Two Problem One Solution

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INTRODUCTION

Associated ipsilateral femoral neck and shaft fractures have been reported to occur in 1% to 9% [1]. These occur typically as a result of high energy trauma in a young patient. Controversy exists about whether this combined injury pattern is best treated with a single or two implants. We present our experience in managing this kind of injury with a single implant, the Proximal Femoral Nail (PFN)

REPORT:

A 31 years old gentlemen involved in a MVA sustained a segmental femur fracture.

Figure 1: Trauma X-ray

He was treated operatively whereby a Watson-Jones approach was used. Mini capsulotomy was done which revealed capsule was impinged between fragments of neck. Neck fracture was then reduced anatomically. PFN was inserted, compression of 5-10mm across fracture site was achieved

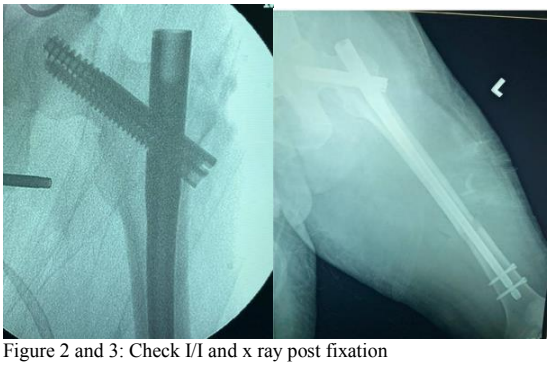

Figure 2 and 3: Check I/I and x ray post fixation

CONCLUSION:

Anatomic reduction and fracture compression of femoral neck fracture is utmost important principle in management of femoral neck fracture especially in young patients. The use of single cephalomedullary device is advantageous over dual plate fixation. It avoids extensive soft tissue dissection and it is free of stress riser issue which may lead to periprosthetic fracture. In our case, PFN, particularly INTERTAN is chosen over recon nail despite knowing the fact that PFN carries a bigger diameter proximal screws (15.25mm vs 12.8mm) is largely due to the unique femoral neck fracture pattern which extends superiorly in an oblique manner to the subcapital region. The proximal screws were intentionally fixed at the inferior aspect of the head to effectively hold the fracture in place. In comparison to recon nail, the proximal superior screw may not be holding much bone across the fracture. Being a load sharing device, future dynamization of nail is also possible if needed for the distal femur fracture. In conclusion, PFN is a viable device to treat this type of fracture pattern.

REFERENCES:

1. Hak, D.J. *et al.* (2015) "Ipsilateral femoral neck and shaft fractures: Current diagnostic and treatment strategies," *Orthopedics*, 38(4), pp. 247–251..