

Factors Associated with Postoperative Mortality in Intertrochanteric Femur Fractures Treated with PFNA

İlhan Kaan ÇELEBİ, MD* Faruk KARACA, MD**

ABSTRACT

In this study, we aimed to investigate the 1-year postoperative mortality rate and the factors affecting it after treatment with proximal femoral nail antirotation (PFNA) in patients with intertrochanteric femur fractures. The remaining 115 patients who applied to our clinic between 01.01.2013-01.01.2023 and underwent surgery using intramedullary implants due to intertrochanteric fractures and were excluded from the exclusion criteria were evaluated. All patients underwent PFNA. These patients were classified and compared according to their demographic data, ASA scores, time to surgery, need for and duration of intensive care unit stay, additional comorbid diseases, reduction method, type of anesthesia, timing of operation and trauma mechanism during their 1-year follow-up. The number of patients who died within 1 year was 20 (17.39%). The most common cause of death among known causes was multiple organ failure - sepsis. It was observed that the age values of the patient group with intertrochanteric fractures exposed to low-energy trauma were statistically significantly higher ($p=0.001$). It was observed that patients who had high-energy trauma or were younger had more additional fractures ($p=0.001$ for both values). Higher age, intensive care stay of 96 hours or more within two weeks post-operatively, ASA score >2 , additional chronic disease number $2\leq$, and the time between fracture and operation showed significant differences on 1-year mortality ($p<0.05$ for each). In patients who underwent PFNA after intertrochanteric femur fractures, high age, postoperative intensive care stay of 96 hours or more within two weeks, ASA score >2 , additional chronic disease count $2\leq$, and the time between fracture and operation were determined as predictive parameters for 1-year mortality. These predictive parameters will provide better information to the patient and their relatives and more careful postoperative care of the patients. In addition, this type of fracture, which has a high postoperative mortality especially in the geriatric patient group, was most frequently seen as a fall from its own level and low-energy trauma. Therefore, osteoporosis monitoring and both indoor and outdoor precautions should be taken in the geriatric patient group.

Keywords: mortality, intertrochanteric fracture, pertrochanteric fracture, intramedullar nailing, trochanteric fracture, geriatric patient

Bahrain Med Bull 2026; 48 (3): 3388 - 3392

* Niksar State Hospital
Tokat, Turkey.
E-mail: kaan.celebi52@gmail.com

** Karadeniz Technical University
Orthopaedics and Traumatology Department
Trabzon, Turkey