Tranexamic Acid (TXA) Guideline

ALL PROVIDERS / EMT

Classification: anti-fibrinolytic

Prehospital Indications:

- Severe, non-compressible and/or uncontrollable hemorrhage
 - < 1hr from onset of injury to administration of medication</p>
 - o Signs or symptoms of shock *UFA EMS Protocol Shock & Fluid Therapy*
 - MAP <60
 - Shock Index > 1.0
 - \circ Age ≥ 16 yo

Contraindications:

- > Isolated traumatic brain injury without external uncontrollable hemorrhage
- > 1 hour from injury
- ➤ Allergy
- ➤ History of venous or arterial thromboembolism (DVT/PE, etc.)

Cautions:

- > Hypotension may be seen with rapid infusion.
- > Hypotension from rapid infusion may be profound, may not respond to IVF boluses.
- May rarely contribute to coagulopathies.
- The risks of TXA administration likely outweigh any if administered more than 1 hour after injury, after full activation of endogenous fibrinolysis begins.

Mechanism of Action:

- A lysine analog that occupies binding sites on the plasminogen molecule, competitively inhibiting plasminogen activation. This causes a delay in natural physiologic breakdown of platelet aggregation.
- Anti- fibrinolytic that inhibits both Plasminogen activation and Plasmin activity thus preventing clot breakdown rather than promoting new clot formation.

Pharmacokinetics:

- > Onset: 5-15min after IV administration
- **Peak Effect**: 4 minutes all routes
- **Duration**: 1-2 hours

Adverse Reactions:

- Seizure
- Diarrhea
- ➤ Color vision change/vision loss
- Renal Impairment
- Myalgia
- > Headache
- Abdominal pain
- Diarrhea

ADULT

PEDIATRIC (<15 years of Age)
NOTE: Pediatric weight based dosing should not exceed Adult dosing.

AEMT

PARAMEDIC

For patients with severe hemorrhage and hypotension:

☐ **TXA Dose:** 2g IV/IO slow infusion (max rate 100ml/min)

AEMT

PARAMEDIC

For patients with severe hemorrhage and hypotension:

☐ Contact Medical Control