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Lumbar hernia in an iliac bone graft defect

A case report

A hernia developed in the region of the inferior lumbar triangle of Petit 1.5 years after a full thickness bone graft had been taken from the part of the iliac crest that forms the base of the triangle.

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The iliac crest is a common site for obtaining autogenous bone grafts. Although this procedure is associated with relatively little morbidity, herniation of abdominal contents through the defect may occur.

Case report

A 60-year-old woman presented with a swelling underneath a surgical scar over the right iliac wing. One and a half year previously, an intercorporal spondylodesis L4–L5 had been performed utilising a full thickness bone graft from the posterior portion of the iliac crest. Six weeks after operation, she had noticed a mass at the operation site that gradually enlarged. The swelling was diagnosed as a lumbar hernia.

Radiographs of the pelvis showed a large defect (Figure 1). When the patient was operated on, the hernia was reduced, and the defect in the osilium was closed by advancing the surrounding fascial layers of the abdominal wall. This repair was further reinforced with nylon mesh.

Discussion

Hernias through iliac bone defects are rare; they occur most often through iliac bone graft donor sites, although other defects in the ilium may lead to herniation (Lewin & Bradley 1949, Bosworth 1955). Strangulation and volvulus (Challis et al. 1975) and irreducible herniation (Pyrtek & Kelly 1960) have been reported. Lumbar hernias may also cause back pain (Light 1983).

The role of the inferior lumbar triangle of Petit in the development of lumbar hernias warrants further consideration, since it is one of the predilection sites for naturally occurring abdominal wall hernias (Swartz 1964). When

Figure 1. Large defect in the posterior portion of the right iliac wing.

full thickness grafts are taken from the posterior iliac crest, the triangle is enlarged and hernias are more likely to occur. We therefore suggest that bone grafts, especially full thickness, should not be taken from the base of Petit's triangle.

References

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