

Exploring The Alternative, Suprapatellar Technique for Intramedullary Tibial Nailing

¹Amiruddin, Amirul Shaiful; ²Khor JK; ¹Che-Hamzah Fahrudin

¹Orthopaedic, HPUPM, ²Orthopaedic, HKL, Malaysia.

INTRODUCTION:

Tibia fractures are common, and intramedullary nailing is the gold standard treatment. The infrapatellar approach is standard, but alternative approaches, such as the suprapatellar approach, are employed under certain circumstances.

REPORT:

A 28-year-old female presented with an open midshaft tibia and fibula fracture following a road traffic accident. Despite initial hemodynamic stability, complications arose, including wound infection and limited knee range of motion due to prolonged immobilization.

Given the constraints posed by the patient's condition, the decision was made to proceed with suprapatellar tibial nail insertion. This approach, involving a 4cm longitudinal incision proximal to the patellar pole, allowed for guide wire insertion without requiring hyperflexion of the knee. Postoperative outcomes demonstrated satisfactory progress, with comparable intraoperative bleeding and union rates to the infrapatellar approach.



Figure 1: Post suprapatellar tibial nail



Figure 2: 8 months post-operative suprapatellar tibial nail

CONCLUSION:

The report highlights the advantages of the suprapatellar technique, including simplified positioning and shorter operation times, particularly beneficial in cases with restricted knee range of motion. Similar approaches have been documented in pregnant patients, showing reduced blood loss, and in studies indicating decreased postoperative pain and improved functional outcomes.

In conclusion, the suprapatellar tibial nail approach emerges as a viable alternative for tibia fractures, offering comparable outcomes to the infrapatellar approach. Its advantages in cases of limited knee range of motion or infeasibility of the infrapatellar region underscore its potential utility in diverse clinical scenarios. Further research and clinical studies may provide additional insights into its effectiveness and applicability across different patient populations.

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