

March 27-28, 2023

Webinar

Journal of Surgery

ISSN: 1584-9341

Therapeutic evaluation of tranexamic acid in reducing perioperative blood loss in fractures around the hip

Shiv Shanker Tripathi*Dr. Ram Manohar Lohia Institute of Medical Sciences, India***Introduction:**

Surgeries around the hip are associated with significant blood loss and has been a source of concerns for surgeons and anesthesiologists worldwide. Increased use of blood transfusion may be related to numerous problems. Numerous techniques and agents have been devised which may be used to decrease blood loss and need for transfusion in the peri-operative period. Tranexamic acid has a major place in the anesthetist's armamentarium to reduce the blood loss in orthopedic surgery.

Objective:

This study was conducted to evaluate the efficacy of Tranexamic acid in reducing blood loss in surgeries for fractures around the hip.

Design:

This was a prospective, randomized, double-blind, placebo-controlled study.

Material and Methods:

100 patients of ASA 1 and 2 were included in the study. Test group (T) was administered tranexamic acid 30 min before surgical incision and was repeated 3 hrs later. Control group (C) was given equal amount of 0.9% normal saline. We measured vitals pre and post administration in test group and compared hemoglobin, hematocrit, blood loss and number of transfusions needed in test and control group. Side effects after tranexamic acid administration were also noted.

Results:

Preoperative assessment of hemoglobin level and hematocrit were almost comparable in both groups. Post operatively the control group showed a marked decrease with extremely significant p value of <0.0001. Intraoperative and post-operative blood loss was found to be significantly less in the test group. Post-operative transfusion requirements were less in test group by approximately 50%. Post-operative nausea, vomiting or complications such as pulmonary embolism or deep venous thrombosis were absent in test group.

Conclusion:

Tranexamic acid is a cost-effective and safe means of minimizing blood loss. It is responsible for lesser reductions in hemoglobin concentrations and hence reduces the need for blood transfusion and all this without increasing the risk of thromboembolic events.

Biography

Shiv Shanker Tripathi is Professor, Department of Emergency Medicine and Trauma at Dr. Ram Manohar Lohia Institute of Institute of Medical Sciences, Lucknow, India. He has done his post-Graduation in Anesthesiology and has completed his Post-Doctoral Certificate Course in [Critical Care Medicine](#). He has more than 50 Publications in international high impact journals. He specializes as a clinician as well as an academician in the field of Emergency, Trauma, Critical care and Anesthesiology.

Received: 12/01/2023 | Accepted: 13/01/2023 | Published: 06/04/2023