

OUTCOMES OF LOCKED INTRAMEDULLARY NAIL PROCEDURE IN CLOSED DIAPHYSEAL FEMUR FRACTURE IN RELATION TO TIMING OF SURGERY

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ABSTRACT

Introduction: Diaphyseal femur fracture is one of the commonest fractures following blunt trauma. The gold standard for managing such injury is intramedullary nailing which provides good union rate, early mobilization and able to address comminuted fractures. Many literatures have advocated that fixation should be done early within 24 hours to reduce risk of respiratory complications for stable cases. However, performing intramedullary fixation for all diaphyseal femur fractures within 24 hours are not possible for all centers due to limited availability of operating theatre time and resources.

Method: In this study, we compared the outcomes of closed diaphyseal femur fracture fixation with locked intramedullary nail procedure done within 1 week to those done after 1 week. This is a retrospective single centre study which was done by reviewing the patient's record who had closed diaphyseal femur fracture treated with locked intramedullary nail procedure at Hospital Tengku Ampuan Rahimah, Klang, Selangor from January 2017 till May 2019. A total of 221 patients were selected with the mean age of 29 years old.

Result and conclusion: There is no statistically significant difference between closed diaphyseal femur fracture treated with locked intramedullary nail done between 24 hours till 1 week compared to cases done after 1 week except for the total length of hospital stays which is longer for cases done after 1 week. Although there is no significant difference between the 2 groups aside from total length of hospital stays, measures should be taken to improve the timing of surgery as prolong hospital stays impose significant cost to both patients and medical institutions.

Keywords: Femur fracture, interlocking nail, timing of surgery