

## Accidental Neck of Femur Fracture in Young Adult Patient with Disuse Osteopenia

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### INTRODUCTION:

Disuse osteopenia is a well-recognized complication of immobilization. However, neck of femur fracture in young healthy adult is rarely reported in literature. Precautions must be taken when treating in these patients, as fracture can occur even in low energy trauma. Our patient sustained neck of femur patient after external fixation was done. The fracture was subsequently fixed with screws.

### REPORT:

Our patient is a 26-year-old gentleman, who sustained open fracture left femur grade 2 after involved in motor vehicle accident. He underwent emergency wound debridement and high tibial pin insertion was inserted. Unfortunately, patient decided to seek traditional treatment and requested to be discharge from hospital. He returned after 7 months as his thigh condition did not improve. After reassessment in clinic, patient's fracture was still mobile, shorted by 4.5cm and radiographic examination showed atrophic non-union with gap. There were 3 foreign bodies seen, embedded in the soft tissue, presumably done by traditional medicine practitioner. Subsequently, patient underwent open reduction, resection of femur and stabilization with Limb-Reconstruction-System.

**Figure 1: X-ray of left femur after trauma**



**Figure 2: Left hip X-ray showing marked osteopenia and neck of femur fracture, and post screw fixation**



Intraoperative was uneventful and there was minimal manipulation of left lower limb. Unfortunately, there was neck of femur fracture seen in the check X-ray post-operation. Screw fixation was done subsequently, and patient was discharge home well.

### CONCLUSION:

Long-term unilateral disuse osteopenia can occur, even in young healthy adult. Therefore, surgeons should be extra cautious when treating these patients if there is any evidence of osteopenia in pre-operative X-ray assessment to prevent similar incident from happening.

### REFERENCES:

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