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

Luisa Costa Andrade, ¹ Marta Baptista, ² João Filipe Costa, ¹ Filipe Caseiro-Alves ¹

¹Medical Imaging Department and Faculty of Medicine, University Hospital of Coimbra, Coimbra, Portugal ²Department of Radiology, José Joaquim Fernandes Hospital, Beja, Portugal

Correspondence to Dr Luisa Costa Andrade, isa.c.andrade@hotmail.com

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).

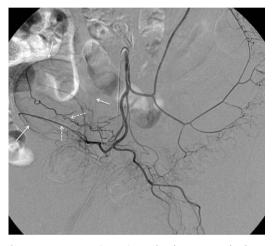
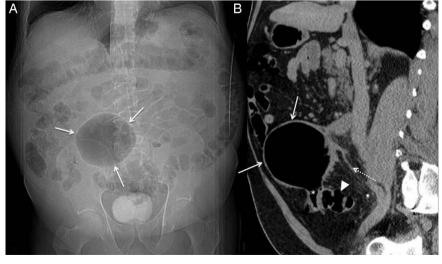


Figure 1 Mesenteric angiography demonstrated a large air-filled cystic structure centrally located in the abdomen (arrows) whose walls were vascularised by inferior mesenteric artery branches (square dot arrows). No active bleeding was identified.

The scout view of an unenhanced abdominopelvic CT demonstrated a large, round, homogeneous radiolucent smoothly marginated 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. These diverticula are preferentially located in the sigmoid colon because of the increased frequency of diverticular disease in this location. Other than through bleeding, giant diverticula can uncommonly present as intermittent masses or abscesses. 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).

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. The treatment gold-standard is surgery: diverticulectomy or segmental resection of adjoining colon and primary anastomosis whenever possible.





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

Figure 2 Unenhanced CT scan immediately performed after angiography. The scout view (A) demonstrated a large, round, homogeneous radiolucency smoothly marginated (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.

Images in...

Learning points

- ► Giant colonic diverticulum (GCD) is a rare manifestation of colonic diverticular disease. ^{1 2}
- The most common CT appearence of GCD is a predominantly gas-filled structure communicating with the adjacent colon.⁴
- Surgical procedures are the gold standard treatment for GCD ^{1 2}

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.

REFERENCES

- 1 Zeina AR, Nachtigal A, Matter I, et al. Giant colon diverticulum: clinical and imaging findings in 17 patients with emphasis on CT criteria. Clin Imaging 2013;37:704–10.
- 2 Filippucci E, Pugliese L, Pagliuca V, et al. Giant sigmoid diverticulum: a rare cause of common gastrointestinal symptoms. *Intern Emerg Med* 2012;7 (Suppl 2):S149–51.
- 3 Abdelrazeq A, Owais A, Aldoori M, et al. A giant colonic diverticulum presenting as a 'phantom mass': a case report. J Med Case Rep 2009;29:1–3.
- 4 Steenvoorde P, Vogelaar FJ, Oskam J, et al. Giant colonic diverticula. Review of diagnostic and therapeutic options. Dig Surg 2004;21:1–6.

Copyright 2014 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit http://group.bmj.com/group/rights-licensing/permissions.

BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ► Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ► Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow