

Occult femoral neck fracture

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DESCRIPTION

A 77-year-old woman presented to the emergency department with persistent pain that developed in the right hip after a fall from a standing height. A radiograph and CT of the right hip revealed no evidence of fracture (figure 1A,B), but MRI revealed oedema of the right femoral neck (T1-weighted

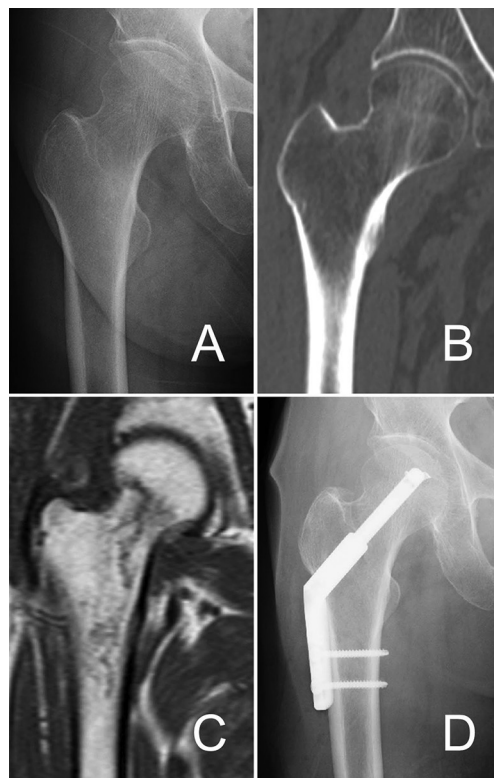


Figure 1 (A) A radiograph of the right hip revealed no evidence of fracture. (B) A CT of the right hip revealed no evidence of fracture. (C) MRI (T1-weighted coronal imaging) revealed oedema of the right femoral neck. (D) Patient was treated with osteosynthesis.

Learning points

- ▶ Occult femoral neck fractures may not be easily diagnosed on a radiograph.
- ▶ If occult femoral neck fracture is misdiagnosed, the non-displaced fracture may become displaced. In this case, a patient may require treatment with hip arthroplasty.
- ▶ MRI is one of the best tools for diagnosing occult fractures.

coronal imaging; figure 1C). She was treated with osteosynthesis (figure 1D) to stabilise the femoral neck fracture, which resulted in a good functional outcome at 6-month follow-up.

Occult femoral neck fractures are frequently misdiagnosed.¹ Once misdiagnosed, the non-displaced fracture may become displaced. When this occurs, patients may need to be treated with hip arthroplasty, which is more invasive than osteosynthesis.

In the context of persistent hip pain where plain radiographs and CT reveal no abnormality, consideration should be given to the use of MRI as it can be more accurate at detecting occult hip fractures.²

Competing interests None declared.

Patient consent Obtained.

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