

## Images of Interest / Imagens de Interesse

**Stercoral Perforation***Stercoral Perforation*

Bernardete Rodrigues, Hugo Correia

Department of Imagiology, Centro Hospitalar  
Tondela-Viseu, Portugal**Address**Bernardete Rodrigues  
Serviço de Imagiologia  
Centro Hospitalar de Tondela-Viseu  
Av. Rei D. Duarte  
3504-509 Viseu  
Portugal  
email: berna.rodri@gmail.com**Abstract**

We report a case of a 91-year-old woman with rectal bleeding. On colonoscopy and CT, a large faecaloma in the sigmoid with wall perforation was documented. Stercoral perforation is a rare but life-threatening condition defined as bowel perforation due to pressure necrosis from faecal impaction.

**Keywords**

Stercoral perforation; Faecaloma; Bowel; CT.

**Resumo**

Apresentamos o caso de uma mulher de 91 anos com rectorragias. Na colonoscopia e na TC observou-se um volumoso feecaloma no cólon sigmóide com perfuração da parede intestinal. Stercoral perforation é uma condição rara mas grave definida como perfuração da parede intestinal devido a necrose por pressão da impação fecal.

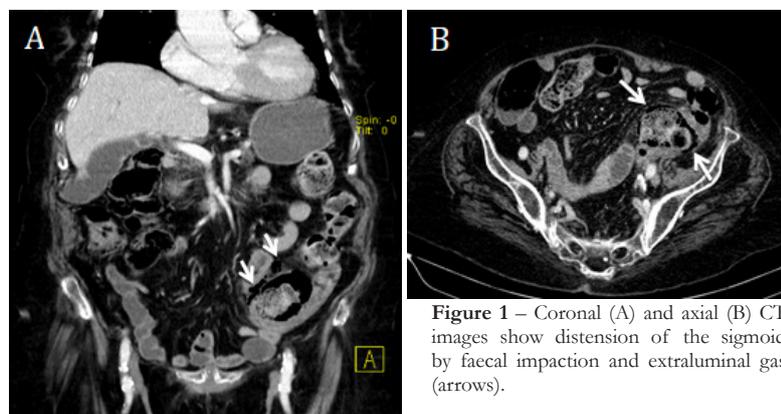
**Palavras-chave**

Stercoral perforation; Faecaloma; Intestino; TC.

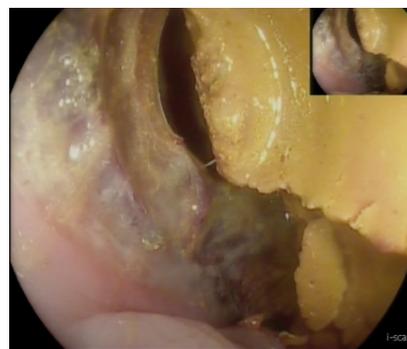
A 91-year-old woman was admitted in the emergency department with rectal bleeding, abdominal pain and prostration. Physical examination revealed a tender abdomen and digital rectal examination showed faeces and blood in the stool. Laboratory testing revealed a C-reactive protein level of 24.50 mg per decilitre (normal value, <0.50) and a white-cell count of 22.200 per cubic millimetre with 85.6% neutrophils (reference range 4.500-11.500). A colonoscopy and a computed tomography (CT) were performed (Figure 1 and 2). Colonoscopy revealed a large faecaloma at 20cm from the anal verge with an ulcerated wall in the proximity. CT confirmed the colonic wall perforation of the sigmoid with extraluminal gas and distension by faeces. Because the patient had no surgical conditions comfort therapy was decided and the patient died.

Stercoral perforation is defined as perforation of the bowel due to pressure necrosis from a faecal mass. The

physiology is related to the development of a faecaloma causing distention and increase in the pressure of the wall which decreases the blood supply leading to ulceration and perforation. It is an uncommon but life-threatening cause of acute abdominal symptoms. The most common locations for perforation are the anterior rectum proximal to the peritoneal reflection, the anti-mesenteric border of the rectosigmoid junction and the apex of the sigmoid colon. Abdominal radiographs may show free intraabdominal air and faecaloma. CT is the most useful technique for the diagnosis of stercoral perforation. CT findings include discontinuity of the bowel wall, the presence of faecal material protruding through the colonic wall or in the intraabdominal cavity, and extraluminal air.<sup>1,2,3</sup> Management includes treatment of any underlying sepsis, removal of the colonic tissue and peritoneal lavage, treatment of colonic perforation peritonitis and any co-morbid medical conditions.<sup>4</sup>



**Figure 1** – Coronal (A) and axial (B) CT images show distension of the sigmoid by faecal impaction and extraluminal gas (arrows).



**Figure 2** – Colonoscopy image reveals faeces and an ulcerated sigmoid wall.

---

**Received / Recebido** 29/10/2018

**Acceptance / Aceite** 26/04/2019

#### **Ethical disclosures / Divulgações Éticas**

*Conflicts of interest:* The authors have no conflicts of interest to declare.

*Conflitos de interesse:* Os autores declaram não possuir conflitos de interesse.

*Financing Support:* This work has not received any contribution, grant or scholarship.

*Suporte financeiro:* O presente trabalho não foi suportado por nenhum subsídio ou bolsa.

*Confidentiality of data:* The authors declare that they have followed the protocols of their work center on the publication of data from patients.

*Confidencialidade dos dados:* Os autores declaram ter seguido os protocolos do seu centro de trabalho acerca da publicação dos dados de doentes.

*Protection of human and animal subjects:* The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

*Proteção de pessoas e animais:* Os autores declaram que os procedimentos seguidos estavam de acordo com os regulamentos estabelecidos pelos responsáveis da Comissão de Investigação Clínica e Ética e de acordo com a Declaração de Helsínquia da Associação Médica Mundial.

#### **References**

1. Maddu KK, Mittal P, Arepalli CD, et al. Colorectal emergencies and related complications: a comprehensive imaging review – noninfections and noninflammatory emergencies of colon. *AJR*. 2014;203:1217-29.
2. Heffernan C, Pachter HL, Megibow AJ, Marai M. Stercoral colitis leading to fatal peritonitis: CT findings. *AJR*. 2005;184:1189-93.
3. Kumar P, Pearce O, Higginson A. Imaging manifestations of faecal impaction and stercoral perforation. *Clinical Radiology*. 2011;66:83-8.
4. Huang WS, Wang CS, Wang JY, et al. Management of patients with stercoral perforation of the sigmoid colon: Report of five cases. *World J of Gastroenterol*. 2006;12:500-3.