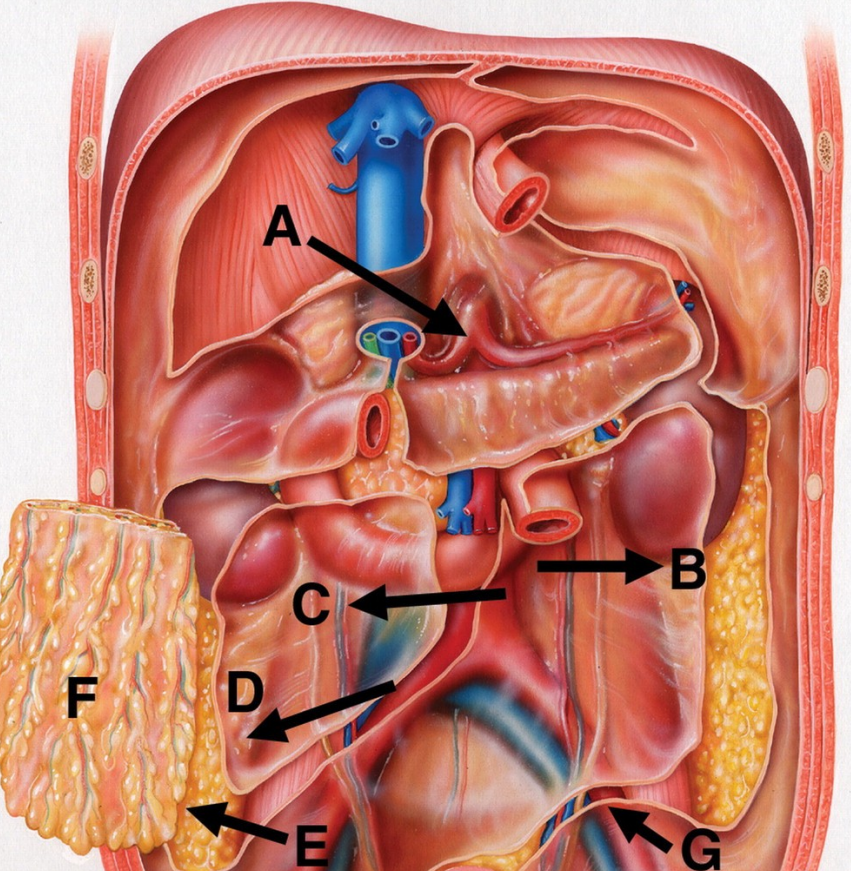


Internal hernia as an uncommon cause of acute abdominal pain: the pivotal role of computed tomography in early detection – a case report

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Clinical Context

Figure 1: Drawing (coronal view) shows the locations and directions of internal hernias of the upper and lower abdominal peritoneal cavity. A = foramen of Winslow hernia, B = left paraduodenal hernia, C = right paraduodenal hernia, D = transmesenteric hernia, E = pericecal hernia, F = transcolonal

A 61-year-old woman presented with acute periumbilical abdominal pain and a single episode of vomiting with no fever and no urinary or bowel dysfunction. Physical examination revealed a soft abdomen with diffuse tenderness and no signs of peritonitis.

Laboratory findings:

- Normal inflammatory markers
- Normal leukocyte count
- Mildly elevated lactate (2.3 mmol/L)

Diagnostic Challenge

hernia.

Internal hernia may present with nonspecific symptoms and **normal laboratory findings** despite underlying vascular compromise, increasing the risk of delayed diagnosis. ***Can imaging identify early bowel ischemia before clinical deterioration?***

Imaging Indication

Contrast-enhanced CT was performed due to persistent acute abdominal pain with concern for small bowel obstruction and possible ischemia despite unremarkable laboratory findings. Imaging demonstrated a 15 cm segment of ileum with concentric wall thickening and **reduced enhancement**, associated with **mesenteric congestion**, crowding of mesenteric vessels, mild proximal small bowel dilatation with air–fluid levels, and a small amount of free pelvic fluid. No pneumoperitoneum was present. Overall, the findings were highly suggestive of an internal hernia with impending vascular compromise.

Outcome

CT raised suspicion of internal hernia with possible vascular compromise. **Imaging findings suggested impending bowel ischemia before irreversible injury developed.**

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Urgent laparoscopic exploration performed

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Internal herniation through omental defect confirmed

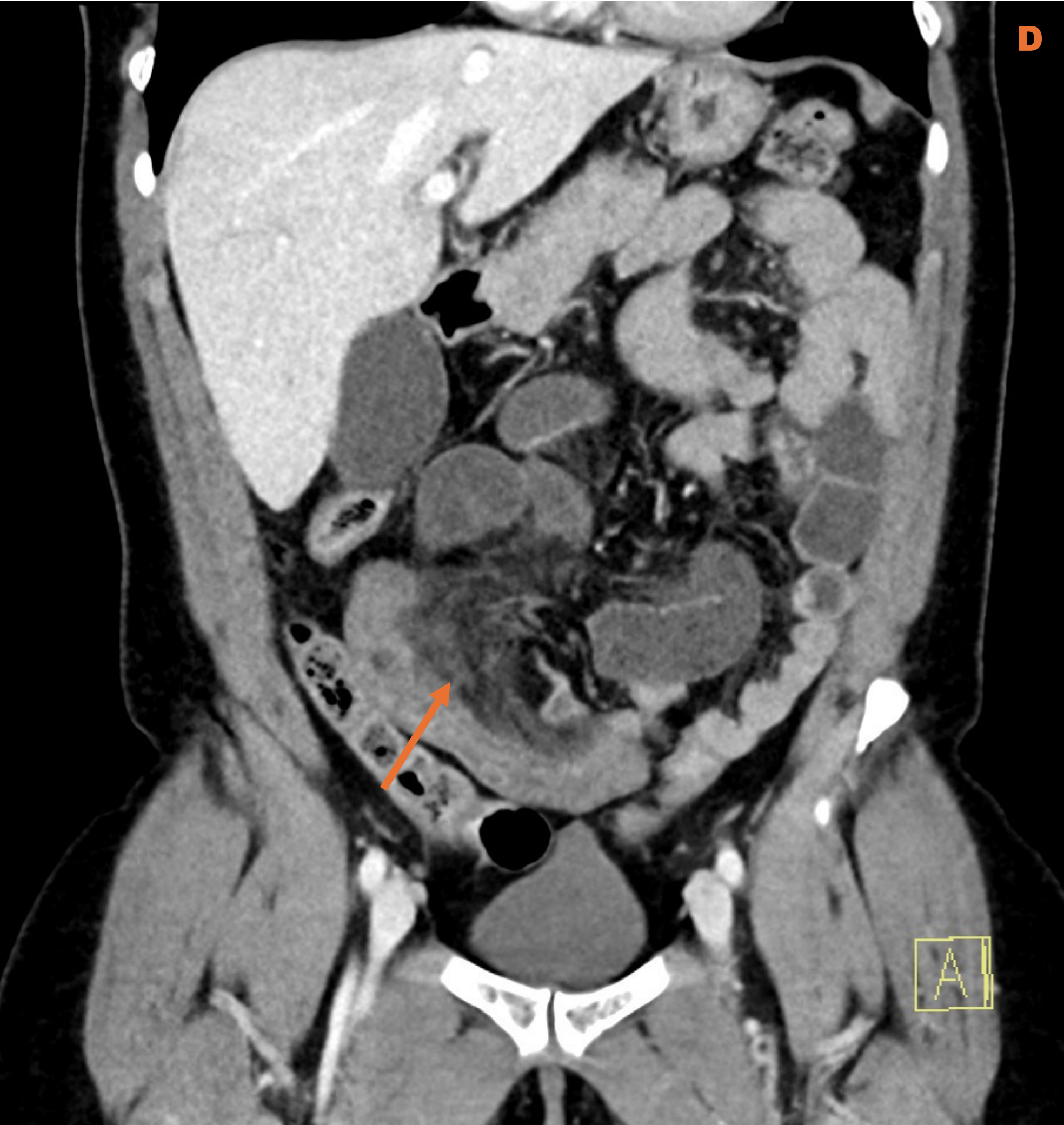
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Bowel viable, **no resection required**

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Incidental Meckel’s diverticulum resected

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Uneventful recovery, discharge on postoperative day 2

References

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CT Red Flags

- Reduced mural enhancement
- Mesenteric congestion
- Crowded loops

Clinical Pearls

- Normal inflammatory markers do not exclude bowel ischemia.
- Reduced bowel wall enhancement with mesenteric congestion on CT should prompt urgent surgical evaluation.
- Early CT diagnosis may prevent bowel necrosis and the need for bowel resection.

Figure 2. Imaging findings of internal hernia with impending bowel ischemia.

(A) Unremarkable X-ray abdomen. (B) Unenhanced axial CT image. (C–E) Portal venous phase CT images showing reduced mural enhancement, mesenteric congestion, clustered bowel loops, free fluid, and proximal small bowel dilatation.