

## Two-Stage Reduction Of Neglected Femoral Shaft Fracture

Fikirudin.N, Addi.S, Wong CS

Department of Orthopaedic Surgery, Hospital Langkawi, Kedah, 01000, Malaysia.

### INTRODUCTION:

Neglected femoral shaft fracture are common and the reduction can be challenging. Herein, we report our experience with a patient with neglected fracture distal third right femur using staged approached. Reduction of a neglected femoral diaphyseal fracture can be achieved by osteotomy and immediate internal fixation or gradual skeletal traction followed by delayed internal fixation. Our objective is to report regarding the efficacy of two stage reduction in neglected femoral shaft fracture.

### CASE REPORT:

This case involves a 12 year old boy, who sustained closed fracture distal third of right femur during a motor vehicle accident. Patient then took an at own risk discharged, came back at 7 weeks post trauma patient with the complaint of pain and shortening of the right leg. An open osteoclasis of the right femur was carried out and skin traction was applied for two weeks with the maximum weight of 3 kg. Repeated check x ray at 10 days post traction was done showed significant reduction in bone overlap. Plating of the right femur using a broad locking plate done. The immediate postoperative course was uneventful, there were no neurovascular complications and the control radiography satisfactory. Rehabilitation started on the second day by assisted passive and active mobilization, joint and muscle maintenance. The discharge from the hospital was carried out on day 4 postoperatively with patient successfully ambulating using crutches with non weight bearing over right leg.

### DISCUSSIONS:

Neglected fractures, as a problem in developing and underdeveloped countries, do not appear to be addressed sufficiently in the literature. The management of neglected femoral shaft fracture



**Figure 1:** X- ray at 7 weeks post trauma. Overlapping of the fracture fragments with angulation and callus formation.



**Figure 2:** Post operative radiography of right femur after plating.

centres upon restoring limb alignment and length. Open reduction is often necessary in patients with fractures neglected for  $\geq 2$  months, because the resulting soft-tissue contractures which develop rapidly making it challenging to restore length and there is increased risk of neurovascular compromise with acute lengthening more than 4 cm. Preoperative skeletal/skin traction can improve soft-tissue contractures and facilitate open reduction. Fixation can be achieved by either intra-medullary nailing or plating.

### CONCLUSION:

Correction for neglected femur fracture via two stage approach (osteoclasis, skin traction and plating) is effective and good result can be achieved without risking the neurovascular.

### REFERENCES:

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