A 78-year-old woman presented to the emergency department with severe abdominal pain. Her WBC count was within normal limits, and a physical examination revealed abdominal distention and perianal tenderness. Written informed consent was obtained from patient for computed tomography (CT). Scout radiography revealed signs of colonic obstruction and fecal impaction in the colon (Figure 1). According to CT, the colon was distended with intraluminal fecalomas, pericolonic/perirectal fat stranding, wall edema and extraluminal bubbles of gas in the rectum, suggesting that perforation had already occurred (Figures 2a, b). On the 3-dimensional CT image, densities due to fecalomas were observed (Figure 3). During surgery, focal perforation on the posterior wall of the rectum was found to be consistent with stercoral ulceration. Despite fecal diversion and antibiotic therapy, the patient died secondary to sepsis.

Stercoral colitis is an inflammatory colitis that is caused by increased intraluminal pressure from impacted fecal material in the colon. When stercoral colitis is associated with colonic perforation, a 35% mortality rate has been reported [1]. In approximately 75% of such cases, ulcers are found in the sigmoid colon or rectum [2]. If stercoral colitis with ulceration is present, focal thickening or pericolonic fat stranding can be observed by CT. The presence of extraluminal gas or an abscess suggests that perforation has already occurred. Surgery should be a last resort for stercoral colitis. If necessary, treatment with surgery usually includes resection of the affected bowel, colostomy and a Hartmann's pouch. In conclusion, it is important to recognize this serious condition and begin treatment as soon as possible.

Key Words: Colonic perforation, computed tomography, stercoral colitis
Figure 2. a, b. Axial contrast enhanced CT image of the pelvis demonstrates fecal impaction resulting in rectal dilatation. A. Perirectal fat tissue shows stranding indicative of inflammatory change (white arrows). Colonic wall thickening and ulceration (arrowhead) is evident. B. Extraluminal bubbles of gas in the rectum suggest perforation (black arrow) (F; fecaloma).

Figure 3. Three-dimensional CT image of pelvis shows fecaloma (arrows) (F; fecaloma).

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References