usually covered with thick exudate [4] and its mucosal surface cannot be observed. This case was not covered with thick exudate enabling the surface to be observed in detail by magni-

ifying endoscopy. To our knowledge, this is the first report of a case of colonic pyogenic granuloma observed by magnifying endoscopy. The histopathological characteristics of pyogenic granuloma are proliferation and lobular arrangement of capillaries with an inflamed and edematous stroma [5]. In this case, the capillaries in the pathology report corresponded with magnifying endoscopy findings. Pyogenic granuloma should be considered when an irregular shaped colon polyp has a congested microvascular network and lacks mucosal pits.

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Yasuhiko Hamada¹, Kyosuke Tanaka¹, Syunsuke Tano¹, Takashi Kitade¹, Masaki Katsurahara¹, Noriyuki Horiki¹, Yoshiyuki Takei²

¹ Department of Endoscopic Medicine, Mie University Hospital, Tsu, Japan

² Department of Gastroenterology, Mie University Graduate School of Medicine, Tsu, Japan

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Corresponding author

Yasuhiko Hamada, MD, PhD
 Department of Endoscopic Medicine
 Mie University Graduate School of Medicine
 2-174 Edobashi
 Mie, 514-8507
 Tsu
 Japan
 Fax: +81-59-2315200
hamayasu0828@kxe.biglobe.ne.jp