

Not A Fairy Tale Solution: Complication of Femoral Neck System In A Comminuted Neck Of Femur Fracture

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INTRODUCTION:

With the introduction of femoral neck system (FNS) since 2018, it has been the implant of choice for the treatment of neck of femur (NOF) fracture in the young population. However there aren't many articles describing the complication of FNS

REPORT:

MR X is a 43 years old gentleman and sustained a segmental femur fracture after being involved in an MVA. The choice of implant chosen after taking into consideration of fracture pattern were retrograde femoral nail and FNS for the NOF fracture and were fixed sequentially. Intraoperatively the fracture assessment by the surgeon noted to be comminuted with minimal medial buttress and had difficulty attaining reduction and open reduction of the fracture were done resulting in a shortened NOF

During the patients follow up at three months, we noticed that the implant had already failed as the blade has been cut out on top of evidence of avascular necrosis of the hip.

To address the complication a fibular strut graft over the neck of femur to promote bone healing and to arrest the progression of avascular necrosis of the NOF was done.



Figure 2: Pelvic X-Ray: C- 3 Months Post Operation D- Post Fibular Strut Graft

CONCLUSION:

Non-union, avascular necrosis of the NOF and implant failure are the complication that has all been seen with this case that leads to patient morbidity. There are little to no evidence to suggest that FNS is a superior implant when it comes to treatment of comminuted NOF fracture.

REFERENCES:

1. Wu ZF, Luo ZH, Hu LC, Luo YW. Efficacy of the femoral neck system in femoral neck fracture treatment in adults: A systematic review and meta-analysis. World J Clin Cases. 2022 Nov.



Figure 1: Pelvic X-Ray , A- Trauma X-ray B- X-ray post fixation