Experience With The First Four Suprapatellar Semi Extended Tibial Nail In Malaysia

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INTRODUCTION:

Suprapatellar nailing of tibial fractures is a simple method with many advantages over traditional tibial nailing. This method is still new in Malaysia and not widely used yet. We aim to report the first four suprapatellar semi extended tibial nails done in Malaysia at our institute.

MATERIALS & METHODS:

We prospectively collected data for the first four suprapatellar nails (SPN) done in our institute between December 2021 and February 2022.

RESULTS:

There were 3 male patients and one female patient. The mean age was 34 (range,17-52) years. Three were closed fractures and one was an open fracture. One patient had an open comminuted proximal tibia fracture with avulsion of the tibial tuberosity (figure 1), another patient had a comminuted distal tibia fracture with intra-articular extension (figure 2), one distal tibia fracture (figure 3) and one delayed midshaft tibial fracture (figure 4). The patient with the proximal tibia fracture and distal tibia fracture with intra-articular extension was allowed toe touch weight bearing for 6 weeks then full weight bearing as tolerated. The other two patients were allowed full weight bearing as tolerated post-operatively. There were no early complications and all cases are still being followed up.

DISCUSSIONS:

The first suprapatellar semi extended tibial nail with the suprapatellar jig in Malaysia was performed in Sultanah Bahiyah Hospital on 20/12/2021. Studies have shown that SPN results in reduced post-operative anterior knee pain, total blood loss, fluoroscopy time and improved Lysholm knee scores. SPN has been shown to be beneficial especially in distal and proximal tibial fractures (1).

CONCLUSION:

SPN is an easy, safe, reliable and reproducible method for surgical fixation of tibial shaft fractures. It can be used for proximal, middle and distal third tibial fractures in the Malaysian population.

Figure 1

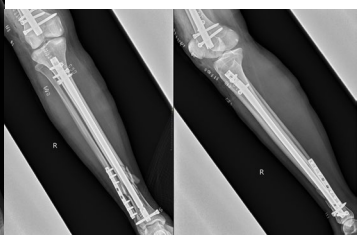

Figure 2

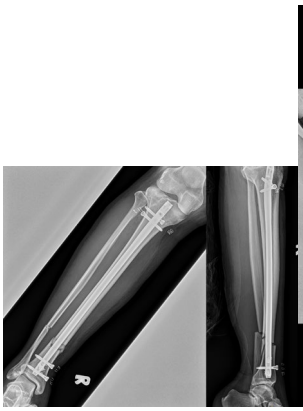

Figure 3

Figure 4

SPN entry point with Jig

REFERENCES:

1. N Mehta, V Selvaratnam, N Giotakis, B Narayan. Is device-assisted reduction prior to semi-extended intramedullary nailing of distal tibial fractures necessary? Injury. 2017 Feb;48 (2):506-510