**C5-9: The Role of Pain, Analgesia and Insulin in Falls among Hospitalized Patients**

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**Presentation Preference:** Late Breaker poster submission

**Abstract Categories:**
Research Interest Groups (RIGs): Researchers in Clinical Settings  
Thematic Areas: Acute illness

**Abstract:**
**Introduction:** Interventions succeeded in reducing falls with injury at our medical center but, the total number of falls continued to average 47.3 per month. Innovative strategies to further reduce falls were investigated. One unit thought falls may be due to side effects of opioid medications. A literature review revealed scant and conflicting information on that topic. Some articles linked analgesia use with falls while other reports linked pain with falls. The general purpose of this study was to gain clarity about the relationship between pain, opioids and falling. The specific aim was to ascertain any correlation among hospitalized patients who fell with reports of pain or receiving analgesic medications within 24 hours prior to falling. Through an IRB amendment, a third aim was added to ascertain the relationship among other medications with pain.
**Method(s):** This was a retrospective, non-experimental design using electronic medical record review. The convenience sample consisted of 243 patients who were reported to have fallen between January 1 and June 30, 2008 at this 650 bed regional medical center. All data were analyzed using descriptive statistics.

**Results:** The final sample of 243 consisted of 118 males and 125 females with race and ethnicity comparable to the distribution seen in total medical center admissions. During 24 hours prior to falling, 62% of patients reported mild pain, less than three, on the NAS and 38% reported pain greater than three. In the sample, 35.8% received opioids within 24 hours prior to falling. A serendipitous finding was that insulin was administered to 58% of the patients who fell.

**Discussion & Conclusions:** While 35.8% of the sample received opioids within 24 hours of the fall, this percentage was far less than the 66.8% of the total patients admitted to the medical center during the same time frame who received opioids. In comparison insulin was administered to 58% of the patients who fell compared to only 24.37% of the total patients admitted during the same time frame. The association between insulin, diabetes and patients falling is intriguing. These findings have generated additional investigations into the relationship between diabetes and falling and re-evaluation of our Falls Prevention Program.

**Abstract History:**
This abstract has been published or accepted for publication.
Rex Hospital Research Conference, Raleigh, NC 09/09; Accepted at Forsythe Medical Center, Winston-Salem, NC 12/13/09

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