

**IMPROVED RECOVERY WITH TRANEXAMIC ACID:
UP AND WALKING AND RARELY TALKING ABOUT BLOOD TRANSFUSION**

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Background Information: There continues to be concern about the availability of blood products, the cost of extended hospital stays, and increased recovery time for total joint replacement patients. These patients occasionally required blood replacement intraoperatively and/or postoperatively. Research supports the establishment of patient care protocols for operative use of injectable, and/or topical Tranexamic Acid (TXA), an antifibrinolytic, in this patient population. Research has related positive results to TXA therapy decreasing the need for blood transfusions without increasing complications, such as pulmonary embolisms and deep vein thrombosis. When patients do not require a blood transfusion they are able to fully participate in physical therapy, be discharged earlier and are more likely to be discharged to their home. Data gathered at a private suburban hospital agrees with the research and has implemented several protocols to improve the patient's surgical experience.

Objectives of Project:

1. Gather evidence regarding blood transfusions in patients having total joint replacements (hip or knee), related to tranexamic acid infusions, post-operative complications, length of stay, participation in therapy, and patients disposition on discharge from hospital.
2. Implement protocol, including ongoing assessment, for two dose infusion of TXA for the total hip and total knee patient.

Process of Implementation: After review of literature, team consensus and appropriate approval, a protocol for TXA was implemented. A training plan was executed involving anesthesia, surgeons and nurses from surgery, PACU and the orthopedic care area. The process was monitored and data trended. The process was successful and further data assessment is in process.

Statement of Successful Practice: Patients who have had the TXA infusions in conjunction with a hip or knee arthroplasty have less blood loss, fewer transfusions of blood, shorter length of stay in the hospital, consistent participation in therapy, and the majority of patients are discharged home.

Implications for Advancing the Practice of PeriAnesthesia Nursing: The implementation of this TXA protocol improves the quality and safety of patient care and the patient's overall surgical recovery. The team is researching the most effective administration time of the second dose of TXA. They hope to change the current practice which is a 10 hour infusion delivered 8 hours post operatively.