Hip Fracture Fixation In A Patient With Below Knee Amputation: A Case Report

¹Liong MF, ¹Sarawan Singh SS, ¹Samadi E, ¹Loong FYS ¹Orthopaedic Department, Hospital Ampang, Jalan Mewah Utara, Pandan Mewah, 68000 Ampang, Selangor

INTRODUCTION

Hip fracture fixation surgery in patients with below-knee amputation poses a challenging problem to the surgeon in terms of obtaining traction for reduction of the fracture. We highlight this difficulty and suggest a technique to overcome it.

MATERIALS AND METHODS

A 57 years old male presented to us with symptom of right hip pain following a fall. He had a below knee amputation done about 5 years ago due to infection. Subsequently he is able to ambulate with below knee prosthesis. Radiographs of his pelvis revealed a displaced intertrochanteric fracture of right femur. Internal fixation of the fracture using an intramedullary device was planned.

RESULTS

The patient was positioned on a traction table as in the standard procedure. A supracondylar femoral pin inserted to provide traction and rotational control as shown in the pictures. First, a sufficient amount of traction and internal rotation were done. Internal fixation was performed using a short femoral nail.



DISCUSSIONS

Figures above showed supracondylar femoral pin inserted and secured to traction table for fracture reduction and fixation.

Intertrochanteric fractures have traditionally been treated by closed reduction and internal fixation with dynamic hip screw or intramedullary device. There is little information in the literature on techniques for patient with intertrochanteric femur fracture with ipsilateral below knee amputation. We use a distal femoral skeletal traction which would assist in traction. Rotation of the affected leg can be checked using the patella as a guide. This method provides sufficient traction, is gentle on the skin, and is less influenced by stump length. But this method does not provide stable rotational control and it is associated with risks of infection, cutting out of the pin, and chronic skin scar discomfort.

CONCLUSIONS

Hip fracture fixation in patients with below knee amputation poses a special problem in positioning for fracture reduction and fixation. In this case report, we share our experience and suggest a technique to use when encountering this difficult problem.

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