

Pancolitis in Enteric Fever: A Rare Occurrence

Dear Sir,

Enteric fever is a common bacterial illness caused by ingesting contaminated food and water in developing countries. It includes typhoid fever, caused by *Salmonella typhi* and paratyroid fever, caused by *Salmonella* Paratyphi A and B. Paratyphoid fever is uncommon and relatively milder compared to typhoid fever. Gastrointestinal involvement is frequent in enteric fever; commonly involved sites are the terminal ileum, ileocecal valves, and ascending and transverse colon, respectively. Involvement of descending colon is rare. Herein, we present a rare case of pancolitis in paratyphoid fever.

A 25-year-old male student presented with intermittent fever and loose stools for 1 week. On physical examination, he had a temperature of 39.4°C, a pulse rate was 110/min, and blood pressure was 120/70 mm Hg. No organs were palpable on per abdomen examination, and the rest of the systemic examination was essentially normal. Blood investigations showed a high erythrocyte sedimentation rate (60 mm/h) and C-reactive protein levels (182 mg/L) with normal total leukocyte count. Liver function tests showed transaminitis with raised aspartate transaminase-165 U/L and alanine transaminase-114 U/L levels. Urine and stool routine examination was normal. Ultrasound whole abdomen showed multiple mesenteric lymph nodes with inflammatory changes in the terminal ileum, cecum, and ascending colon. Contrast-enhanced computed tomography abdomen showed thickened terminal ileum and ileocecal region with multiple nonnecrotic mesenteric lymph nodes. Colonoscopy was done, which revealed multiple erosions and ulcerations starting from the rectum to the ileocecal region [Figure 1]. Biopsy samples from the colon and ileal region showed inflammatory changes with dense infiltration of neutrophils and lymphocytes. Blood culture done on the day of admission grew *Salmonella* Paratyphi A. He was treated with an injection of ceftriaxone 2 gm twice daily for 10 days, and his fever subsided on the 6th day of the antibiotic, along with improvement in abdominal symptoms.

The pathogenesis of enteric fever begins with the ingestion of bacilli in contaminated food items. This is followed by penetration through the intestinal mucosa and subsequent bacteremia to various organs, including Peyer's patches in the terminal ileum.^[1] Peyer's patches become hyperaemic due to the presence of inflammatory cells and mucosal necrosis occurs, resulting in ulcer formation. The typical ulcer has a punched-out appearance and is oriented along the long axis of the bowel. Ulcer formation commonly occurs in the ileocecal region and ascending colon, although

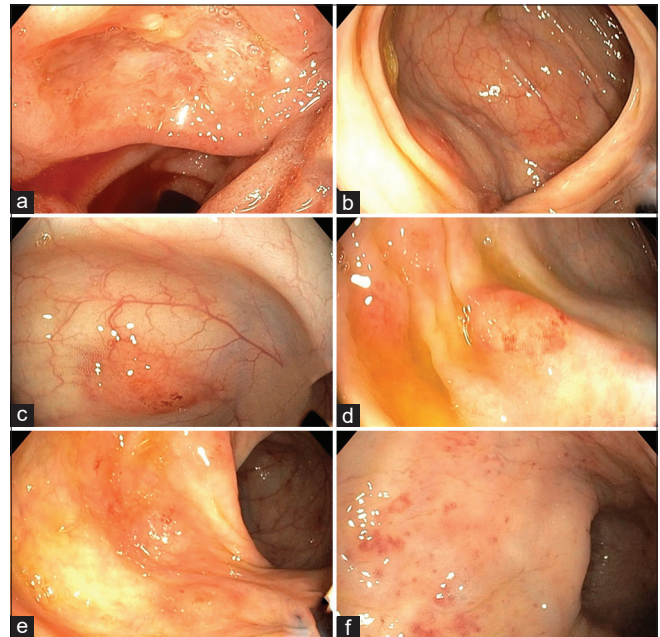


Figure 1: Colonoscopy showing (a) Ileal ulcer, (b) Erosions in ascending colon, (c and d) Erosions in the transverse colon, (e) Erosions in descending colon, (f) Erosions in the sigmoid colon

rarely on the left side of colon.^[2] The terminal ileum has plenty of lymphoid aggregates, which explains the reason for most perforation occurring in its vicinity.^[3] Further, the bacilli spread along the marginal arteries and affect other colon segments. However, left-side colonic involvement is rare, and we could not find any case of pancolitis in paratyphoid fever. A case series of seven patients with typhoid fever with lower gastrointestinal bleeding showed intact left colon in all patients.^[4] This case emphasizes the need to have enteric fever also as a possibility in left-sided colonic lesions.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understand that name and initials will not be published and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Access this article online	
Quick Response Code: 	Website: www.jgid.org
	DOI: 10.4103/jgid.jgid_229_22

How to cite this article: Kumar P, Kumar M. Pancolitis in enteric fever: A rare occurrence. *J Global Infect Dis* 2023;15:86-7.

Received: 07 December 2022 **Revised:** 12 December 2022

Accepted: 13 December 2022 **Published:** 31 March 2023

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