

Cytomegalovirus colitis with Amoebiasis in an Immunocompetent patient

M Mathew, G Goel, S Bhat, G Varghese

Citation

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Abstract

Cytomegalovirus (CMV) colitis commonly occurs in immunosuppressed individuals including those with acquired immune deficiency syndrome (AIDS), organ transplantation and hematological malignancies. Only a few cases of CMV colitis involving immunocompetent patients have been reported and even rarer cases of CMV colitis associated with amoebiasis. We describe a rare case of CMV colitis in an immunocompetent patient with amoebiasis.

INTRODUCTION

Cytomegalovirus (CMV) is a common human infection with a high seroprevalence of 40 – 100% in the general population. Most of the primary CMV infections in immunocompetent individuals are asymptomatic and usually involve the colon.^{1,2} Colonic mucosal damage has been reported by many authors to be a predisposing factor for CMV invasion in these individuals.^{1,3} Colitis in these cases may become self limited once the preceding intestinal damage resolves.¹ This report describes a case of CMV colitis in an immunocompetent elderly male with amoebiasis.

CASE REPORT

A 77 year old male presented with constipation, weight loss and loss of appetite of one month duration. He was a known diabetic and hypertensive on medications. On colonoscopy, multiple colonic diverticulae and mucosal ulceration was seen. The ascending colon showed a slightly nodular mucosa with three superficial ulcers. The ileocaecal valve and caecum were narrowed and ulcerated. Mucosal biopsies from the ileocaecal valve and ascending colon was sent for histopathological examination.

PATHOLOGICAL FINDINGS

Sections from the ileocecal valve showed an ulcerated colonic mucosa containing trophozoites of amoebae. The lamina propria was infiltrated by neutrophils, lymphocytes, eosinophils, plasma cells.(Fig 1)

{image:1}

The ascending colon ulcer showed an ulcerated mucosa with

a purulent exudate containing trophozoites of amoebae and intranuclear inclusions of cytomegalovirus.(Fig 2)

{image:2}

A diagnosis of amoebiasis with cytomegalovirus colitis was made.

DISCUSSION

CMV infection is one of the most common infections in immunosuppressed individuals. Rarely, CMV colitis has been reported in immunocompetent patients. It is generally asymptomatic but patients may present with diarrhea, fever, tenesmus, urgency, hematochezia and abdominal pain. The disease is usually limited to the left colon and endoscopy shows erosive colitis and multiple ulcers.² Massive gastrointestinal hemorrhage, toxic megacolon, perforation and inflammatory bowel disease are few of the complications of the disease.¹

The disruption of colonic mucosa can predispose to CMV colitis in an immunocompetent patient. Various authors have demonstrated that either CMV has a propensity to infect proliferating endothelial cells in inflamed, damaged tissue or it can be a superinfection of another intestinal disorder like inflammatory bowel disease.^{1,3}

Several authors recommend treatment with antiviral therapy for CMV colitis. In few cases with preceding treatable or self limited colonic damage, a favourable outcome was observed without any specific antiviral therapy.¹

In the present case, the patient may have been predisposed to

CMV infection secondary to colonic amebiasis which was demonstrated on biopsy. This case supports the hypothesis that mucosal damage is the most common predisposing factor in the development of CMV colitis.

References

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Author Information

Mary Mathew, MD

Department of Pathology, Kasturba Medical College

Garima Goel, MD

Department of Pathology, Kasturba Medical College

Sudha Bhat, MD

Department of Pathology, Kasturba Medical College

George Varghese, MD

Department of Medicine, Kasturba Medical College