

Retrograde Intramedullary Nailing; A Review Of Outcome And Functional Status

¹Mohamad Nor MA, ¹Mohd Yunus MA, ¹Randhawa SS, ¹Han CS, ¹Abdul Rahman NR
¹Orthopaedic Department, Hospital Sultan Haji Ahmad Shah, Jalan Maran, 28000 Temerloh, Pahang

INTRODUCTION:

Intramedullary nailing remains the preferred and gold standard method for treating femoral shaft fractures. Retrograde femoral nailing is used in the treatment of these fractures especially in fractures in obese patients, concomitant ipsilateral femur and tibia fractures, fractures below a stemmed hip prosthesis and in polytrauma patients requiring multiple simultaneous surgical procedures⁽¹⁾. The objective of this retrospective review was to describe the healing and functional outcomes of 5 patients who underwent retrograde femoral nailing at our institution.

MATERIALS & METHODS:

Patients (5) with femoral shaft fractures (OTA 32) treated with retrograde intramedullary nailing were studied. Their fracture characteristics, time to surgery, operative time, intraoperative blood loss, healing, complications and functional outcomes based on WOMAC and KOOS scores were evaluated.

RESULTS:

For pain and functionality, WOMAC scoring system shows samples to have lowest score of 18, with highest at 32 whereas using KOOS scoring system, best functionality recorded at 70% and worst at 55%. Four out of 5 patients managed to regain knee range of motion up to 120 degrees of flexion. Patients were all able to return to work within 5 months post operatively.

DISCUSSIONS:

The retrograde method of intramedullary nailing is fraught with potential complications due to its due to its entry point through the knee. Studies comparing antegrade and retrograde femoral nailing reveal conflicting results when it came to knee function in retrograde patients². However in this study, all our patients achieved union and were free of complications. Four of them obtained good knee functional outcome based on WOMAC and KOOS score and thus

enabling them to return back to work within the expected time frame. Therefore we recommend this method of nailing as it is technically less demanding.

CONCLUSION:

Retrograde femoral nailing is an effective method of femoral shaft fracture fixation in cases in which its indications are truly met. Based on our results, retrograde femoral nailing appears to be a suitable alternative to antegrade nailing in situations where proximal access is neither possible nor desirable.

REFERENCES:

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