Class
Hemostatic Agent, Antifibrinolytic, Plasminogen Inactivator

Pharmacologic Properties

Tranexamic Acid (TXA) is a synthetic derivative of the amino acid lysine that forms a reversible complex that displaces plasminogen from fibrin resulting in the inhibition of fibrinolysis leading to an improved homeostasis in the traumatic patient with significant hemorrhage. It also inhibits the proteolytic activity of plasmin, basically, TXA inhibits fibrin clots from being dissolved or degraded in the body by plasmin that aids in the reduction of mortality due to bleeding in the trauma patient.

Indications

TXA use should never supersede field bleeding control techniques and rapid transport to a Trauma Center.

Adult patients with systolic blood pressure less than 90 **AND/OR** a sustained HR greater than 110 beats per min **or** Pediatrics with age-appropriate shock Protocol 21P, due to any **ONE** of the following that occurred within 3 hours of injury or child birth:

- Trauma Alert Patients with torso injuries and/or amputations (not controlled by tourniquets, hemostatic agents, and/or wound packing)
- Uncontrollable bleeding from shunts, fistulas, etc.
- Severe postpartum hemorrhage
- Tactical Field Care for uncontrolled hemorrhage Protocol 38.
- Any patient in TRAUMATIC ARREST for whom resuscitation efforts have been initiated or are ongoing.

*May be considered at the discretion of the on-scene OIC based on their assessment of the patient's condition and the benefits/risk.

Contraindications

- More than three **(3) hours** from time of injury or child birth
- Hypersensitivity
- Suspected MI, Stroke, or Pulmonary Embolism
- Isolated head injuries
- Patients less than 5 years of age
- Do not infuse concurrently in the same IV line with blood products or Hextend®.

Side Effect/Adverse Reactions

TXA potentially can possess the risk of venous and arterial blood clots (thromboembolisms), therefore the use should be cautious and selective to meet the specific population of patients listed. Hypotension (with rapid IV injection), dizziness, allergic dermatitis, diarrhea, headache, nausea, vomiting, blurred vision.

Dosage and Administration

Adult

- 2 grams slow IVP

Pediatric

- 15 mg/kg IV slow IVP

***Note – Not indicated for pediatrics less than 5 years old.**