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Recommended Citation
FALL-RELATED INJURY IN THE HOSPITAL

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BACKGROUND/PURPOSE

2 – 9% of adult patients who fall in the hospital suffer serious injury. There is little evidence-based literature to guide physicians when assessing hospitalized patients for fall-related injury. This study was designed to (1) identify demographic and/or clinical factors which predict serious fall-related injury among hospitalized adults, and (2) judge the adequacy of physician documentation related to adult patients who fell in the hospital.

METHODS/SETTING

Nursing staff are required to report all hospital falls through our hospital’s computerized Patient Safety Network (PSN). We performed a retrospective chart review of all PSN reported falls that occurred during 2010 in our 431-bed university acute care hospital. Patients less than 18 years old, pregnant women, and prisoners were excluded.

RESULTS

Medical records were available for 286/293 (98%) of PSN-reported falls in 251 eligible patients. Falls occurred in 152 males (61%), and 99 females (39%). Compared with all adult patients admitted during the same period, falls were more frequent in males (p = 0.02), but not more frequent in persons older than 64 years (p=0.8). 48% of falls occurred while toileting. 25% (63/286) of falls were associated with injury, and 4% (11/286) with serious injury (laceration requiring closure or fracture). Compared to all fallers, patients with injury did not differ by gender (males 38/152 vs. females 25/99, p=0.96). Patients older than 64 years who fell were no more likely to suffer injury than younger adults (13/64 vs. 50/187, p = 0.31).

In univariate analysis, patients who reported hitting their head, patients with pre-fall confusion, and patients who received narcotics on the day of fall were more likely to suffer injury (estimated odds ratios 6.04, 2.00 and 5.1, respectively). In multivariate analysis, receiving a narcotic on the day of fall was the strongest predictor of injury (Table). 33% (21/63) of patients who received a narcotic on the day of fall were more likely to suffer injury (estimated odds ratios 6.04, 2.00 and 5.1, respectively). In multivariate analysis, receiving a narcotic on the day of fall were more likely to suffer injury that younger adults (13/64 vs. 50/187, p = 0.31).

Patients older than 64 years who fell were no more likely to suffer injury than younger adults (13/64 vs. 50/187, p = 0.31).

CONCLUSIONS

1. In this single-institution study, injury occurred in 25% of patients who fell, and serious injury in 4%.
2. Nearly half of all falls occurred while toileting.
3. Compared to all falls, falls with injury did not vary by gender or age.
4. Receiving a narcotic of the day of fall was the strongest predictor of injury.
5. Physicians inconsistently provided medical record documentation of hospitalized patients who fell with injury.

LIMITATIONS

1. This is a single institution study.
2. Only falls reported by nurses to our Patient Safety Network were studied, thus not all falls may have been included.
3. Classification of extent of injury was based on review of the nurse’s PSN and physician’s progress notes, and some injuries may not have been captured.
4. This study did not include psychiatric patients admitted to Mental Health Center.

REFERENCES