

How I did: Retrograde Femoral Nailing in a Complex Femoral Fracture

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INTRODUCTION:

Considerable energy is required to form femoral shaft fracture, even greater energy is needed to create concurrent proximal femur fracture. The management of complex femoral fracture demands special techniques as well as a suitable choice of implant to obtain a successful outcome. We present a case of a short stature patient with a segmental femur and an ipsilateral femoral neck fracture fixed with a retrograde femoral nail (RFN) and femoral neck system (FNS) instead of an antegrade femoral nail.

REPORT:

A 34-year-old food rider with a history of right acetabular wall plating was involved in a high-velocity motor vehicle accident in which he sustained complex right femur fractures (Figure 1). Pre-operatively, the patient's height is 140cm with his femoral length measurement about 290mm, whereby the shortest available antegrade nail is 300mm. Hence, firstly, we addressed the shaft fracture by using a RFN instead with the desired length via a mini-open reduction due to a large floating segment (Fig 1). Then, we fixed the femoral neck fracture with a FNS by inserting one derotational screw and one neck screw to complete the fixation. At 5 weeks of follow up (Fig 2), patient ambulates with crutches.

CONCLUSION:

Antegrade femoral nail is generally preferred in such complicated fractures. However, due to limitation of the desired length, RFN was inserted together with an FNS.



Figure 1 showing AP & lateral views of segmental femoral with neck of right femur fracture



Figure 2 showing AP& lateral views of right femur at 5 weeks of fixation

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