AB110. Anaesthesia effects on elderly patients for hip and ankle surgery: a systemic review

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**Background:** The geri-orthopaedic population undergoing surgery continues to increase. Despite advances in anesthesia and analgesia, there is no consensus of opinion regarding the safest form of anaesthesia for these patients. The risk factors associated with surgery of this patient cohort have a high mortality in surgery due to multiple co-morbidities.

**Methods:** Assessment of anesthesia risk factors in geri-orthopaedic patients undergoing hip and ankle surgery in order to reduce mortality and identify causative factors. This study focuses on elderly patients admitted for hip and ankle surgery over a 10 year period. The authors searched databases for relevant published trials: PubMed and the Cochrane Central Register of Controlled Trials. Patients 65 years of age or older were included in the study. After retrieving the sample from a database search, evaluation of the data collection sheet of potential parameters was carried out. Statistical analysis and inclusion/exclusion criteria were applied.

**Results:** Post-operative complications were the most important indicator of patient mortality. Type of fracture and treatment method was not statistically significant predictors for mortality. Following this, seven independent variables were investigated: type of anaesthetic, age, gender, type of treatment, type of fracture, length of hospital stay, and complications post-operatively.

**Conclusions:** This study demonstrates the importance the type of anesthesia in controlling post-operative complications in hip and ankle fracture surgery. Adverse effects of post operative surgery, such as myocardial infarction, pulmonary embolism and pneumonia, may be reduced resulting in the opportunity to allow for early ambulation and shorter hospital stays.

**Keywords:** Anaesthesia; ankle; elderly patients; hip; surgery

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