

Hemorrhagic Shock Guideline T-04

Begin IV Fluid Resuscitation

Inclusion Criteria
<p>Clinical situation consistent with and concerning for hemorrhage <i>WITH</i> <b>Significant Traumatic Mechanism <u>or</u> Evidence of Non-Traumatic Hemorrhage</b></p>
AND
<p><b>Signs of Hypoperfusion</b> (confusion/AMS, cool extremities, etc.) <i>WITH</i> <b>ONE of the following persistent (i.e. after initial fluid bolus) vital sign abnormalities:</b></p> <ul style="list-style-type: none"> <li>● <b>Systolic BP &lt; 90</b> <ul style="list-style-type: none"> <li>○ SBP &lt;110 if &gt;64 years old</li> </ul> </li> <li>● <b>Tachycardia &gt; 120</b></li> </ul>

Exclusion Criteria
<ul style="list-style-type: none"> <li>● Injuries &gt; 3 hours old</li> <li>● Age &lt; 16 years</li> <li>● Known hypersensitivity to TXA</li> <li>● Suspected concurrent STEMI, Pulmonary Embolism or Stroke/CVA</li> </ul>

P	<p><b>Tranexamic Acid (TXA)</b> <b>1000 mg IV/IO</b></p>
	<p>Peds: DO NOT USE &lt;16 years</p>
	<ul style="list-style-type: none"> <li>● Mix in 100-500 mL NS</li> <li>● Infuse over 10-15 minutes</li> </ul>

T-P4 TXA ADMINISTRATION		
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## 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.