

Factors influencing surgical delay after hip fracture in hospitals of Emilia Romagna Region, Italy: a multilevel analysis.

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Source

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Abstract

Hip fracture is becoming a major public health concern, with associated mortality and morbidity particularly in the elderly. This study aims to investigate factors (i.e. patient factors and hospital variables) associated with increased risk for delaying surgery after hip fractures, and to assess whether and to what extent timing was associated with mortality risk. All patients aged 65 and over, resident in Emilia Romagna Region (Italy) and admitted to hospital for hip fracture (2009 - 2010) were selected. Data on surgical delay were adjusted using multilevel logistic regression model. A Cox proportional hazard model was fitted to a propensity score matched sample to assess mortality between delayed and early treated patients. Of the 10,995 patients included (mean age: 83.3 years), 44.9% underwent surgery within 2 days. Significant risk factors for delayed surgery were: gender (OR: 1.16), comorbidity (OR: 1.29), anticoagulant (OR: 7.64), antiplatelet medication (OR: 2.43), type of procedure (OR: 1.37) and day of admission (OR: Thu-Fri: 6.05; Sat-Sun: 1.17). Type of hospital and annual volume of hip fracture surgeries were not sufficient to explain hospital variability. A significant difference in mortality rate between early and delayed surgery emerged six months post surgery.