

Infected transverse colonic cystic duplication simulating pelvic appendicular abscess

Ramnik V Patel,^{1,2} Irene Milliken,³ Alistair Dick,³ David Marshall³

¹Department of Paediatric Urology, University College London Hospitals NHS Foundation Trust, London, UK

²Department of Paediatric Urology, Great Ormond Street Children Hospital NHS Trust, London, UK

³Department of Paediatric Surgery, The Royal Belfast Hospital for Sick Children, Belfast, UK

Correspondence to

Ramnik V Patel,
ramnik@doctors.org.uk

DESCRIPTION

A 23-month-old girl presented with 5 days of lower abdominal pain, lethargy, anorexia, reduced wet nappies and high fever not responding to a 5-day course of amoxicillin. On examination, she had a pulse rate of 179, respiratory rate 32, temperature 39.2°C and a tender mass in the lower abdomen. A urine dipstick was normal. White cell count was $30.36 \times 10^9/L$, neutrophils $24.59 \times 10^9/L$ and C reactive protein 34.9 mg/L. An abdominal ultrasound scan showed a 5.7 cm long cystic mass on the left side of the pelvis with a thin septae, layering of the debris within the mass, haustra-like appearance and enhancing double wall at places, and a small amount of free intraperitoneal fluid in the pelvis, which was later confirmed by a CT scan (figure 1). A giant infected cystic duplication of the mid-transverse colon was diagnosed at surgery via Pfannenstiel incision. She

underwent a segmental resection of the transverse colon including the duplicated colon and end-to-end anastomosis uneventfully. Pathology confirmed non-communicating infected colonic duplication cyst and revealed a whole muscle layer of the colon together with inflamed, ulcerated mucosa with extensive granuloma and abscess formation compatible with an infected duplication. Postoperative recovery was uneventful. She is asymptomatic and thriving well at 8-month follow-up. Mid-transverse colonic cystic duplication presenting late with complications of infection and abscess formation in the pelvis is rare.^{1 2} Differential diagnoses include appendicular abscess, infected ovarian cyst, inflammatory pseudocyst or infected mesenteric cyst. Antenatal diagnosis is possible and resection with reconstruction is curative.³ Transverse colonic surgery via Pfannenstiel incision is a technical challenge.

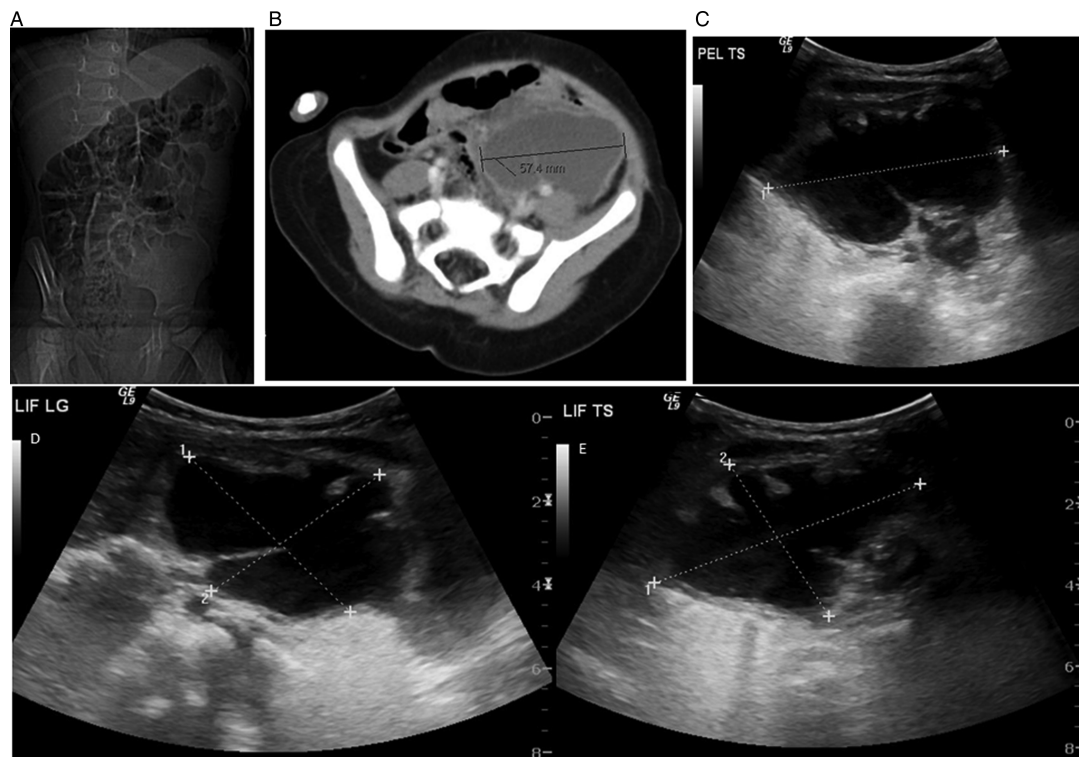


Figure 1 (A) An abdominal scout film showing soft tissue pelvic mass extending to the left lower abdomen and abnormal dilated bowel gas pattern. (B) A CT scan showing a 5.7 cm length cystic structure in the left pelvis with wall enhancement on the pelvic side. (C–E) Transverse and longitudinal ultrasound scans of the pelvis and left iliac fossa showing a cyst with a septa and the double-wall lining in places.

To cite: Patel RV, Milliken I, Dick A, et al. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2013-201459

Learning points

- ▶ Transverse colonic tubular duplications are common but cystic duplications are rare. Since the transverse colon is mobile, cystic duplications of the mid-transverse colon can present in the pelvis.
- ▶ An infected transverse colonic cystic duplication cyst can mimic appendicular abscess with lower abdominal pain and fever associated with tender mass and raised inflammatory markers. The classic enhancing mucosa of a duplication cyst on ultrasound/CT scan can be destroyed by infection and an important clue may be lost.
- ▶ Colonic duplications have a high incidence of complications, such as infection, bleeding, perforation, adenocarcinoma and obstruction, and therefore, even if antenatally diagnosed or incidentally found, should be resected.

Contributors All the authors have actively participated in the clinical management of this patient and have been involved in the preparation, editing and finalisation of the manuscript.

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Banchini F, Delfanti R, Begnini E, *et al.* Duplication of the transverse colon in an adult: case report and review. *World J Gastroenterol* 2013;19:586–9.
- 2 Stefanidis K, Lappas I, Kolofousi C, *et al.* A rare presentation of colonic duplication cyst: report of a case and review of literature. *JBR-BTR* 2012;95:71–3.
- 3 Piolat C, N'Die J, Andrini P, *et al.* Perforated tubular duplication of the transverse colon: a rare cause of meconium peritonitis with prenatal diagnosis. *Pediatr Surg Int* 2005;21:110–12.

Copyright 2013 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