AB095. SOH21AS250. A systematic review on the use of prophylactic proton pump inhibitors in patients with a hip fracture and their effect on developing acute gastrointestinal haemorrhage and mortality

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Background: Hip fractures represent a significant burden to every orthopaedic department. Acute gastrointestinal haemorrhage is a postoperative complication associated with increased mortality. Stress ulcer prophylaxis such as the use of proton pump inhibitors is an important measure to decrease this perioperative complication. There are no guidelines on the prescription of prophylactic proton pump inhibitors (PPIs) to hip fracture patients.

Methods: This systematic review will aim to determine whether there is any benefit for patients admitted with hip fractures being treated with prophylactic PPI medication. Observational studies were identified from the literature. They assessed the effects of the use of prophylactic PPIs for preventing gastrointestinal bleeding in patients admitted to hospital with hip fractures. Three observational studies were used for the analysis using statistical software.

Results: Patients taking PPIs had a reduced risk of an acute gastrointestinal haemorrhage (AGIH) than those without PPI therapy (RR 0.15, 95% CI: 0.04–0.57, P<0.0001). The use of PPIs in hip fracture patients shows a reduced mortality risk (RR 0.12, 95% CI: 0.01–1.06, P<0.0001).

Conclusions: These results suggest that prophylactic PPI use in hip fracture patients is associated with a reduced risk of AGIH and also a reduced rate of mortality in this patient group. Orthopaedic surgeons should be aware of the risk of AGIH as a complication in hip fracture patients, knowledgeable to the factors which increase risk in their patient population and be cognisant that the prophylactic use of PPI medication is of benefit in reducing the complication of AGIH and correlates with a decreased mortality rate.

Keywords: Acute gastrointestinal haemorrhage; hip fracture; orthopaedics; proton pump inhibitors (PPI); stress ulcer

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Footnote

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