

T-P4 TXA ADMINISTRATION		
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INDICATIONS (Inclusion Criteria)

1. Traumatic Injury or Uncontrolled Non-Traumatic Hemorrhage

Penetrating Injury or Significant Blunt Trauma with a likelihood of internal/non-compressible hemorrhage.

GI Bleeding (hematemesis or bloody/melanotic stools); Vaginal/postpartum bleeding; etc.

With any of the following:

- SBP <90 mmHg
- Shock Index >1.0 (Heart Rate > SBP)
- Pediatric (<10 years): SBP < 70 mmHg + (2 x age in years)
- Deteriorating vital signs (even if above thresholds) or other clinical findings consistent with hypoperfusion (altered mental status, cool extremities, weak pulses, etc.)
- Severe Altered Mental Status (AMS; see below)

2. Isolated Head Injury

With Severe Altered Mental Status (AMS):

- Responsive only to Pain (AVPU Scale)
- Motor GCS <6 (i.e. unable to follow commands)
- Rapidly deteriorating mental status

3. High Suspicion of Hemorrhagic Stroke

Including BOTH:

Known bleeding disorder
(hemophilia, von Willebrand's disease, etc.)

-- OR --

Confirmed to take a blood thinner
Does NOT include antiplatelet medications such as aspirin or clopidogrel [Plavix]

AND

Severe lateralizing neurologic deficits (e.g. hemiparesis), OR **Severe Altered Mental Status (AMS, see left)**

EXCLUSION CRITERIA

- Injuries or the onset of acute neurologic symptoms > 3 hours prior to administration
- Known hypersensitivity to TXA
- Suspected concurrent STEMI, Pulmonary Embolism or Ischemic Stroke (CVA)
- Ventricular Assist Device (VAD)

T-P4 TXA ADMINISTRATION		<table border="1"> <tr><td>First Responder</td></tr> <tr><td>EMT</td></tr> <tr><td>AEMT</td></tr> <tr><td>Paramedic</td></tr> </table>	First Responder	EMT	AEMT	Paramedic
First Responder						
EMT						
AEMT						
Paramedic						

Tranexamic Acid (TXA) 2 grams (2000 mg) IV/IO
<u>MIX</u>: 2 grams of TXA in 50-100 mL NS <ul style="list-style-type: none"> • Can also add to a 500 mL fluid bolus • Infuse over 10 minutes

Pediatric Dosing of Tranexamic Acid (TXA)		
<u>MIX</u>: 15 mg/kg of TXA in 50-100 mL NS <i>or in a 10 mL/kg fluid bolus (below)</i>		
Broselow Color/ Weight (kg)	TXA Dose (mg)	IV Fluid Bolus Normal Saline (mL)
Gray (3-5)	75	50
Pink (6-7)	105	70
Red (8-9)	135	90
Purple (10-11)	165	110
Yellow (12-14)	210	140
White (15-18)	270	180
Blue (19-23)	350	230
Orange (24-29)	435	290
Green (30-36)	540	360
Adult	2000 (2 grams)	500

NOTES:

- TXA is a synthetic amino acid (lysine) that blocks plasminogen from being converted to the enzyme plasmin.
 - Plasmin normally destroys clots by breaking down fibrin (fibrinolysis).
 - TXA decreases bleeding by inhibiting this natural process.
- TXA should never be bolused in, it should be **dripped in over 10 minutes**.
- Recent evidence does not support a significant rate of DVT or Pulmonary Embolism with appropriate use of TXA, but it can theoretically cause a hypercoagulable state where [*unwanted*] blood clots may formed.
 - Caution should be used in patients who are at risk of forming blood clots (history of multiple clots, using estrogens or progesterones, etc.), or
 - Who have concurrent active disease caused by blood clots (i.e. patients who are actively showing signs or symptoms of stroke/CVA, STEMI, etc. in addition to the traumatic event.

QI Review Parameters:

1.

