



AB076. SOH23ABS_129. Tranexamic acid is associated with a reduction in postoperative transfusion rates in hip fracture surgery

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Background: In hip fracture surgery, blood transfusions are commonly reported postoperatively. Allogenic blood transfusions can be associated with adverse effects, so their use should be reduced where possible. This study will focus on outcomes following the use of perioperative tranexamic acid (TXA) with the primary aim of assessing transfusion rates and thromboembolic events.

Methods: This was a single-centre retrospective cohort study performed in a high-volume academic trauma unit. Patients undergoing surgery for a hip fracture between 1st August 2019 and 1st August 2020 were included. Two groups based on whether or not the patient received TXA were identified. Primary outcomes of interest were transfusion rates, postoperative haemoglobin levels and the rate of venous thromboembolism (VTE).

Results: A total of 351 patients were included, 178 in the control group and 173 in the TXA group. On univariate analysis, 4 variables were associated with postoperative transfusion: Age ($P<0.0001$), ASA ($P<0.001$), TXA ($P=0.022$), and preoperative haemoglobin level ($P<0.0001$). On multivariate analysis, both the preoperative Hb ($P<0.0001$) and administration of TXA ($P=0.047$) were associated with a reduced need for postoperative transfusions. Day 1 haemoglobin levels in the TXA group were significantly higher compared to the no-TXA group

($P=0.0183$). With regards to VTE, there was found to be no statistically significant increase in the rate of VTE ($P=0.242$).

Conclusions: Administering intraoperative TXA is associated with reduced postoperative transfusion rates and improved postoperative haemoglobin levels in hip fracture patients while not increasing venous thromboembolic events.

Keywords: Tranexamic acid (TXA); postoperative transfusion rates; hip fracture; venous thromboembolic events; postoperative optimisation

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Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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