

MORBIDLY OBESE PATIENT, ANTEGRADE OR RETROGRADE NAILING? A CASE REPORT

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INTRODUCTION:

Antegrade nailing has been gold standard for femoral diaphyseal fractures. However, in morbidly obese patients, retrograde nailing can be an alternative as it presents a simpler approach compared to antegrade nailing.

REPORT:

A morbidly obese (150 kilogrammes) 18-year-old male was referred for closed comminuted diaphyseal fracture of right femur (Figure 1) after a motor-vehicle accident. He had a degloving wound over his right heel in which debridement was done. Skeletal traction was applied to right lower limb while waiting for operation. In view of the patient's size, he was planned for retrograde intramedullary nailing of right femur. Due to financial constraints, a standard interlocking tibial nail was used. At post-operative 5 months, radiographs indicated good callus formation and patient was allowed to full weight bear. At post-operative 8 months, radiographs show evidence of union (Figure 2) and patient demonstrates zero to 110° knee range of motion.



Figure 1: Plain Radiograph of AP view Right Femur.

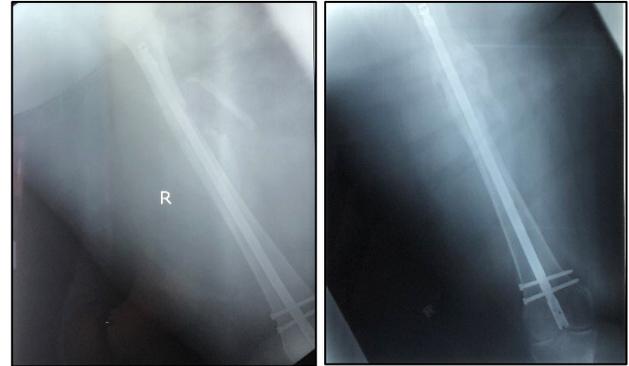


Figure 2: Plain Radiograph of Right Femur Post-operative 1 week (left) and 8 months (right)

DISCUSSIONS:

Morbidly obese patient has a higher intraoperative and post-operative complications risk, such as difficult entry point due to thick soft tissue, and risk of wound breakdown due to excessive manipulation. A retrograde nail provides an easier entry point and reduces risk of soft tissue infection especially around the proximal femoral region. A tibial nail can be used as an alternative as the construct has an anterior bend, which can accommodate the anatomy of the distal femur which flares into two posteriorly curved condyles¹. Therefore, retrograde traditional interlocking tibial nails may present as a viable option for diaphyseal or supracondylar femoral fractures².

CONCLUSION:

Tibia interlocking nail can be used as an alternative in treating diaphyseal femoral fractures. Retrograde intramedullary femoral nailing is preferred in obese patients.

REFERENCES:

1. Yang SC, et al. Retrograde Tibial Nail for Femoral Shaft Fracture with Severe Degloving Injury. *Chang Gung Med J* 2004;27:454-8.