Pyogenic granuloma mimicking a colon cancer

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 (arrow) and that the submucosal layer (arrow heads) was intact (Fig. 4). The lesion was removed by endoscopic mucosal 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 extremely 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 magnification.

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.
fying 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.

Endoscopy_UCTN_Code_CCL_1AD_2AC

Competing interests: None

References
3 Hocke M, Bosseckert H. Incorrect macroscopic diagnosis of colonic carcinoma made at endoscopy. Endoscopy 2004; 36: 668
4 Hosono T, Kawamura T, Murakami K et al. A case of pyogenic granuloma of the descend-

Bibliography
DOI http://dx.doi.org/10.1055/s-0034-1364955
© Georg Thieme Verlag KG Stuttgart · New York
ISSN 0013-726X

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