

# Giant colonic diverticulum presenting with painless rectal bleeding and diagnosed at angiography

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Accepted 3 October 2014

## DESCRIPTION

A 68-year-old man with a history of colonic diverticulosis presented with painless rectal bleeding. He was afebrile and haemodynamically stable.

Mesenteric angiography was performed. The active bleeding was not identified, but a large air-filled lesion centrally located in the abdomen was seen. Its walls were vascularised by inferior mesenteric artery branches (figure 1).

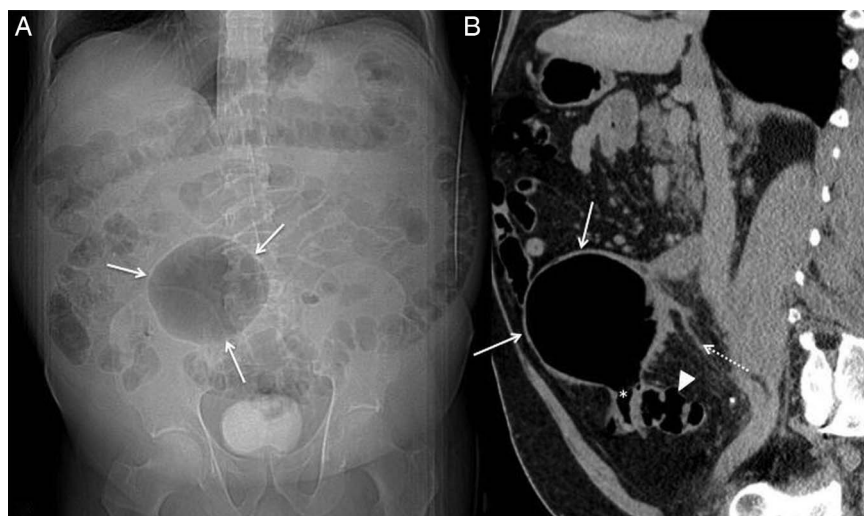


**Figure 1** Mesenteric angiography demonstrated a large air-filled cystic structure centrally located in the abdomen (arrows) whose walls were vascularised by inferior mesenteric artery branches (square dot arrows). No active bleeding was identified.

The scout view of an unenhanced abdominopelvic CT demonstrated a large, round, homogeneous radiolucent smoothly margined lesion—balloon sign (figure 2A). Sagittal CT reconstructions (figure 2B) showed a 10×9 cm cystic mass communicating with the sigmoid colon and containing only gas. The diverticulum wall was thickened with surrounding fat stranding, indicating recent inflammation. The patient was treated conservatively with antibiotics. Considering the risk of future complications the patient is awaiting elective diverticulectomy.

Giant colonic diverticulum, defined as a colonic diverticulum measuring 4 cm or more, represents an unusual manifestation of diverticular disease.<sup>1 2</sup> These diverticula are preferentially located in the sigmoid colon because of the increased frequency of diverticular disease in this location.<sup>1 2</sup> Other than through bleeding, giant diverticula can uncommonly present as intermittent masses<sup>3</sup> or abscesses.<sup>2</sup> Histologically, they can be true congenital diverticulum (wall composed of all structural layers), pseudodiverticulum (wall composed mainly of mucosa) or inflammatory diverticulum (wall composed of reactive scar tissue).<sup>1 2</sup>

Clinically, patients can be asymptomatic or present with non-specific symptoms, such as intermittent unspecific abdominal pain, constipation with occasional diarrhoea, fever, nausea or melena.<sup>1 2</sup> The treatment gold-standard is surgery: diverticulectomy or segmental resection of adjoining colon and primary anastomosis whenever possible.<sup>1 2</sup>



**Figure 2** Unenhanced CT scan immediately performed after angiography. The scout view (A) demonstrated a large, round, homogeneous radiolucency smoothly margined (arrows). Sagittal CT image (B) showed a 10×9 cm cystic mass (arrows) communicating (\*) with the sigmoid colon (arrowhead). It contained only gas. The wall of the diverticulum was thickened with surrounding fat stranding (round dot arrow), indicative of recent inflammation.



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**To cite:** Andrade LC, Baptista M, Costa JF, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2014-204826

## Learning points

- ▶ Giant colonic diverticulum (GCD) is a rare manifestation of colonic diverticular disease.<sup>1 2</sup>
- ▶ The most common CT appearance of GCD is a predominantly gas-filled structure communicating with the adjacent colon.<sup>4</sup>
- ▶ Surgical procedures are the gold standard treatment for GCD.<sup>1 2</sup>

**Contributors** LCA, MB and JFC conducted the diagnostic procedures. LCA wrote the first draft of the manuscript. MB, JFC and FC-A revised and added important

intellectual content. All authors read and approved the final version of the manuscript to be published.

**Competing interests** None.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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