Primary Gastric Actinomycosis Resembling a Mass Presents with Upper Gastrointestinal Bleeding

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Cite this article as: Irak K, Karamangil EZ, Dursun N, Karaali Z, Poturoğlu Ş. Primary gastric actinomycosis resembling a mass presents with upper gastrointestinal bleeding. *Diagn Interv Endosc.* 2022;1(3):87-88.

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Received: October 17, 2022 **Accepted:** December 3, 2022 **Publication date:** December 30, 2022 **DOI:** 10.5152/DiagnIntervEndosc.2022.223350

A 61-year-old male, with no history of operation, applied to the emergency department with melena. He had recently been administered with 20 non-steroidal anti-inflammatory drugs. Melena was identified on his rectal examination. His hemoglobin levels were 9.7 g/dL, and prothrombin time was 8.06 seconds. His upper gastrointestinal endoscopy was reported as: in antrum, a 3-4 cm, oval bowl-shaped mass with black, hair-like fibrin and purple clot-like material on its central surface (Figure 1 and Video 1). A hyperemic oval mass with slightly oozing bleeding and surrounding mucosal edema was observed in the antrum (Figure 2). In histopathological examination, clusters of filamentous microorganisms showing radial arrays were detected, confirming actinomyces infection (Figure 3). The patient used amoxicillin clavulanic acid for 14 days after he was discharged and had no complaints in his follow-up. In control endoscopy, scar in the antrum was observed.
Actinomycosis is most commonly caused by *Actinomyces israelii*, which is present in the oral and gastrointestinal tract flora.[1] Cervicofacial region, abdominopelvic region, and respiratory tract are frequently affected by actinomycosis.[2]

Primary gastric actinomycosis is rare, and to the best of our knowledge, 26 cases have been reported to date.[1,3] Actinomycetes usually cause opportunistic infection if there is a break in the mucosal barrier. Abdominal actinomycosis is facilitated by factors such as gastrointestinal surgery surgery, inflammation, and visceral perforation.[1] Our patient had no history of previous abdominal surgery or trauma. Mucosal damage and age-related mucosal atrophy due to non-steroidal anti-inflammatory drugs used recently may have caused infection by reducing mucosal resistance.

Actinomycosis may show various symptoms and signs, depending on the site of involvement, and may sometimes mimic malignancy.[2] Our patient had signs of gastrointestinal bleeding and a mass appearance on gastroscopy.

All forms of actinomycosis are treated with antibiotics[4]; Actinomyces species are sensitive to penicillin. In this case, oral amoxicillin-clavulanate of 1000 mg twice a day was administered for 2 weeks.

Figure 1. An oval mass with a hair-like center in the antrum.

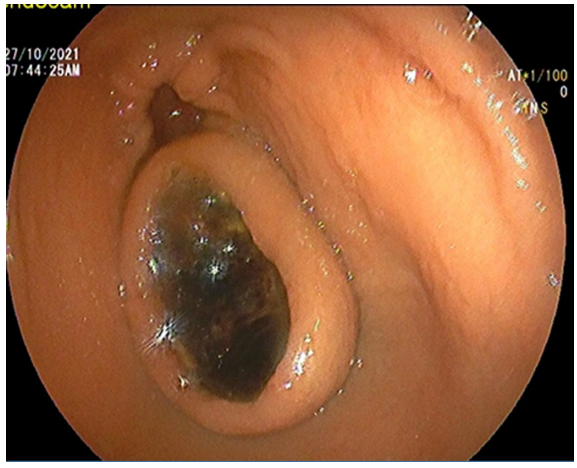

Figure 2. An oval mass with slightly leaky bleeding and swelling of the surrounding mucosa in the antrum.

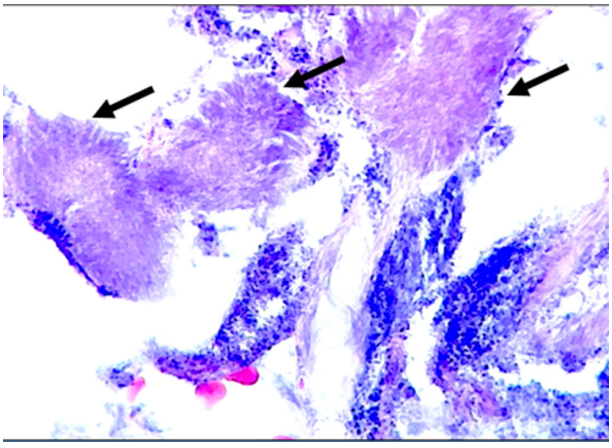

Figure 3. Basophilic clusters of actinomyces bacteria within the ulcer floor.

Informed Consent: Written informed consent was obtained from all participants who participated in this study.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – K.I., E.Z.K., N.D., Z.K., Ş.P.; Design – K.I., E.Z.K., N.D., Z.K., Ş.P.; Supervision – K.I., E.Z.K., N.D., Z.K., Ş.P.; Resources – K.I., E.Z.K., N.D., Z.K., Ş.P.; Materials – K.I., E.Z.K., N.D., Z.K., Ş.P.; Literature Search – K.I., E.Z.K., N.D., Z.K., Ş.P.; Writing Manuscript – K.I.; Critical Review – K.I., E.Z.K., N.D., Z.K., Ş.P.

Declaration of Interests: The authors declare that they have no competing interest.

Funding: The authors declared that this study has received no financial support.

Video 1: Esophagogastroduodenoscopy showed, oval bowl-shaped mass with black, hair-like fibrin and purple clot-like material on its central surface about 3-4 cm in antrum. Biopsies were taken from the edge and middle of the mass.

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