

Cytomegalovirus gastritis

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Abstract

Cytomegalovirus (CMV) has been increasingly recognized as an important common pathogen in an immunocompromised state. The colon and stomach are the most common sites of its gastrointestinal infection. Symptoms of CMV gastritis are usually nonspecific and include epigastric pain, fever, nausea and bleeding. Endoscopic features are quite variable and include macroscopically normal mucosa, diffuse erythema, nodules, pseudotumors, erosions and ulcers. The bioptic detection of intranuclear inclusions is the hallmark of CMV infection. Most gastrointestinal CMV infection responds well to ganciclovir. We present endoscopic and histopathological features of CMV gastritis in a 71 year old woman receiving long-term prednisolone for pemphigus vulgaris.

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Key words: Cytomegalovirus; Gastritis; Pemphigus vulgaris; Endoscopy

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TO THE EDITOR

A 71 year old woman who had been receiving long-term prednisolone for pemphigus vulgaris underwent upper gastrointestinal endoscopy for screening. She denied having abdominal symptoms. On examination, there was no tenderness on abdominal palpation and normal bowel sounds. Endoscopic examination revealed numerous patchy erythemas in the gastric body (Figure 1A). The erythema was slightly depressed (Figure 1B). The histopathological examination of the lesion showed large epithelial cells with characteristic “owl’s eye” eosinophilic intranuclear inclusion body surrounded by a clear halo (Figure 1C) compatible with cytomegalovirus (CMV) infection. Positive immunostaining for CMV antigens confirmed the diagnosis of CMV gastritis (Figure 1D). The gastritis improved with the treatment of ganciclovir.

CMV has been increasingly recognized as an important common pathogen in an immunocompromised state including those caused by immunosuppressive medications, cancer chemotherapy, transplant recipients, aging and human immunodeficiency virus infection^[1]. The colon and stomach are the most common sites of its gastrointestinal infection. Although postural epigastric pain has been described as a sign of CMV gastritis^[2], symptoms of

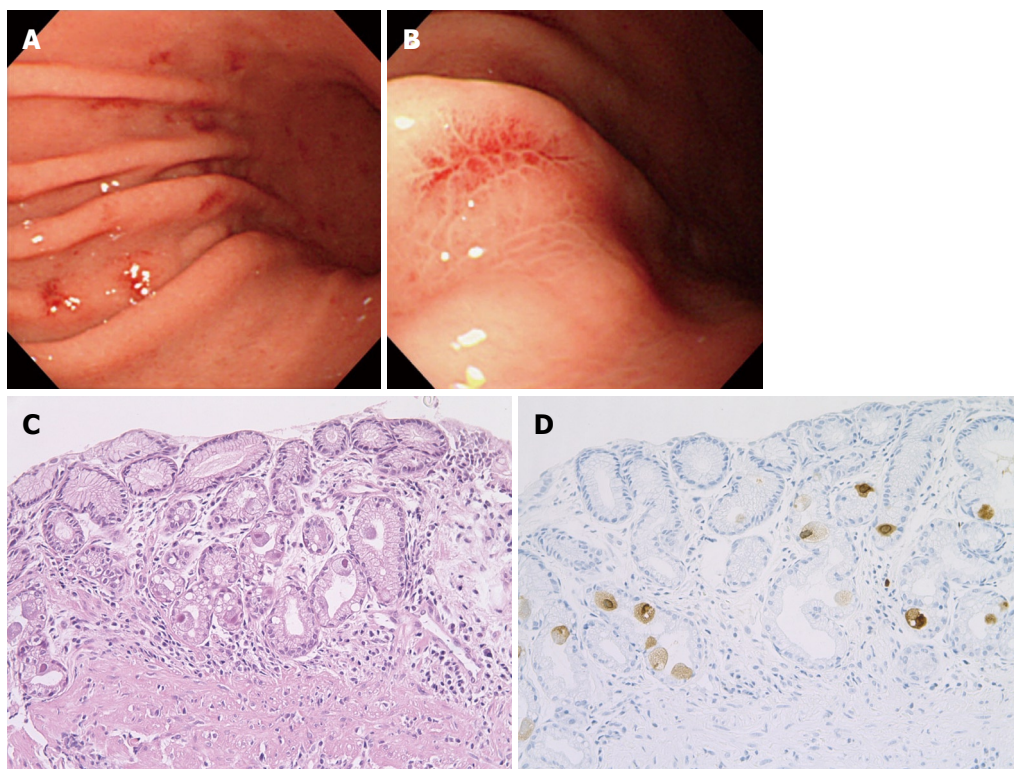


Figure 1 Endoscopic and histopathological pictures of cytomegalovirus gastritis. A: Note numerous patchy erythemas in the gastric body; B: Closer observation showing the slightly depressed erythema; C: Histopathological examination of the erythema showing large epithelial cells with characteristic "owl's eye" eosinophilic intranuclear inclusion body surrounded by a clear halo (H&E, × 200); D: Note positive immunostaining for cytomegalovirus antigens (× 200).

this disorder are usually nonspecific and include epigastric pain, fever, nausea and bleeding. Endoscopic features are quite variable and include macroscopically normal mucosa, diffuse erythema, nodules, pseudotumors, erosions and ulcers. Although the bioptic detection of "owl's eye" is the hallmark of CMV infection, classical intranuclear inclusions are not always found because CMV may infect vascular endothelium or connective tissue stromal cells under the ulcers as well as mucosal epithelium^[3]. Therefore, several diagnostic tools have been coupled for the suspected infection including CMV antigenemia assay and polymerase chain reaction of the specimen^[4,5]. Most gastrointestinal CMV infection responds well to ganciclovir regardless of the cause of the underlying immunosuppression.

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