

Case	(401) Be aware of the osteosynthesis material: is it really normal? ("broomstick break")
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CASE PRESENTATION

A 59-year-old woman came to the ER complaining of spontaneous, non-traumatic pain and functional impotence in the left hip over the last 12 hours. Her personal history included a high-grade metastatic neuroendocrine carcinoma of the lung and she had undergone surgery 8 months ago for a pathological subtrochanteric fracture of the left femur.

A long PFNA (proximal femoral nail antirotation) device with augmentation had been placed.

At the ER, AP radiographs of the pelvis and AP and axial radiographs of the left femur were requested. The gamma nail and the pathologic fracture through a lytic lesion in the left femur could be depicted.

Moreover, there was an abnormal angulation of the proximal end of the diaphyseal stem in the area where it inserts into the cervicocephalic screw, consistent with a break of the osteosynthesis material. The patient was admitted for surgical treatment.

DISCUSSION

Break of the osteosynthesis material.

Hip fractures are a frequent reason for consultation in patients over 60 years old, usually caused by low-energy trauma. The anatomical limit of the joint capsule of the proximal femur is decisive and allows the classification of fractures as intracapsular and extracapsular.

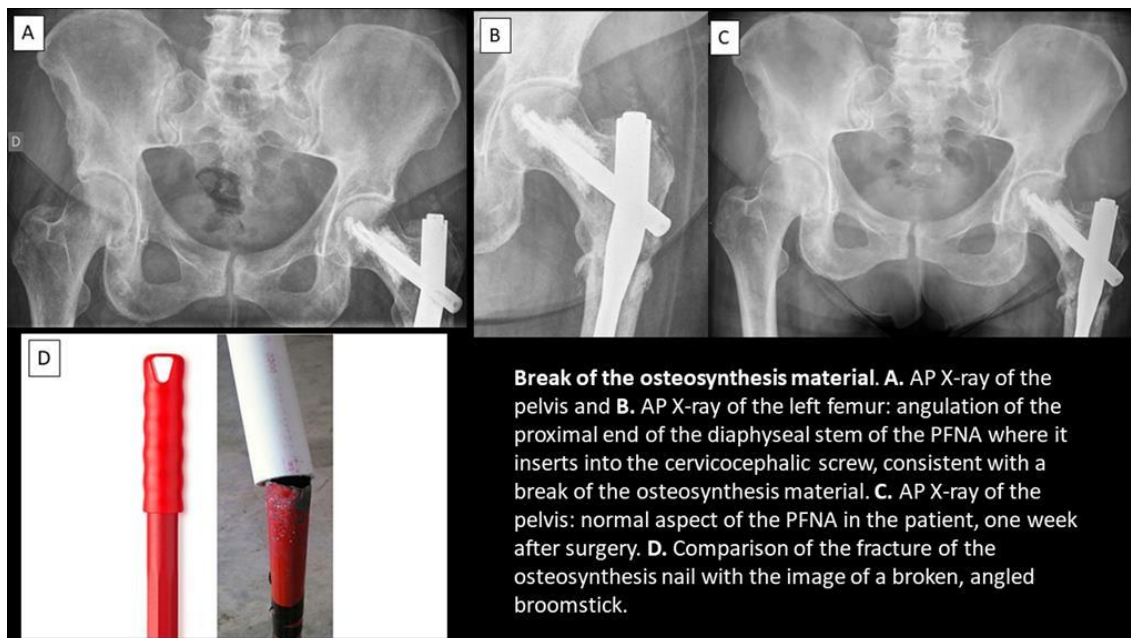
Generally, the treatment is surgical. In the specific case of pathological fractures, the treatment consists of performing an osteosynthesis with a long PFNA with augmentation.

The break of the implant is a relatively rare complication. In most cases it is due to the fatigue of the material (absence of fracture consolidation or technical errors in its placement). If a complication of the osteosynthesis material is suspected, radiographs of the hip and femur should be performed to confirm the suspicion.

The nail break will appear as an angulation of the nail compared to its normal position. It is important to compare with previous images, as subtle angulations may remain unnoticed. When the break of the osteosynthesis material occurs, the treatment consists of extracting the osteosynthesis material and performing a new osteosynthesis with a long PFNA.

CONCLUSION

The break of the osteosynthesis material is a relatively uncommon complication in hip operations and needs surgical repair. Therefore, apart from looking for bone fractures, careful inspection of the rods should always be kept in mind.



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