PICTURES IN DIGESTIVE PATHOLOGY

Gastrointestinal affectation with cytomegalovirus in an immunocompetent patient

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A 65-year-old woman presented with an emetic syndrome with dehydration and general deterioration. She had suffered from vomiting and diarrhea for the last two weeks. Upper gastrointestinal tract endoscopy revealed a large, deep ulceration in the gastric antrum with a fibrin base and irregular borders (Fig. 1) affecting the gastric incisura, and pylorus with pyloric stenosis (Fig. 2). A histological examination of biopsy samples demonstrated chronic inflammation with acute foci, granulation tissue, atrophy, and fibrosis (Fig. 3). A colonoscopic examination revealed a segmentary colitis 30 to 40 cm away from the anal margin, with circumferentially-sited fibrin ulcerations similar to the gastric lesions (Fig. 4). Intestinal biopsies from the two affected tracts thoroughly showed granulation tissue with intranuclear cytomegalovirus inclusion bodies in endothelial and stromal cells (Fig. 5).

The study of immunity (CD4 and CD8 lymphocyte subsets) was normal. Serum IgM antibodies against cytomegalovirus were elevated, so the patient received intravenous antiviral and antisecretory treatment with gancyclovir

Fig. 1.- Gastric ulcer.
Úlceración antral.

Fig. 2.- Pyloric stenosis.
Estenosis pilórica.

Fig. 3.- Histologic examination of a gastric lesion –chronic inflammation, atrophy, and fibrosis.
Histología de la lesión antral. Inflamación crónica, tejido de granulación, atrofia y fibrosis.

Fig. 4.- Segmentary colitis with fibrin ulcerations.
Afectación segmentaria de colon. Úlceras fibrinadas.

Fig. 5.- Histologic examination of the colon –intranuclear cytomegalovirus inclusions in cells.
Histología de las lesiones de colon. Inclusiones intranucleares de citomegalovirus.

and pantoprazole for 4 weeks. After that both the diarrhea and intestinal lesions disappeared, but not so gastric involvement; the patient required surgery for her pyloric stenosis. Gastrointestinal infection by cytomegalovirus commonly occurs in immunocompromised patients, and is rare in immunocompetent individuals. Gastrointestinal disease may vary in location, but the colon is the most commonly affected site. Endoscopy findings range focal erythema to diffuse ulcers. The diagnosis is reached using optical microscopy on biopsies, which showed the intranuclear inclusions characteristic of cytomegalovirus infection (1). Infections can be treated with gancyclovir. In immunocompetent patients gastric affectation usually has a favorable course, but extensive lesions may require surgery (2).

REFERENCES

1. Yoshida M. Cytomegalovirus enteritis in a nonimmunocompromised host: Usefulness of polymerase chain reaction by using paraffin-embedded biopsy specimen for the diagnosis. *Gastrointest Endosc* 1996; 44 (4): 482-5.
2. Vergara M. Gastric ulcers as the only manifestation of infection by cytomegalovirus in immunocompetent patients. *Gastroenterol Hepatol* 1998; 21 (7): 332-4.