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Incisional Iliac Hernia

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Disclosure: Nothing to report.

A 61-year-old woman presented with 1 month of abdominal pain and bowel irregularity. Physical examination was normal. Computed tomography of the abdomen demonstrated a nonincarcerated hernia of the ascending colon through a 25-mm bony defect in the superior aspect of the right iliac crest (Figure 1)—a defect created 16 years prior when iliac crest bone graft harvest was performed during subtalar fusion. An open surgical approach was employed to reduce the hernia and close the defect with mesh. Her postoperative course was unremarkable. Her symptoms resolved entirely.

The iliac crest is the site utilized most frequently in orthopedic surgery for bone graft harvest. The literature suggests that up to 5% of these procedures may be complicated by symptomatic herniation of abdominal contents. Other procedural complications include: donor site pain, nerve



FIGURE 1. Computed tomography of the abdomen with arrows denoting colonic herniation through full-thickness defect of right iliac crest.

injury (commonly the lateral femoral cutaneous nerve, manifesting as meralgia paresthetica), vascular disruption (including superior gluteal and lumbar arteries), hematoma, visible deformity, abnormal gait, and stress fracture.^{2,3} Advanced age, obesity, muscular weakness, larger defect size, and full-thickness harvest have been identified as risk factors.4 The hernia often presents as a soft-tissue mass originating at the defect site, which may become more pronounced with cough. Auscultation over the area may reveal bowel sounds. The spectrum of associated abdominal symptoms ranges from mild discomfort to colicky pain and distention;³ up to 16% of patients present with acute signs of intestinal obstruction. Iliac herniation may be prevented by harvest of a partial thickness graft, whenever possible. Selective removal of bone from the anterior or posterior crest, rather than the middle, may also decrease the risk.4 Clinicians caring for patients with a history of iliac crest bone graft harvest should be familiar with this complication and consider prompt radiologic imaging when investigating new or unexplained abdominal symptoms.

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