



# AB167. SOH23ABS\_136. To investigate if preoperative anaemia in patients undergoing hip arthroplasty is associated with postoperative blood transfusions

Gavin O'Connor<sup>1</sup>, Stephen Mannion<sup>2</sup>, James Purcell<sup>2</sup>

<sup>1</sup>School of Medicine, University College Cork, Cork, Ireland;

<sup>2</sup>Department of Anaesthesiology, South Infirmiry-Victoria University Hospital, Cork, Ireland

**Background:** Approximately 7,000 total hip arthroplasty (THA) surgeries occur in Ireland each year. Anaemia is a common condition in this population who undergo THA. Blood transfusions are commonly used to treat low haemoglobin secondary to blood loss, and therefore postoperative blood transfusions occur in a considerable number of patients who undergo THA.

**Methods:** A retrospective cohort study of all patients who underwent THA in 2019 in South Infirmiry-Victoria University Hospital (SIVUH), Cork.

**Results:** In total, 350 charts met our inclusion criteria and were requested. Of this, 291 charts have been retrieved and reviewed. Altogether, 8.9% of the patients who underwent THA had preoperative anaemia. Of this population, 19.23% had a postoperative blood transfusion, compared to just 1.51% of patients who were not anaemic preoperatively. The odds of receiving a blood transfusion in the preoperative anaemia group of patients was 15.54 times greater compared to those who were not anaemic preoperatively. Our study suggests multiple important findings, such as that increasing age and American Society of Anesthesiologists (ASA) scores are associated with preoperative anaemia and postoperative blood transfusions.

**Conclusions:** Preoperative anaemia is common in

the cohort who undergo THA. Preoperative anaemia predisposes patients to increased rates of postoperative blood transfusions. The ASA grade was found to be a useful tool for indicating the increased likelihood of patients needing postoperative blood transfusions. Postoperative blood transfusions have been linked to increased length of hospital stay in patients who undergo THA.

**Keywords:** American Society of Anesthesiologists (ASA); anaesthesiology; post-operative blood transfusion; pre-operative anaemia; total hip arthroplasty (THA)

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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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