

## Fixation of Intertrochanteric Fracture with Ipsilateral Below Knee Amputation

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### INTRODUCTION:

Hip fracture occurs less than 3% in post amputee patients and presents a unique challenge during fixation. Intertrochanteric fracture is treated with the aid of traction table which maintain reduction with axial traction, internal rotation and adduction of the limb.

### REPORT:

A 53 year old gentleman with underlying diabetes, and history of right below-knee amputation due to peripheral vascular disease complained of right hip pain after a fall. Radiographs showed an intertrochanteric fracture of the right femur with posteromedial comminution. A fracture traction table was used and his below knee stump was strapped securely to the traction table via skin traction. The distal stump was strapped to the end of the bar with crepe bandage in a figure of 8-fashion above the knee. The opposite leg was placed in abduction. A short proximal femoral nail via closed reduction was inserted with no complication. Post operation, the stump had no lesion or blisters.



Figure 1: Pre-operative radiographs



Figure 2: Positioning of patient on traction table



Figure 3: post operative radiographs

### DISCUSSION:

Hip fractures with ipsilateral below-knee amputation pose a challenge during usage of traction table for reduction of fracture. The foot is required to be strapped to the foot strap for axial traction for reduction of fracture. If the fracture is minimally displaced, manual traction by human assistance or skin traction can be considered which is non invasive but is difficult to maintain sufficient traction and rotation control. Another technique is inverted traction boot. The stump can fit into the traction boot with the knee flexed but this requires the stump to be at least 12 cm below the knee joint. For stumps that are short and fracture more displaced, skeletal traction can be considered.

### CONCLUSION:

Hip fracture fixation surgery in patients with below knee amputation is a technically challenging technique. Multiple consideration needs to be considered especially during positioning using the traction table and method of reduction.

### REFERENCES:

1. Tanpure,etal.Intertrochanteric Femur Fracture Fixation in Patient with Below-Knee Amputation Journal of orthopaedic vol.12,12(2022):105-108.