中文題目:在一位新診斷愛滋病人發生之食道結核所致支氣管食道廔管

英文題目: Broncho-esophageal fistula related to esophageal tuberculosis in a patient with newly-diagnosed acquired immune deficiency syndrome

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**Introduction**: Tracheo/broncho-esophageal fistula are usually congenital in children, whereas it might be the presentation of esophageal malignancy with airway invasion in adults.<sup>1</sup> Herein, we reported a case of esophageal tuberculosis with broncho-esophageal fistula presenting with recurrent left lower lobe pneumonia.

Case Presentation : A 44-year-old homo-sexual man had suffered from intermittent fever and productive cough for 2 months although being treated with oral antibiotics in the Outpatient Department. He was therefore admitted for fever of unknown origin. Series of chest radiograph showed recurrent left lower lung pneumonia. Both enzyme-linked immunosorbent assay and western blot of his serum showed positive results for antibodies to human immunodeficiency virus. The sputum smear revealed acid-fast bacilli. Despite receiving broad-spectrum antibiotic treatment, anti-tuberculous therapy, highly-active antiretroviral therapy, and steroid treatment, he remained having fever, productive cough, dyspnea, and dysphagia. Computed tomography of the chest showed eccentric circumferential wall thickening of esophagus, peri-esophageal soft tissue with invasion to the trachea-bronchial tree, forming a broncho-esophageal fistula, and lymphadenopathy, which were suggestive of esophageal malignancy. Esophageal tumor biopsy was done via rigid esophagoscopy, and two stents were placed, one of which in the esophagus and the other in the left main bronchus, to cover the fistula. Pathological examination of the biopsy specimens showed granulation tissue without evidence of malignancy. His fever subsided thereafter and he continued his anti-tuberculous and highly-active antiretroviral treatment in the Outpatient Department. Followed in the clinic, he had an uneventful recovery of his pneumonia although he reported that the stent in the bronchus was expectorated.

**Discussion**: The clinical features of tracheo/broncho-esophageal fistula might include dysphagia (50.3%), reflux esophagitis (40.2%), gastroesophageal reflux disease without esophagitis (56.5%), respiratory tract infection (24.1%), asthma (22.3%), wheeze (34.7%), persistent cough (14.6%), Barrett's esophagus (6.4%), esophageal squamous cell cancer (1.4%).<sup>2</sup> In this case, his recurrent left lower lobe pneumonia raised the suspicion of tracheo/broncho-esophageal fistula, and the presence of dysphagia highlighted the possibility of an esophageal disorder. On chest imaging, thickened esophageal wall, peri-esophageal soft tissue with invasion to the trachea-bronchial tree, and lymphadenopathy, are typical findings of esophageal malignancy, whereas esophageal tuberculosis should be listed as a differential diagnosis, especially in endemic areas and in immunocompromised hosts. Although no general consensus in the management of trachea/broncho-esophageal or esophago-mediastinal fistula complicating esophageal tuberculosis, anti-tuberculous treatment with or without surgical intervention to correct the anatomical destruction is commonly adopted, while surgical treatment (stent implantation) is usually reserved for those with poor response to conservative medical treatment.<sup>3,4</sup> Our patient received surgical intervention due to failure of medical treatment, and he had an uneventful recovery. We reported this case to highlight that tracheo/broncho-esophageal fistula should be considered in patients with recurrent pneumonia, especially in those with dysphagia.

## **Reference**

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