Radiology for the Surgeon Chirurgie et radiologie

SOFT-TISSUE CASE 32. PRESENTATION

A 29-year-old man was using a circular saw when a large piece of plywood was "kicked back" from the saw and struck him in the right lower quadrant of the abdomen. When seen in the Emergency Department he was hemodynamically stable. He had some

tenderness over the right anterior superior iliac spine with some superficial abrasions in that area. He was admitted overnight for observation. Because of persistent tenderness in the right lower quadrant an enhanced computed tomography scan of the abdomen and pelvis was obtained. Infusion CT scans of the abdomen are shown at presentation (Fig. 1) and 4 weeks later (Fig. 2).

Can you detect the abnormality? For the answer and discussion see page 112.







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Radiology for the Surgeon Chirurgie et radiologie

SOFT-TISSUE CASE 32. DIAGNOSIS

RIGHT COLONIC INTRAMURAL HEMATOMA

The hematoma can be seen in Fig. 1. The patient was also investigated with small-bowel followthrough radiography, which showed that contrast passed by this lesion, which partially narrowed the lumen. The patient was treated nonoperatively and did not require laparotomy. He left hospital 3 days later tolerating a full diet. At follow-up he was well and had no complications (Fig. 2).

Intramural hematomas have been described and reported to occur less frequently in the large bowel than the small bowel.¹ Patients with these lesions are at risk for the development of stenosis in the long term, secondary to an organizing hematoma, and to bowel ischemia from vascular injury to the area.

A study by Rizzo and colleagues² showed that CT is an accurate investigation for detecting bowel injury especially if oral contrast medium is used. In that study, CT findings that correlated with bowel or mesenteric injuries requiring surgery included the following: free peritoneal fluid, mesenteric infiltration, thick-walled bowel, free air and associated abdominal injuries. In patients treated nonoperatively, CT scans showed bowel thickening but less frequently free peritoneal fluid, mesenteric infiltration and associated injuries. CT of the abdomen and pelvis with both oral and intravenous contrast media is recommended for detecting injuries and hematomas of the bowel wall.

References

- Spencer R, Bateman JD, Hern PL. Intramural hematoma of the intestine. A rare cause of intestinal obstruction. Review of the literature and report of a case. *Surgery* 1957;41:794-804.
- Rizzo MJ, Federle MP, Griffiths BG. Bowel and mesenteric injury following blunt abdominal trauma: evaluation with CT. *Radiology* 1989;173:143-8.

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FIG. 1. Computed tomography scan of the abdomen and pelvis with both oral and intravenous contrast media at the time of admission shows an intramural hematoma (arrow) of the cecum.



FIG. 2. Follow-up CT scan 4 weeks later shows partial resolution of the hematoma.

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