

# Infected enteric duplication cyst

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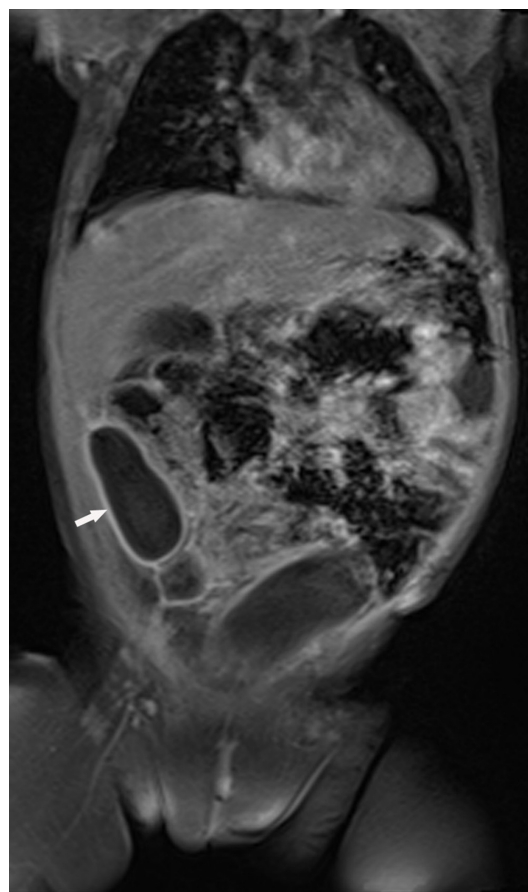
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## DESCRIPTION

An 8-month-old female infant presented with a 2-day history of vomiting, diarrhoea and fever. Physical examination revealed a painful right abdomen. Laboratory tests showed a C-reactive protein of 140 mg/L (normal: <6 mg/L) and a white blood cell count of  $12.8 \times 10^9/L$  (normal:  $4-15 \times 10^9/L$ ). Ultrasound of the abdomen revealed a paracolic cystic mass of  $1.4 \times 5$  cm with septations from the lower part of the liver into the right fossa with no signs of volvulus or intussusception (figure 1). Abdominal CT confirmed the cystic mass and revealed signs of infection. MRI of the abdomen suggested an enteric duplication cyst as the most likely diagnosis (figure 2).

Treatment with intravenous amoxicillin-clavulanic acid and painkillers was started. Laparotomy was scheduled a few days later, and a bowel-like mass was found, which did not connect with the gastrointestinal tract and its mesentery. Histopathology showed an enteric duplication cyst with colonic mucosal lining. She was discharged 5 days after surgery.

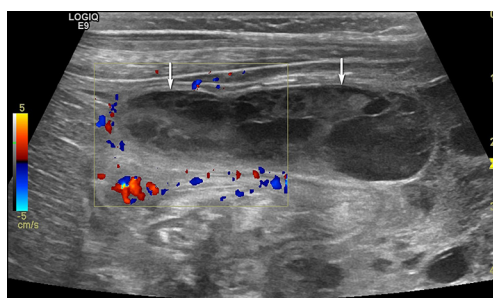
Enteric duplications are non-malignant, rare (1:4500) congenital anomalies that may vary greatly in presentation, size, location and symptoms. They are characterised by the following three features: a well-developed coat of smooth muscle, lined with a mucous membrane and found along (and often intimately attached to some portion of) the gastrointestinal tract.<sup>1</sup> They are most frequently found in the small intestine (44%) and colon (15%), but can also be found in gastric (7%), duodenal (5%), rectal (5%), thoracic and thoracoabdominal (4%), cervical (rare) or pyloric (extremely rare) localisations.<sup>2</sup> They arise during early embryonic development, but true aetiology remains unknown. Enteric duplications can be single



**Figure 2** MRI coronal T1-weighted image with intravenous contrast: tubular cystic mass with thick wall ventral and lateral of the ascending colon.

or multiple, spherical or tubular, isolated or fistulated. They are discovered incidentally or present as a (painful) palpable abdominal mass. Complications are rare, but may include bleeding and infection, or manifestation as an acute intestinal obstruction. Malignant transformation has been described.

Management of asymptomatic cysts is usually expectant. When symptomatic, duplication cysts can be treated endoscopically or



**Figure 1** Ultrasound: encapsulated tubular mass with predominant hypoechoic heterogeneous echogenicity under the right lobe of the liver.



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## Learning points

- ▶ Infected enteric duplication cysts are rare.
- ▶ They should be considered in the differential diagnosis of unidentified abdominal mass with signs of obstruction and/or infection.
- ▶ Excision of the cyst is much easier and safer after antibiotic treatment of the infection.

surgically. Associated anomalies are common; screening is appropriate.<sup>3</sup>

Thus, infected enteric duplication cysts are rare, but should be considered in the differential diagnosis of unidentified abdominal mass with signs of obstruction and/or infection. Excision of the cyst is much easier and safer after antibiotic treatment of the infection.

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