

Prevalence of non-union complication in femoral shaft fracture patients who underwent IM nailing surgery in Fatemi Hospital Ardabil.

Abstract

Background: In various statistics, the incidence of non-union following the use of intramedullary nail has been reported between 1.1 and 0.9%, which indicates a high number of non-union. Usually, femoral shaft fracture following intramedullary nail application should find union between three and six months. The purpose of this study is to investigate the prevalence of non-union complications in femoral shaft fracture patients who underwent surgery using the IM nailing method in Fatemi Hospital Ardabil.

Aim: The aim of this study was to investigate the frequency of non-union complication in femoral shaft fractures who underwent IM nailing surgery in Fatemi Hospital.

Materials and Methods: This study is a descriptive analytical study in which patients referred to the orthopedic clinic of Fatemi Hospital in Ardabil in 1400 with a diagnosis of femoral shaft fracture underwent IM nailing surgery. Using anterior-posterior femur imaging, these patients were placed in one of 5 groups from 0 to 4 according to the Winquist Hansen classification. Also, the data of fracture type and fracture line were collected in these patients in addition to the demographic variables of age and gender. The data was analyzed by spss 22 software and a significance level of 0.05 was considered.

Results: In the present study, 70 femoral shaft fracture patients with an average age of 36.06 ± 5.13 years underwent IM nailing surgery in Fatemi Hospital. The prevalence of non-union complication in femoral shaft fracture patients was 18.6%. A significant relationship was observed between fracture grade and non-union complication.

Conclusion: According to the findings of the present study and related studies, possible side effects such as delayed healing, non-healing, and bone infection in the medullary nail method are almost equal to the external fixator method, and on the other hand, the length of bed rest and healing time, in the method The medullary indigo is less. Another issue is re-surgery and the use of medullary cannulation in some patients who are not well treated by external fixator, so it is recommended to perform medullar cannulation from the very beginning, in this way it will be more economical for the patient. Considering the complications of this method it is still one of the first choices of treatment in similar fractures.

Key words: Non Union - Femoral shaft fracture - intraosseous nailing