

TRANEXAMIC ACID (TXA)

Other Names: Cyklokapron

Actions

Tranexamic Acid is an antifibrinolytic (prevents clot breakdown) amino acid that has been shown to reduce mortality when given to trauma patients.

Contraindications

- Known hypersensitivity
- Greater than 3 hours from time of injury
- Non-traumatic hemorrhagic shock (e.g., GI bleed)
- Hemorrhagic shock stabilized by other means
- Hypercoagulopathy

Indications & Dose

- **Hypotension or Shock – Traumatic hemorrhage**
 - **Adult:** > 18 years old with major trauma and clinical evidence of marked blood loss, internal or external with any one of the following:
 - HR > 110 OR SBP < 90
 - **Slow IV/IO:** 20 mg/kg mixed in 100 cc NS/LR/D5W and infused over 10 minutes; maximum initial dose 1 gram. **DO NOT administer as an IV bolus**
- **Hemorrhage Control – Traumatic hemorrhage**
 - **Adult:** > 18 years old with major trauma and clinical evidence of marked blood loss, internal or external with any one of the following:
 - HR > 110 OR SBP < 90
 - **Slow IV/IO:** 20 mg/kg mixed in 100 cc NS/LR/D5W and infused over 10 minutes; maximum initial dose 1 gram. **DO NOT administer as an IV bolus**
- **Traumatic Injuries – Traumatic hemorrhage**
 - **Adult:** > 18 years old with major trauma and clinical evidence of marked blood loss, internal or external with any one of the following:
 - HR > 110 OR SBP < 90
 - **Slow IV/IO:** 20 mg/kg mixed in 100 cc NS/LR/D5W and infused over 10 minutes; maximum initial dose 1 gram. **DO NOT administer as an IV bolus**

Adverse Effects

- Neuro: Headache, cerebral edema, seizure
- CV: Hypotension
- GI: Nausea, vomiting
- Musculo: Muscle cramps
- Hemat: Thromboembolism

Considerations

- TXA did not reduce mortality in post-partum hemorrhage, GI bleeding, and head bleeds.
- Drug should be administered as early as possible, but NOT initiated beyond 3 hours from time of injury
- Patients with history of previous clotting disorders (DVT) may be at higher risk for developing clots
- Rapid administration may cause hypotension
- Use a filter needle if drawing from an ampule
- Drug must be properly maintained between 15-30° Celsius (59-86° Fahrenheit)

Pharmacokinetics

- Onset: As early as 3-4 minutes
- Duration: Max effect within 4 hours; delayed effects up to 48 hours

Pregnancy/Lactation

- Okay to use in pregnancy and breastfeeding

Initiated: 2/26/2024	Last Review/Revision Date:	Next Review Date: 6/1/2025
Effective Date: 6/1/2024	Approved by: Steven Andrews, MD, EMT-P, FAEMS	