A case of pyogenic granuloma of the cecum treated by endoscopic resection

A 45-year-old man presented with hema-
tochezia during the 3 days prior to his ad-
mission. His past history included hemo-
ophilia without any major bleeding events.
His vital signs were stable and his physical
examination was unremarkable. Initial
laboratory findings revealed a hemoglo-
bin of 8.6 g/dL, hematocrit of 40.3 %,
platelet count of 336 × 10^9/L, prothrombin
time of 11.9 seconds, and activated partial
thromboplastin time (aPTT) of 49.4 sec-
onds.

Esophagogastroduodenoscopy (EGD)
showed no specific findings. Colonoscopy
showed a pedunculated polyp of approxi-
mately 25 mm, which had a lobulated
contour, hypervascular appearance, and
was covered with an adherent white exu-
date, and the surrounding mosaic-pattern
mucosa with white spots (Fig. 1 a, b). It
was difficult to exclude malignancy and
biopsies were taken.

Histopathology showed inflammatory
granulation tissue and elective endoscopic
snare polypectomy was performed. After
the polyp had been resected, minor bleed-
ing occurred (Fig. 1 c), which ceased
after electrocoagulation (Fig. 1 d). Mi-
croscopic examination of the resected
polyp showed a highly vascular prolifera-
tion that resembled granulation tissue
and an inflammatory cell infiltrate with
stromal edema, which was consistent
with a pyogenic granuloma (Fig. 2).

After treatment, the patient’s hemoglo-
bin improved gradually and he has remained
in a stable condition with no further epi-
sodes of bleeding in the 6 months since
his discharge.

Fig. 1 Colonoscopy views showing: a a pedunculated polyp (approximately 25 mm) with a lobulated
contour, hypervascular appearance, and covered with an adherent white exudate, and the surrounding
mosaic-pattern mucosa with white spots close to the ileocecal valve (white arrow); b the same polyp
and the nearby appendiceal orifice (black arrow); c minor bleeding after resection of the tumor with a
polypectomy snare; d the resection site after the bleeding had been controlled by the application of
electrocoagulation.

Fig. 2 Histology showing a highly vascular proliferation resembling granulation tissue and an inflammatory cell infiltrate with stromal edema (hematoxylin
and eosin stain, magnification × 100).
A pyogenic granuloma is a specific type of capillary hemangioma that resembles granulation tissue and usually occurs in the skin. The macroscopic and microscopic features of a pyogenic granuloma in the gastrointestinal tract are similar to those seen in the skin [1]. Pyogenic granulomas are benign lesions of uncertain etiology and their pathogenesis has been related to an infectious origin or they may be a special type of hemangioma, while other authors believe that they develop as a result of repetitive trauma or injury, with a possible association with hemophilia, or through a hormonal mechanism for pyogenic granuloma during pregnancy [1,2].

A gastrointestinal pyogenic granuloma, although rare, can be a source of obscure or overt bleeding from the gastrointestinal tract. To the best of our knowledge, no cases of pyogenic granuloma of the cecum have previously been reported in the English literature. Treatments for gastrointestinal pyogenic granuloma include endoscopic polypectomy, surgical resection, argon plasma coagulation, and angiographic embolization [1,3]. In summary, we report the first case of a pyogenic granuloma in the cecum, which was successfully treated with endoscopic snare polypectomy, with no further bleeding after the patient was discharged.

Chang Jun Shin, Seung Goun Hong, Mahn Lee
Department of Internal medicine, SAM Anyang Hospital, Gyeonggi, South Korea

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Corresponding author
Seung Goun Hong, MD
Department of Internal medicine
SAM Anyang Hospital
613-9 Anyang 5 dong, Manan-gu
Gyeonggi 430-733
South Korea
Fax: +82-31-4490151
permi@naver.com