

## Extraction broken nail using simple instrument

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### INTRODUCTION:

Intramedullary nail is one of common procedure for femoral shaft fracture. Non union of femoral shaft fracture following intramedullary nail vary from 0.8 to 7.5%. Broken intramedullary nail is well known complication after non union. We report a technique of removal broken nail using a standard guide wire and a ball tipped guide wire which widely available.

### REPORT:

21 year old gentleman, alleged motor vehicle accident sustained open fracture left femur. Interlocking nail was done for him. During serial follow up noted to have non union of left femur with broken nail. Exchange nail was arranged for him.

During procedure he was positioned lateral. Proximal segment of nail and distal screws were removed. Ball tipped guide wire was first introduced until the ball tipped passed through the remaining segment of broken nail. Then plain guide was inserted until it pass through nail. Slowly withdraw the ball tipped guide wire while maintaining plain guide wire. Broken nail will follow and was removed uneventfully.

Subsequently procedure completed with intramedullary reaming and insertion larger diameter nail.



### CONCLUSION:

Removal of broken nail is a challenging procedure and not routinely performed. Few method have been described from closed method to open method. We found out this method beneficial and suitable to be conducted as it doesn't require extra special instrument.

### REFERENCES:

1. Biomechanical analysis of the mechanism of interlocking nail failure. *Arch Orthop Trauma Surg* 1992
2. Franklin JL, Winquist RA, Benirschke SK, Hansen ST Jr. Broken intramedullary nails. *J Bone Joint Surg Am.* 1988

