

Correlation Between Euroqol-5 Dimension (EQ-5D) And 1-year Mortality in Patients With Hip Fractures

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INTRODUCTION:

Quality of life is frequently measured pre-surgery in patients with hip fractures to serve as an aim to return to post-surgery. The EUROQOL-5 DIMENSION (EQ-5D) is a validated and reliable instrument for quantifying a patient's preoperative quality of life. The aim of this study is to investigate the correlation between preoperative EQ-5D and 1-year mortality in patients presenting with hip fractures. We hypothesize that there is a correlation between preoperative EQ-5D and 1-year mortality in a cohort of hip fracture patients.

METHODS:

A retrospective study was conducted on all admitted hip fracture patients who underwent surgery in a single tertiary hospital between the period of 2020-2021. Variables collected from the cohort include 1-year mortality, type of fracture, type of surgery, age, gender, and ethnicity. The effect of these variables on 1-year mortality was then examined through binary logistic regression.

RESULTS:

There were 588 patients. The mean age was 80.03 ± 7.89 (range 60–103) years. At 1-year post operation, 92.5% (544) of patients survived. EQ-5D was found to be a strong predictor of 1-year mortality in patients, remaining significant after adjusting for age, gender, ethnicity, type of surgery, and type of fracture in multivariable analysis (OR = 5.12, 95% CI, $p = 0.001$). Data for preoperative EQ-5D was complete.

DISCUSSIONS:

A lower EQ-5D score was associated with a higher 1-year mortality post-operatively in hip fracture patients. This could be due to poorer rehabilitation potential. With earlier identification of patients at risk of higher 1-year mortality, more planning can be directed towards better management.

CONCLUSION:

Through this study, we concluded that poorer preoperative EQ-5D was associated with higher 1-year mortality in hip fracture patients after surgery. Thus, preoperative EQ-5D is a useful predictor of 1-year mortality following hip fracture surgery.