Gastric tuberculosis resembling depressed type, early gastric cancer

A 60-year-old asymptomatic man was referred to our hospital for evaluation of a gastric lesion detected by esophagogastroduodenoscopy (EGD) in a medical check-up. EGD showed an irregularly shaped, depressed lesion with converging folds on the posterior wall of the upper gastric corpus (Fig. 1, Fig. 2). Magnifying endoscopy with narrow-band imaging at the anal portion of the lesion revealed spiral-shaped, dilated small vessels/microvessels with an amorphous surface (Fig. 3). Endoscopic ultrasonography (EUS) demonstrated a hypoechoic lesion localized in the deep portion of the mucosa and the superficial submucosa (Fig. 4). A biopsy from the lesion showed granulomatous inflammation with caseous necrosis and Langerhans giant cells. Acid-fast bacilli were detected by both Ziehl-Neelsen staining (Fig. 5) and mycobacterium culture. A polymerase chain reaction test for tuberculosis was also positive. Fluorine-18 fluorodeoxyglucose positron emission tomography (PET) showed markedly increased accumulation in the lymph nodes of the mediastinum, pulmonary hilum, and upper abdomen (Fig. 6). Chest computed tomography (CT) revealed no evidence of pulmonary tuberculosis. Colonoscopy, small-bowel capsule endoscopy, and bronchoscopy showed normal findings. Biopsy from the inguinal lymph node demonstrated nonspecific inflammation without any neoplastic cells or granulomas. Thus, the patient was diagnosed as having gastric tuberculosis with systemic lymphadenopathy, and subsequently underwent antituberculous treatment. Both the gastric lesion and lymphadenopathy had resolved 6 months later.

Gastric tuberculosis is rare, and its endoscopic appearance can vary [1–4]. To confirm a definitive diagnosis of tuberculosis, EUS-guided, fine-needle aspiration or surgery is sometimes required [1,4,5]. The gastric lesion in our case resembled depressed-type, early gastric cancer endoscopically; however when the amorphous area (probably composed of inflammation or granulation tissue covered with thin epithelium) was viewed using magnifying endoscopy with narrow-band imaging, it was clearly different from that of gastric cancer. We thus consider that magnifying endoscopy with narrow-band imaging is useful in the differential diagnosis between gastric tuberculosis and gastric cancer.
Endoscopy_UCTN_Code_CCL_1AB_2AD_3AF

Competing interests: None

Hiroki Yaita1, Shotaro Nakamura2, Koichi Kurahara1, Toshifumi Morishita1, Shuji Kochi1, Yumi Oshiro3, Naohiko Hamaguchi4, Tadahiko Fuchigami1

1 Division of Gastroenterology, Matsuyama Red Cross Hospital, Ehime, Japan
2 Department of R/D for Surgical Support System, Center for Advanced Medical Innovation, Kyushu University, Fukuoka, Japan
3 Department of Pathology, Matsuyama Red Cross Hospital, Ehime, Japan
4 Department of Respiratory Medicine, Matsuyama Red Cross Hospital, Ehime, Japan

Fig. 5 Histologic image of a biopsy specimen from the gastric lesion showing acid-fast bacilli (Ziehl-Neelsen stain, magnification: ×1000).

Fig. 6 Fluorine-18 fluorodeoxyglucose positron emission tomography (PET) showing markedly increased accumulation in the lymph nodes of the mediastinum, pulmonary hilum, and upper abdomen.

References

Bibliography
© Georg Thieme Verlag KG
Stuttgart · New York
ISSN 0013-726X

Corresponding author
Hiroki Yaita, MD
Division of Gastroenterology
Matsuyama Red Cross Hospital
1 Bunkyo-cho
Matsuyama-shi
Ehime 790-8524
Japan
Fax: +81-89-9269916
hyaita@matsuyama.jrc.or.jp

Yaita Hiroki et al. Gastric tuberculosis with systemic lymphadenopathy... Endoscopy 2014; 46: E669–E670