

TO NAIL OR NOT TO NAIL? A 7-YEAR RETROSPECTIVE REVIEW ON INTERTROCHANTERIC FRACTURE FIXATIONS OUTCOMES

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INTRODUCTION:

Intertrochanteric fracture is common cause of morbidity and mortality. Emergence of better implant designs, MIPO and better understanding of natural history of these fracture has seen the tendency to use cephalomedullary fixation although DHS is still considered gold standard fixation method and being significantly economical. This retrospective review aims to analyze the efficacy of extramedullary versus cephalomedullary devices using union rate, reoperation rate and infection rates as main indicators.

METHODS:

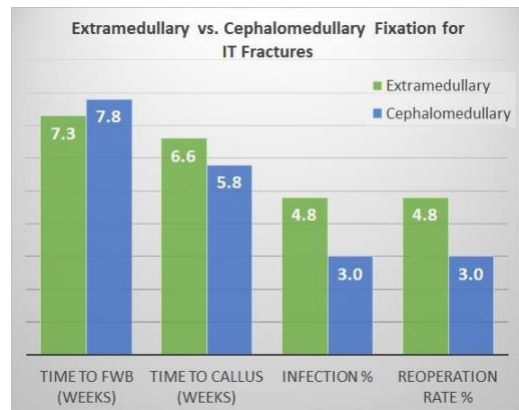
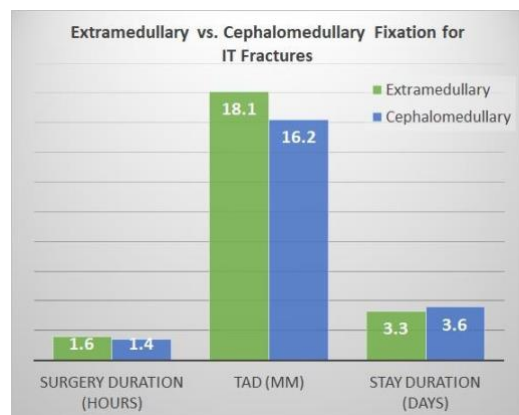
This is a retrospective study conducted in a tertiary hospital where data was collected between 2011 to 2018. Inclusion criteria were patients with intertrochanteric fractures who underwent extramedullary or cephalomedullary fixations. All patients must be followed up for minimum 1 year. Total of 215 samples were collected (122 females and 93 males, aged between 23 and 101 years). Efficacy of fixation method was measured by surgery duration (Hours), hospital stay (Days), infection rate, tip apex distance (Millimetres), time until full weight bearing (Weeks) and presence of callus (Weeks). The statistical analyses were conducted using Statistical Package of the Social Sciences (SPSS) version 22.0 for Windows (SPSS Inc, Chicago, IL).

RESULTS:

Our study demonstrated that cephalomedullary devices were the preferred choice accounting for 61.4% of the total number of surgeries. Cephalomedullary devices resulted in better surgery duration, and infection rate. Extramedullary devices had better outcomes in stay duration and ambulation time. There were no significant statistical differences between both groups.

DISCUSSIONS:

While usage of cephalomedullary devices resulted in faster surgery times and better radiographic outcomes, this did not translate to improved functional outcomes. Our study highlights similar efficacies in both groups with minimal difference in outcomes. The extramedullary group had a 1.8% higher incidence of infection.



CONCLUSION:

There is no clinical evidence to support the usage of one method over the other. The DHS should be the treatment of choice, especially if cost is a factor.

REFERENCES:

Ma KL, Wang X, et al : Proximal Femoral Nails And Dynamic Hip Screw For Fixation Of Intertrochanteric Fractures/Meta Analysis. Orthop Traumatol Surg Res. 2014 Dec;100(8):859-66.