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Radiology for the Surgeon

Chirurgie et radiologie

CASE 11. DIAGNOSIS

MIDGUT VOLVULUS

Midgut volvulus is a surgical emergency. Delay in diagnosis is associated with a high death rate from bowel infarction. If the clinical setting is suggestive, early computed tomography (CT) can be very useful. The characteristic appearance of twisted mesentery is that of collapsed small-bowel loops on the CT scan (arrowheads) and mesenteric fat (short arrow), wrapping around the superior mesenteric artery (long arrow), creating a whirl-like pattern.¹ Dilated small-bowel loops arranged in a radial pattern, representing closed-loop obstruction, and mesenteric fatty stranding, representing edema, indicate progression to torsion.² Thickening of bowel wall and intraperitoneal fluid with or without gas in the bowel wall suggest infarction.³

At surgery, performed within hours after CT, a mesenteric volvulus through an internal hernia was found. The small bowel was dusky in appearance. The

anomaly was corrected and the patient recovered without complication.

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