

11th Annual Conference on ORTHOPEDICS AND REHABILITATION

March 14-15, 2024 | Webinar

Safety and efficacy of tranexamic acid in hip hemiarthroplasty: A retrospective review of peri-operative outcome**Muhammad Waqas***Dow University Hospital Karachi, Pakistan*

Background: In low-income nations, hemiarthroplasties majorly unipolar hemiarthroplasty (Austin Moore implant) is commonly used for treating femoral neck fractures, often causing significant blood loss. Studies on elective endo-prosthetic surgery have shown tranexamic acid (TXA) effectively reduces blood loss and postoperative complications. This research aims to assess if combining TXA with hemiarthroplasty reduces perioperative blood loss and bleeding-related issues similarly.

Methods: This cohort study focuses at individuals aged 60 or older who hip hemiarthroplasty at a major tertiary care facility had affiliated with a university between January 2016 and June 2023. The study analyzes transfusion rates, surgical complications, and patient demographics over period of time. Of the 231 patients, 153 were given a regular dose of tranexamic acid (TXA) prior to surgery, and 78 did not. TXA and non-TXA groups had mean ages of 68.52 ± 4.32 and 68.34 ± 2.63 , respectively.

Result : TXA treatment was associated with less blood loss (223.95 ± 112.67 vs. 357.69 ± 206.50 ml, $p < 0.001$) and a shorter surgical recovery period ($p = 0.01$). Postoperative hemoglobin levels rose in the TXA group ($p = 0.70$) but they fell in the non-TXA group ($p < 0.01$). Significant variations were noted in Hct, platelet count, and PT across the groups ($p < 0.05$).

Conclusion: TXA administration reduced blood loss, shortened surgical times, and maintained stable postoperative Hb and Hct levels, but postoperative complication rates did not significantly differ between TXA and non-TXA groups.

Biography

Muhammad Waqas, a recent alumnus of Dow University of Health Sciences, An enthusiastic researcher since 2022, He have completed his FCPS residency in September, He collaborated with national and international teams on numerous projects related to various orthopedic subspecialties. His ultimate goal is to contribute to high-impact orthopedic projects. Muhammad's research interests are diverse, reflecting his broad curiosity and ambition. He has explored various aspects of orthopedic surgery, including innovative surgical techniques, the biomechanics of joint replacements, and the impact of orthopedic conditions on quality of life. His work is characterized by meticulous methodology and a relentless pursuit of precision, qualities that will undoubtedly serve him well in his future career.