

عنوان مقاله:

Factors Associated with Development of Thigh Compartment Syndrome Following Subtrochanteric and Diaphyseal Femoral Fractures

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خلاصه مقاله:

Objectives: Acute compartment syndrome of the thigh (CST) is an ongoing challenge for orthopaedic surgeons as the diagnosis is often difficult to establish. Currently, there is a shortage of studies investigating risk factors for the development of thigh compartment syndrome following subtrochanteric and diaphyseal femoral fractures. This study aimed to identify risk factors associated with the development of CST following femoral fractures. **Methods:** Retrospective review performed in a level one trauma center from January ۲۰۱۱ to December ۲۰۲۰ for all patients with non-pathological acute subtrochanteric or diaphyseal femoral fractures. Variables collected included demographics, injury severity score (ISS) scores, mechanism of injury, classification of femoral fracture, open versus closed injuries, development of compartment syndrome, time to compartment syndrome diagnosis, number of subsequent surgeries, and primary wound closure versus split-thickness skin graft. The statistical analysis of this study included descriptive analysis, simple logistic regression, paired T-test, and Wilcoxon Signed Rank. **Results:** Thirty-one (۷.۷%) patients developed thigh compartment syndrome following ۴۰۳ subtrochanteric or diaphyseal femoral fractures. The mean (SD) age for those who developed CST was ۲۷.۳۵ (۸.۴۲). For every unit increase in age, the probability of developing CST decreased. Furthermore, male gender had ۱۸.۵۲ times greater probability of developing CST ($P < .۰۰۱$). AO/OTA ۳۲-C۳ and subtrochanteric femoral fracture patterns demonstrated ۱۵.۴۲ ($P = .۰۰۱$) and ۳.۱۵ ($P < .۰۰۱$) greater probability of developing CST, respectively. Patients who presented to the hospital following a motor vehicle accident (MVA) or gunshot wound (GSW) had ۵.۹۰ ($P = .۰۰۶$) and ۱۴.۸۷ ($P < .۰۰۱$) greater probability of developing CST, respectively. **Conclusion:** Patients who were male, younger in age, and had a ۳۲-C۳ and subtrochanteric femoral fractures were at increased probability of developing CST. High energy trauma also increased the risk of developing CST.

A high index of suspicion should be expressed in patients with these risk factors. Level of evidence: III

کلمات کلیدی:

Diaphyseal femoral fracture Subtrochanteric femoral fracture, Thigh compartment Fasciotomy, Thigh compartment syndrome

لینک ثابت مقاله در پایگاه سیویلیکا:

