Intrapelvic migration of the antirotation screw from a short proximal femoral nail: an unusual complication of a usually used implant

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DESCRIPTION

A 52-year-old woman met with a fall at home and was brought to our trauma centre. The patient presented with severe, excruciating pain in the left hip. Physical examination of the left hip joint revealed the following findings: tenderness and swelling over the trochanteric region with restricted range of movements and a healed suture mark over the trochanteric region. Further inquiry revealed that the patient had sustained a left hip fracture 3 months previously for which she was operated

elsewhere. However, no documentation was available with her. The distal neurovascular status was normal, and the other orthopaedic or systemic findings were clinically irrelevant. Digital radiograph (anterior posterior view) of the pelvis revealed an intrapelvic migration of the antirotation screw from a short gamma 3 nail with varus angulation and non-union at the fracture site (figure 1). An emergency ultrasound of the abdomen and pelvis revealed no intra-abdominal or visceral injuries. An elective surgery in the form of antirotation screw removal+implant (short gamma nail) removal+total hip replacement was planned. Preoperative fitness was obtained, and the patient was successfully operated. Currently (5 weeks postrevision surgery), the patient is doing well and is able to walk without a walker.

The short proximal femoral nail is widely used for the treatment of trochanteric fractures and is considered as a first-choice option for internal fixation of pertrochanteric fractures.¹ Though cutting out of the lag screw is a common complication, cutting out leading to the medial migration of the screw into pelvis is rare with only a few cases published to date.^{2,3} As per our knowledge, this is the first case of an intrapelvic antirotation screw migration from a short proximal femoral nail.

Figure 1 Digital radiograph (anterior posterior view) of the pelvis showing intrapelvic migration of the antirotation screw with varus angulation and non-union at the fracture site. Partial lateral cutting out of the distal locking screws can be seen too.

Learning points

- ▶ Short proximal femoral nail is the popular choice of treatment for pertrochanteric fractures.
- ▶ Cutting out of the lag screw is a common complication, but cutting out leading to intrapelvic migration is a rare complication, and the patient should be assessed for any other pelvic injuries as a consequence of the cutting out.
- ▶ Antirotation screw migration into the pelvis is unheard of and has not been reported previously.

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