UT Health San Antonio

CMV-induced Gastritis, Duodenitis & Colitis in an Immunosuppressed Patient

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INTRODUCTION

- Cytomegalovirus (CMV) is a common cause of morbidity and mortality in immunocompromised patients.
- CMV can infect any part of the Gastrointestinal tract, with the colon being the most affected.
- There are isolated reports of gastric, small intestine, and esophagus involvement, however, we report a case of CMV-induced gastritis, duodenitis, and colitis which occurred concurrently in an immunosuppressed patient.

CLINICAL PRESENTATION

- ✓ A 65-year-old woman with a history of End-Stage Renal Disease status after a deceased donor kidney transplant presented with fatigue, generalized weakness, and a 2-week history of melena.
- \checkmark Her social history was negative for smoking, alcohol ingestion, and illicit drug use. Surgical history and review of systems were otherwise insignificant.
- \checkmark On admission, vitals and physical exam were not significant with unremarkable abdominal exam.
- \checkmark On laboratory analysis, serum creatinine of 2 mg/dL (baseline of 1.4-1.6 mg/dL) and a hemoglobin level of 7 g/dL; complete blood count and chemistry panel were otherwise normal.
- ✓ The patient was CMV positive with a viral load of PCR 309000 IU/mL.
- ✓ Due to her history of transplant and anemia an esophagogastroduodenoscopy (EGD) and colonoscopy were performed and revealed erythematous mucosa in the antrum, duodenum, ascending colon, transverse colon, descending colon, and ileocecal valve.
- \checkmark Biopsies of these sites revealed cytopathic changes and positive immunostaining for CMV.
- ✓ The patient received IV ganciclovir followed by oral valganciclovir until 2 weekly CMV viral load had been negative.
- Subsequent outpatient Follow-up visit showed resolution of symptoms and CMV viral load.











Figure 1a: Diffuse erythema on the second portion of the duodenum



Figure 2b: Duodenum CMV



- * CMV gastroenteritis in acute settings can present with a wide variety of symptoms including nausea, vomiting, abdominal pain, and bloody diarrhea.
- Various endoscopic findings include diffuse erythema, erosions, nodules, and plaques
- CMV gastroenteritis is often an isolated finding in one site and therefore can be easily missed if there is not a significant clinical suspicion.
- Upon review of the literature, no other case reports were found involving all the above-mentioned sites in a single patient.
- * It is important to note that patients who are immunocompromised may present with vague symptoms, which should be investigated further, as was the case with our patient.
- Our case emphasizes that physicians should be aware of various clinical presentations and that although rare, CMV can affect multiple areas in the same patient.

CONCLUSION



Figure 1c: Diffuse erythema throughout the colon



Figure 2c: Colon CMV