



## Emergency Department hip fracture pain management in the elderly

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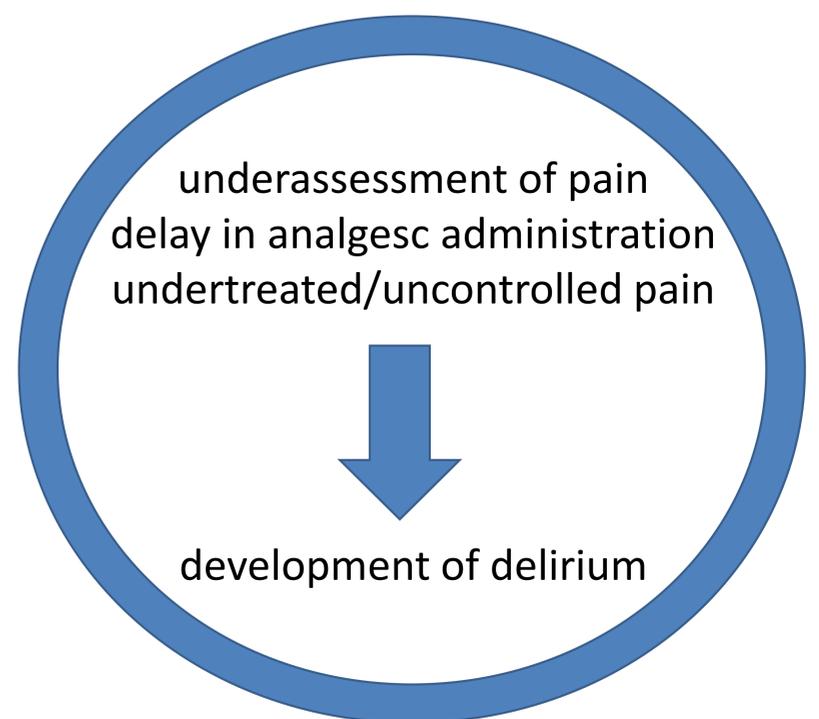
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**Background:** Hip fracture is commonly associated with considerable pain. Undertreated pain and inadequate analgesia appear to be independent risk factors for delirium in frail older adults associated with delayed recovery, increased mortality and poorer physical, cognitive and affective function 6 months postfracture. The aim of the present study is to describe current practices for managing pain in patients with hip fracture in Cuneo Emergency Department.

**Methods:** We retrospectively collected data of hip fracture patients aged 65 years or more attending to Emergency Department (ED) of Cuneo (Northern Italy) from January, 2013 to December, 2013. Presence of pain, evaluated with VAS or PAINAD scale, and its management information were recorded.

**Results:** In a sample of 77299 ED accesses, we found 20.024 old subject (25.9%), mean age 77 years, attending the ED; pain was the major reason for visit in 5284 patients (26.4%). The main reason of hospital admission in patients with acute somatic pain (1045 patients, 20%) was hip fracture (137 patients, 13%). In this sample, mean age 82.7 years, 21 patients (15%) received analgesic therapy such as NSAID or opioid. Even if choosing analgesia administration was not significantly associated with age, in our ED we treated 16 patients with opioid (mean age 82.1 years) and 5 patients with NSAID (mean age 84.5 years). The day after admission to the orthopaedic ward, about 50% of patients had uncontrolled pain; the development of delirium was significantly associated with undertreated or uncontrolled pain (delirium was identified in 30.4% patients with pain vs. 14.3% patients without pain),  $p < 0.05$ .



**Conclusion:** Older adults with hip fracture are at risk for underassessment of pain, considerable delay in analgesic administration after pain is identified, and treatment with inappropriate analgesics in Cuneo ED. Data from this study suggest that undertreated pain and underuse of opioid are significant contributors to the development of delirium.

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