An unusual cause of bowel obstruction: caecal volvulus

A 70-year-old woman who had previously undergone anterior resection for rectal cancer presented with a 4-day history of abdominal distension and absolute constipation. On examination, the abdomen was diffusely tender with no signs of peritonism or sepsis.

Abdominal radiography showed a markedly distended air-filled viscus extending to the left upper quadrant, suggesting a diagnosis of caecal volvulus (*Figure 1*). This was distinguished radiologically from a distended stomach by identifying colonic haustrations (*Figure 1*, arrows).

Contrast-enhanced computed tomography demonstrated closed loop obstruction with massively distended caecum and collapsed distal colon. Twisting of the mesenteric vessels producing the 'whirl sign' was highly suggestive of intestinal volvulus (*Figure 2*).

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Figure 1. Upright abdominal radiograph demonstrating a dilated caecum with its long axis extending to the left upper quadrant. The arrows point to colonic haustrations.

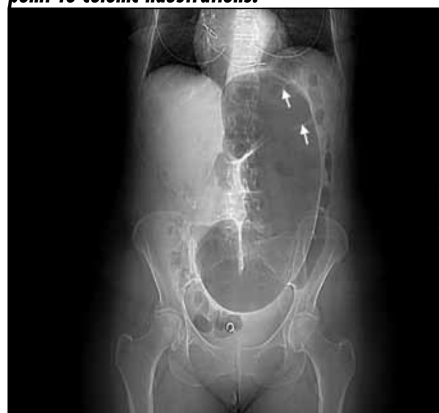
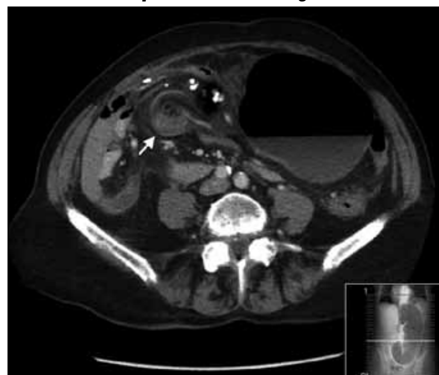


Figure 2. Axial contrast-enhanced computed tomography demonstrating distension of the caecum. Arrow points to 'whirl sign'.



The patient underwent a laparotomy, which confirmed the radiological findings (*Figure 3*). A right hemicolectomy with end-to-end anastomosis was performed, followed by an uneventful recovery.

Caecal volvulus can arise from incomplete embryological fixation of the right colon to retroperitoneal structures or as a result of adhesions acting as pivot points for rotation (Habre et al, 2008).

Diagnosis is based on clinical features of bowel obstruction and classical radiographic findings. Computed tomography can confirm the diagnosis, but should not delay treatment especially when features of peritonism are present. **BJHM**

Habre J, Sautot-Vial N, Marcotte C, Benchimol D (2008) Caecal Volvulus. *Am J Surg* **196**: e48–9

Figure 3. Intraoperative finding of distended U-shaped caecum with torted mesentry at its base.