Answer

Perforated Stercoral Ulcer

At laparotomy, the patient was found to have perforation of the rectum with impacted stool in the vault. There was no evidence of diverticulitis. The patient underwent resection of the affected portion of her rectum with end colostomy.

Stercoral perforation has been defined as "perforation of the large bowel due to pressure necrosis from fecal masses."[1] Historically, it has been considered a relatively rare cause of colonic perforation. Fewer than 70 cases were reported in the literature before 1998.[2] However, the actual incidence may be higher than previously thought. In a prospective study from a university hospital, Maurer et al[3] found that stercoral perforation accounted for 1.2% of all emergency colorectal cases and 3.2% of all colonic perforations. The incidence may be underestimated due to misdiagnosis and lack of clear diagnostic criteria.

The median age of presentation is about 60 years with an equal gender distribution.[4] Often, patients have a history of chronic constipation and many present following a painful bowel movement.[5] Peritonitis is a common finding. Free air is often found on radiography; however, patients with rectal perforation may have retroperitoneal air as this patient did.[6] The rectum or sigmoid colon is the site of perforation in the vast majority of cases.[7] At laparotomy, fecal peritonitis is present and a fecal mass is found at the site of perforation or elsewhere within the abdominal cavity.

Although earlier series reported mortality rates of 30% to 55%, prompt exploration may decrease that rate.[1,4] Treatment with colostomy has a lower reported mortality rate than with primary repair.[2] In Maurer's series of 7 patients, all patients received colostomies and there were no in-hospital deaths.[3]

Accepted for Publication: November 30, 2005.
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Financial Disclosure: None reported.

REFERENCES

1. Serpell JW, Nicholls RJ. Stercoral perforation of the colon. *Br J Surg*. 1990;77:1325-1329.
2. Tokunaga Y, Hata K, Nishitai R, Kaganoi J, Nanbu H, Ohsumi K. Spontaneous perforation of the rectum with possible stercoral etiology: report of a case and review of the literature. *Surg Today*. 1998;28:937-939.
3. Maurer CA, Renzulli P, Mazzucchelli L, Egger B, Seiler CA, Buchler MW. Use of accurate diagnostic criteria may increase incidence of stercoral perforation of the colon. *Dis Colon Rectum*. 2000;43:991-998.
4. Gekas P, Schuster MM. Stercoral perforation of the colon: case report and review of the literature. *Gastroenterology*. 1981;80:1054-1058.
5. Dubinsky I. Stercoral perforation of the colon: case report and review of the literature. *J Emerg Med*. 1996;14:323-325.
6. Rozenblit AM, Cohen-Schwartz D, Wolf EL, Foxx MJ, Brenner S. Case reports. Stercoral perforation of the sigmoid colon: computed tomography findings. *Clin Radiol*. 2000;55:727-729.
7. Maull KI, Kinning WK, Kay S. Stercoral ulceration. *Am Surg*. 1982;48:20-24.