

Colonic obstruction secondary to incarcerated transiliac bone hernia

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Abstract

Herniation of intra-abdominal viscera through pelvic bone defects represents an extremely uncommon complication following orthopaedic interventions in the bony pelvis. We report a rare case of acute colonic obstruction through a defect in the iliac bone, following bone graft harvesting from the iliac crest, aiming to raise clinical awareness.

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Keywords: transiliac; hernia; surgery; emergency

Key Clinical Message: Transiliac bone hernias are a rare cause of intestinal obstruction and high clinical suspicion is required for their diagnosis

Abstract

Herniation of intra-abdominal viscera through pelvic bone defects represents an extremely uncommon complication following orthopaedic interventions in the bony pelvis. We report a rare case of acute colonic obstruction through a defect in the iliac bone, following bone graft harvesting from the iliac crest, aiming to raise clinical awareness.

Case Description

A 77-year old Caucasian female patient presented to our acute surgical take with features of gastrointestinal obstruction, comprising of abdominal distension, vomiting and sharp pain localised in the left iliac fossa. She had a complex medical history comprising of congestive heart failure, hypertension, diabetes mellitus and previous right knee and hip replacements, along with extraction of left iliac bone graft for spinal surgery. Clinical examination revealed a moderately distended but soft abdomen, with tenderness in deep palpation in the left iliac fossa; no obvious external hernia was identified. Provisional diagnosis was that of intestinal

obstruction and hence an urgent abdominopelvic computed tomography (CT) scan with intravenous contrast was performed for further assessment. The performed CT scan revealed the presence of closed loop colonic obstruction between a competent ileocecal valve and the distal descending colon, which had herniated through the left iliac bone, with no obvious evidence of intestinal ischemia or perforation (Figures 1 & 2). The patient was scheduled for emergency laparotomy and intraoperatively there was no concern regarding the viability of the colon, after the reduction of the herniated segment. The defect was closed with the use of synthetic polypropylene mesh and no colonic resection was eventually required. The patient had an uneventful recovery and was discharged in a stable condition, with no evidence of recurrence at 6 months postoperatively.

Our case highlights the need for high clinical suspicion of a transiliac bone hernia in patients with previous relevant orthopaedic interventions, who present with features of gastrointestinal obstruction, as highlighted by the previous very limited reports in the literature^{1,2}. Since clinical examination is usually insufficient to establish the diagnosis, we advocate urgent performance of abdominopelvic computed tomography for diagnostic and pre-operative planning purposes, followed by prompt surgical intervention, with liberal use of prosthetic mesh to reduce the chance of recurrence of the hernia.

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Figure Legends

Figure 1: Axial view of the preoperative CT scan showing the site of the incarcerated transiliac bone hernia, with part of the descending colon protruding through the defect (red arrow). Note the presence of cecal dilatation (yellow arrow), which in absence of small bowel dilatation, was suggestive of closed loop colonic obstruction and mandated urgent laparotomy

Figure 2: Sagittal view of the preoperative CT scan showing the site of the incarcerated transiliac bone hernia (red arrow), with evident proximal colonic obstruction (yellow arrow)

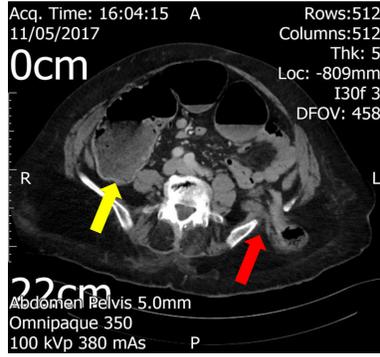


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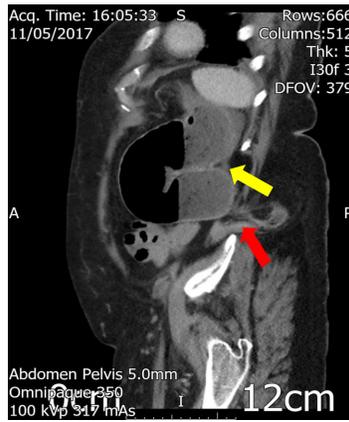


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