

Use of Tranexamic Acid (TXA) in the Treatment of Trauma Patients

Clinical Indications:

Bleeding Control in the Trauma Patient

Anti-fibrinolytic hemostatic agent for trauma patients

To be initiated within 3 hours of trauma

Adult Dosing: (must be >60kg)

- Loading Dose: 1 Gm (mixed in 50 cc saline) given slow via IV push
- Infusion: 1 Gm over 8 hours via infusion pump.

Inclusion Criteria: Acutely injured patient who otherwise meets the criteria for plasma and red blood cell administration guideline **or** massive transfusion within the first three (3) hours of time of injury.

- ≥ 18 years of age
- Trauma patient

Exclusion Criteria:

- Less than 18 years of age
- Known time of injury of greater than 3 hours or unknown time of injury
- Hypersensitivity to TXA
- Any known thromboembolic disease history including deep vein thrombosis (DVT), pulmonary embolism (PE), acute coronary syndrome (ACS)
- Active evidence of intravascular clotting (DIC)
- History of retinal vein or artery occlusion
- Concurrent use of anticoagulants such as warfarin, heparin, direct thrombin antagonists (Dabigatran), Factor X antagonists (Dalteparin, Lovenox, rivaroxaban, apixaban) for baseline medical problems for risk-reduction of thrombotic complications.
- Prior administration of pharmacological doses of procoagulant factors: prothrombin complex concentrates (PCC), recombinant Factor VII, activated.
- Subarachnoid hemorrhage
- Seizure in the course of current illness

****Stop infusion if any of the above exclusion criteria are identified***

Relative Contraindication: severe renal insufficiency as defined by stage 4 or 5 chronic kidney disease (CKD), end stage renal disease (ESRD), or requirement of renal replacement therapy (such as hemodialysis or hemofiltration) or serum Creatinine >3mg/dl. The decision to give TXA in such patients should be made by the individual clinician caring for the trauma patient on a case by case basis. However, a loading dose of one gram should be considered without the subsequent infusion dose.

Rate related hypotension may occur.