

RETRIEVAL OF BROKEN GUIDE WIRE IN NECK OF FEMUR: CASE REPORT

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Introduction: Broken guide wires in cephalo-medullary nailing's are not uncommon. However, removing them is challenging, leading to many complications. There are several techniques to remove broken guide wires. In this case report, we present a new retrieval technique through the femoral neck screw hole using the reamer with the guidance of image intensifier (II). Methodology: 84-year-old male presented with closed unstable left intertrochanteric femur fracture. Proximal femoral nail was planned for fixation. Intra-operatively, after nail insertion, a size 3.2mm guide wire was inserted through the femoral neck into the head. Accuracy of placement confirmed under II. Femoral neck reaming was initiated and guide wire broke at the fracture site. Using the jig and sleeve for guidance, the cannulated reamer was advanced until the tip of the broken wire up to the apex of the femoral head.

Discussion: As the femoral head was reamed, the guide wire detached from the bone and reversed together with the reamer. This process was closely monitored with the help of II. The reamer was slowly removed and the broken guide wire was retrieve along with the reamer.

Conclusion: Breakage of guide wires is a known complication of cephalofemoral nailing, usually due to overuse of wires decreasing the mechanical and bending strength. There are no published reports regarding this technique for broken guide wire retrieval. This unreported removal technique was successful and relatively safe, without any major complications. However, it is purely surgeon dependent.