

### Esophageal Actinomyces: A Case Report

Actinomyces usually causes infection in the face, lung, and abdomen. Esophageal actinomyces is rare, and only three cases have been reported in the past 20 years (1,2). All were patients with AIDS. We report here the case of a 55-year-old man with mid-esophageal infection by *Actinomyces viscosus*.

The patient presented with epigastric pain and weight loss that had persisted for three months. The physical examination and basic tests, including blood count, renal and liver biochemistry, and chest radiography, were entirely normal. Upper endoscopy revealed a 1-cm erythematous nodule situated at the mid-esophagus (Figure 1). Biopsy showed a clumped bacterial colony overlying an inflamed esophageal squamous epithelium. Culture confirmed the presence of *Actinomyces viscosus* (Figure 2). Endoscopic ultrasonography demonstrated that the nodule was a 1-cm cavitating lesion, arising from the third layer of the esophageal wall (Figure 3). Abdominal ultrasonography and a CT of the thorax were unremarkable. The patient declined an HIV test. He was treated with oral co-amoxiclav (amoxicillin and clavulanic acid) 375 mg thrice daily. After four weeks of treatment, a repeat upper endoscopy confirmed complete resolution of the lesion. A further biopsy was negative for *Actinomyces*. Three months later, he developed painless obstructive jaundice. Disseminated pancreatic adenocarcinoma was diagnosed at laparotomy, and he died one month later.

*Actinomyces* infection occurs in both immunocompetent and immunocompromised hosts (3). Impairment of cytotoxic T-cell function, as reported in patients with pancreatic carcinoma (4), may have been the predisposing factor in our patient. As the esophageal nodule was situated at one of the three common sites of foreign-body impaction, we postulate that a minor mucosal injury resulting from normal deglutition had allowed entrance of the *Actinomyces* organism (5). A search for an underlying malignancy may be rewarding if actinomyces is found at an unusual site.

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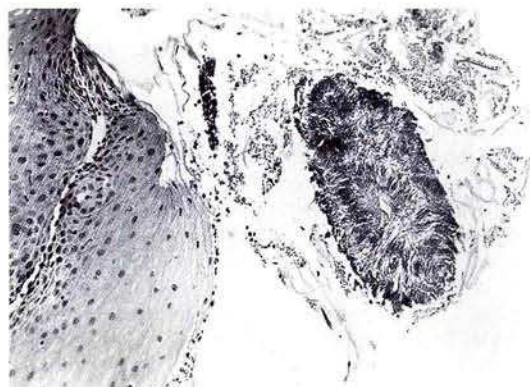
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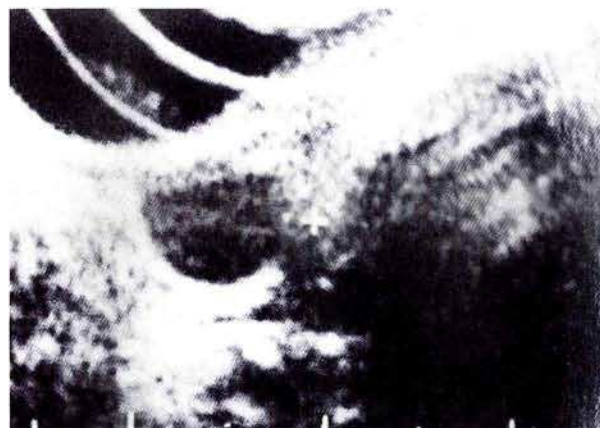
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**Figure 1:** Endoscopic image of the esophageal nodule situated in the mid-esophagus.



**Figure 2:** Microscopically, a clumped bacterial colony with the characteristics of *Actinomyces* species overlay an inflamed esophageal squamous epithelium.



**Figure 3:** A 1 cm cavitating lesion, arising at the third layer of the esophageal wall.

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