# Retrograde Femoral Nailing As Silver Standard For Femoral Shaft Fracture Especially In District Hospital Setting.

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## INTRODUCTION:

In district hospital, equipment (traction table, number of image intensifier machine) and OT time are limited. The department is often run by juniors medical officer with 1 or 2 specialist. It's crucial to select an effective, simple and fast method for fixing the shaft of femur.

## **METHODS:**

Retrospective studies was conducted, RF nailing case from year 2014 until 2016 was collected. 34 cases have been selected and reviewed up to post operative 3 months.

Inclusive criteria:

- 1. Open (Gustilo 1) or closed shaft fracture
- 2. Transverse, short oblique or simple communited fracture

#### **RESULTS:**

All cases were performed by junior MO (<2 years of experience). Mean OT time requires: 140 mints (2.20 Hours). 11 cases with proximal locking (for comminuted fracture), 23 cases without proximal locking.

Table 1: Operating Hour

| OT Time ( Hour) | Number of case |
|-----------------|----------------|
| <1              | 1              |
| 1-2             | 9              |
| 2-3             | 14             |
| >3              | 10             |

ROM knee 0-90: 5 patients, 0-120: 10 patients, Full: 18 patients. No case of septic arthritis. 33 patient shown clinical and radiology evidence of fracture union.

Complication:

- 1 patient who is an open fracture case developed fracture side infection
- 1 delayed union.
- 1 ROM knee 15-60 degree
- 1 with distal fragment malunion in internal rotation of 30 degree (proximal locking not done)

# **DISCUSSIONS:**

Most surgeon are skeptical for RF nailing as they try to avoid open a virgin knee which lead to osteoarthriti and septic arthritis, which is not true. The entry point comes in the ROM only at the final 20 degree before full extension that to articulate with intact anterior cruciate ligament. The risk of septic knee appears low[1] Furthermore, we are using solid unreamed nail which decrease the marrow debris into the knee. The average time for RF nail is faster than interlocking nail which required an average time of 3 hours [2]. The knee motion postoperative is almost similiar with the gold standard. [3].

## **CONCLUSION:**

RF nailing can be consider as a 2nd option for fixing diaphyseal femur fracture especially in district setting and also poly trauma or morbid obesity patient.

# **REFERENCES:**

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