



CMV Colitis in Immunocompetent Patients—A Case Series

Anushka Verma¹ Muppa Indrakeela Girish² Amol S. Dahale² Ashok Dalal³ Sanjeev Sachdeva³

¹Department of Physiology, Lady Hardinge Medical College, New Delhi, India

²Department of Gastroenterology and Hepatology, DY Patil Medical College, Pune, Maharashtra, India

³Department of Gastroenterology and Hepatology, Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, New Delhi, India

Address for correspondence Amol S. Dahale, MD, DM, Department of Gastroenterology and Hepatology, DY Patil Medical College, Pune, Maharashtra, India (e-mail: amolsd_1986@yahoo.com).

J Digest Endosc 2021;12:245–246.

Cytomegalovirus (CMV) colitis is a common occurrence in immunocompromised patients but uncommon in immunocompetent patients with usually mild and self-limiting symptoms and rarely gives rise to serious complications.¹ Gastrointestinal involvement is very rare in immunocompetent individuals; however, the commonly involved sites are colon and rectum.² We aimed to share our experience of CMV colitis in immunocompetent patients. We are sharing our experience of four patients having immunocompetent status. Our aim was to analyze clinicoepidemiological-associated attributes of CMV colitis in immunocompetent individuals. The average age of

patients in the study was 53.5 years (→ **Table 1**). In the present study, no of patients were four in which two were females (50%) and two were males (50%). Frequently occurring symptoms were abdominal pain and diarrhea. Three patients presented with abdominal pain (75%) and two patients with bloody diarrhea (50%). Comorbidities seen in involved patients were diabetes in 2 (50%) and hypertension and coronavirus disease 2019 in another (25%); one patient did not have any comorbidities. Diabetes was controlled in two patients with antidiabetic treatment and hemoglobin A1c was under-control. The common organs involved were sigmoid and rectum. The common



Fig. 1 Transverse colon showing multiple discrete deep ulcers.

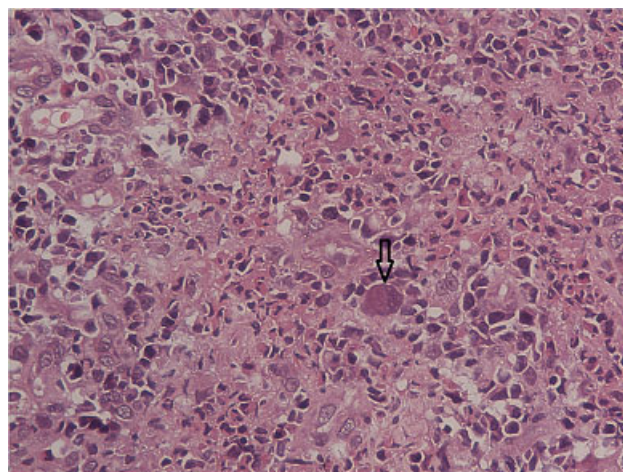


Fig. 2 Histopathological examination: Arrow showing cytomegalic cells containing basophilic intranuclear inclusion body.

DOI <https://doi.org/10.1055/s-0041-1742134>.
ISSN 0976-5042.

© 2022. Society of Gastrointestinal Endoscopy of India. All rights reserved.

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial-License, permitting copying and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

Table 1 Clinical, colonoscopic features and outcome of cases

Age/Sex	Comorbidity	Clinical features	Colon areas involved	Colon findings	Diagnosis	Outcome
65/F	Diabetes	Pain abdomen, diarrhea	Transverse, ascending colon, cecum	Multiple, deep and superficial ulcers	HPE + IHC	Cured
52/F	Nil	Pain abdomen, bloody diarrhea	Sigmoid	Multiple, superficial ulcers	HPE + IHC	Cured
45/M	Diabetes	Pain abdomen, bloody diarrhea	Rectum, rectosigmoid	Multiple superficial ulcers	HPE + IHC PCR+	Cured
55/M	Hypertension COVID-19	Diarrhea	Rectum	Multiple, deep ulcers	HPE + IHC	Death

Abbreviations: COVID-19, coronavirus disease 2019; HPE, histopathological examination; IHC, immunohistochemistry; PCR, polymerase chain reaction.

finding in colonoscopy was multiple superficial and deep ulcers (►Fig. 1). The diagnosis of CMV colitis within the four patients was on the basis of histopathology and immunohistochemistry. Tissue CMV polymerase chain reaction (qualitative) was performed in two patients' samples, and only one of them was positive. Histopathology reports of all four patients showed inclusion bodies with cytopathic effect, which was confirmed within immunohistochemistry (►Fig. 2). Three patients received treatment, and subsequently, their condition improved. However, one patient expired due to myocardial infarction before receiving the treatment. CMV colitis is very uncommon in immunocompetent patients and should be considered with appropriate clinical intervention to achieve positive outcome from the treatment.

Conflict of Interest

None.

References

- 1 Dinesh BV, Selvaraju K, Kumar S, Thota S. Cytomegalovirus-induced colonic stricture presenting as acute intestinal obstruction in an immunocompetent adult. *BMJ Case Rep* 2013; 2013:2013–200944. Doi: 10.1136/bcr-2013-200944
- 2 Nakase H, Herfarth H. Cytomegalovirus colitis, cytomegalovirus hepatitis and systemic cytomegalovirus infection: common features and differences. *Inflamm Intest Dis* 2016;1(01):15–23