



Images in Clinical Medicine

Cytomegalovirus esophagitis in a patient with acquired immunodeficiency syndrome

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A 34-year-old man complained of dyspnea associated with a dry cough, and body weight loss for 1 week. He had been able to exercise as usual until 1 week previously. He had a sticking sensation in his chest, from the throat to the epigastric area. Chest radiography showed increased infiltrations in the bilateral lungs. A Western blot was positive for human immunodeficiency virus and

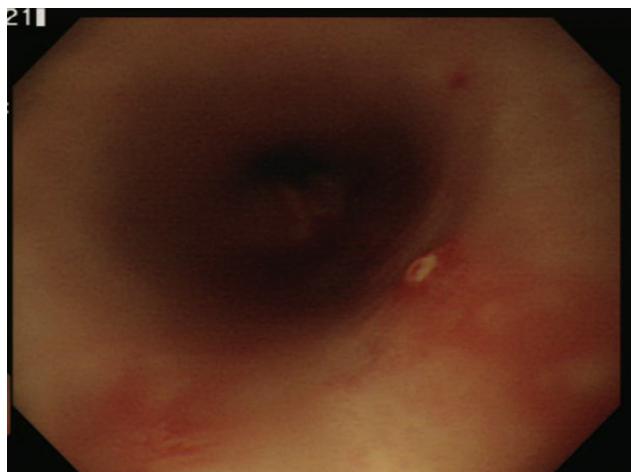


Fig. 1. An esophagogastroduodenoscopy shows whitish, circular, nodular-like lesions of about 0.3 cm in the distal esophagus.

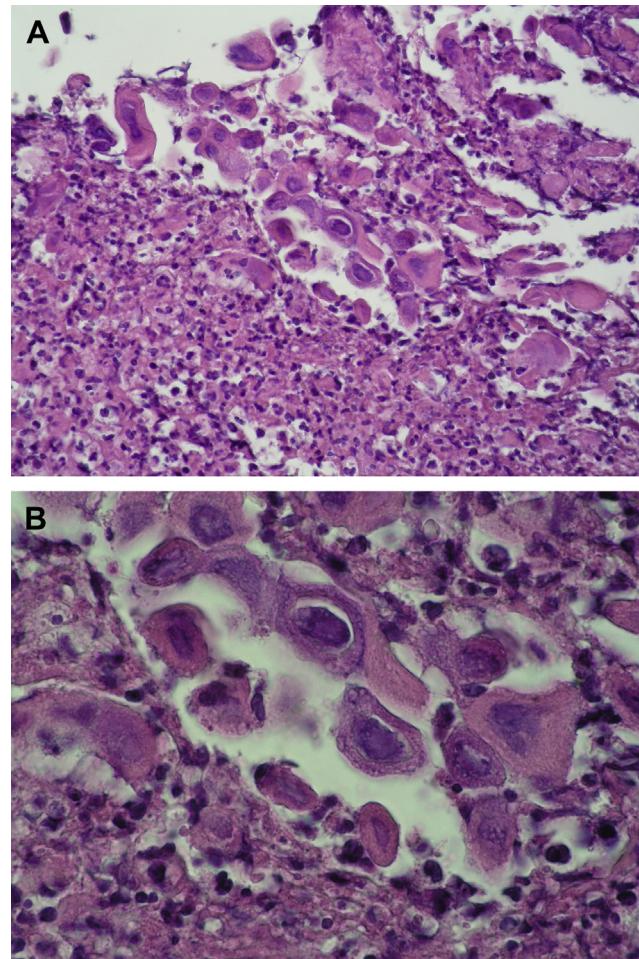


Fig. 2. An endoscopic biopsy specimen shows ulcerations and squamous cells presenting a viral cytopathic effect, intranuclear basophilic inclusions, and clear perinuclear halos, compatible with cytomegalovirus infection. (A) Hematoxylin and eosin stain, 400 \times . (B) Hematoxylin and eosin stain, 1000 \times .

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acquired immunodeficiency syndrome (AIDS) was confirmed. Oral candidiasis was noted. An esophagogastroduodenoscopy (EGD) to survey for esophageal candidiasis showed several whitish, circular, nodular-like lesions of about 0.3 cm in the distal esophagus (Fig. 1). A biopsy specimen was obtained. Microscopically, intranuclear basophilic inclusions with clear perinuclear halos were seen in the squamous cells, compatible with cytomegalovirus (CMV) infection (Fig. 2).

CMV is an important human pathogen and an opportunistic pathogen in AIDS patients [1,2]. Infections of the gastrointestinal tract caused by CMV usually manifest as luminal infection, such as esophagitis or colitis [1]. CMV-induced esophagitis has been reported in 8–28 % of patients with AIDS undergoing EGD for dysphagia/odynophagia [2]. The endoscopic spectrum of CMV esophagitis in these patients had been little described [3]. The endoscopic features of CMV esophagitis range from mild mucosal erythema to confluent ulcerations, and in rare cases, nodular lesions [4]. Endoscopic examination of our patient showed mucosal erythema and nodular-like lesions in the distal esophagus. An endoscopic biopsy specimen showed squamous cells presenting a viral cytopathic effect and intranuclear inclusions.

Wilcox et al [5] reported that five of 16 patients with CMV esophagitis had substernal chest pain. Our patient reported a sticking sensation in the chest, which was slightly different from that report. Although CMV does not usually produce pseudotumor lesions in the alimentary tract, this pathogen must be included in the differential diagnosis of gastrointestinal lesions in AIDS patients [4,6].

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