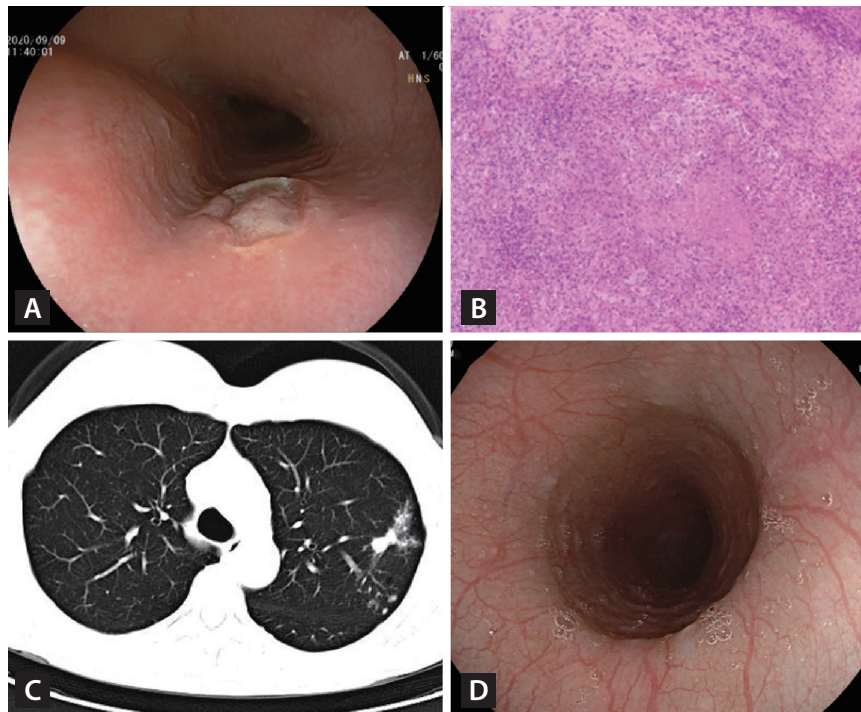


# A rare case of esophageal ulcer: esophageal tuberculosis

Dong-Ge Han<sup>1,2,3</sup>, Xiao-Xia Wang<sup>1,2,3</sup>, and Wei Liu<sup>1,2,3</sup>

<sup>1</sup>The First College of Clinical Medical Science, China Three Gorges University, Yichang; <sup>2</sup>Institute of Digestive Disease, China Three Gorges University, Yichang; <sup>3</sup>Department of Gastroenterology, Yichang Central People's Hospital, Yichang, China



**Figure 1.** (A) Esophagogastroduodenoscopy showing circumferential circular and deep ulcers with heaped up edges in the upper esophageal region at 28 cm from the incisor. (B) H&E staining showed ulceration and caseating granulomas. (C) Chest CT scan revealing potential pulmonary tuberculosis. (D) Repeat endoscopy examination showed that the ulcer healed. CT, computed tomography.

A 46-year-old woman presented with a 3-week history of mildodynophagia and retrosternal pain. She denied fever, cough, weight loss, and history of esophageal carcinoma. She had no recorded medical history. Physical examination was unremarkable with no lymphadenopathy. Laboratory tests were normal. Esophagogastroduodenoscopy showed circumferential circular and deep ulcers with heaped up edges in the upper esophageal region at 28 cm from the incisor (Fig. 1A). Colonoscopy examination was normal. Esophageal biopsy specimens (H&E staining) showed ulcer-

ation and caseating granulomas (Fig. 1B). The histopathological characteristics of the esophageal biopsies indicated the possibility of esophageal tuberculosis. Chest computed tomography scan revealed potential pulmonary tuberculosis (Fig. 1C). No enlarged mediastinal lymph nodes were found in adjacent areas. She underwent a bronchoscopy examination. Acid-fast staining and polymerase chain reaction testing of bronchoalveolar lavage fluid for *M tuberculosis* were positive. The purified protein derivative skin test and T-SPOT. TB assay were also positive. Human immunodeficiency virus

screening antibody was negative. Finally, she received a diagnosis of esophageal tuberculosis secondary to pulmonary tuberculosis. Esophageal tuberculosis is rare, which is commonly secondary to tuberculosis of lung and lymph nodes [1]. Symptoms are related to the extent of infection, which may include retrosternal pain, dysphagia, haematemesis, and odynophagia [2,3]. The endoscopic features of esophageal tuberculosis is not well defined because of its rarity. Multiple biopsies are suggested to take to detect the evidence of tuberculosis infection. The patient received a standard oral antituberculous regimen with rifampicin, isoniazid, ethambutol, and pyrazinamide per day. Two months after antituberculous treatment, her symptoms of odynophagia and retrosternal pain disappeared. Repeat endoscopy examination showed that the ulcer healed gradually after 12 months of antituberculosis medication (Fig. 1D).

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### Correspondence to

Wei Liu, M.D., Ph.D.

Institute of Digestive Disease, China Three Gorges University, 8 Daxue Road, Yichang 443000, China

Tel: +86-15207201575, Fax: +86-0717-6486157

E-mail: liuweil@ctgu.edu.cn

<https://orcid.org/0000-0001-7118-815X>

### CRedit authorship contributions

Dong-Ge Han: methodology, resources, investigation, data curation), Xiao-Xia Wang: formal analysis, validation, software, writing - original draft; Wei Liu: conceptualization, visualization, supervision, project administration

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The authors disclose no conflicts.

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### Ethical statement

The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Written informed consent was obtained from the patient for publication of this "GI Image". Board institutional approval was not required.