



Sisters of Charity of Leavenworth Health System

Title: Guideline for Tranexamic Acid Use In Trauma Patients

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**PURPOSE:** Guideline for use of tranexamic acid in the treatment of trauma patients with hyperfibrinolysis.

**DEFINITIONS:**

**Acidosis:** Increased acidity / hydrogen ion concentration in the blood or body tissues.

**Coagulopathy:** Impaired ability of body to coagulate blood.

**Fibrinolysis:** The breakdown of fibrin.

**Hyperfibrinolysis:** Markedly increased fibrinolysis.

**Hypothermia:** Hypothermia occurs when the body has heat loss faster than production of heat. Normal body temperature is around 98.6 F (37 C). Hypothermia is a core body temperature below 95 F (35 C).

- Mild hypothermia - core temperature 90 to 95 F (32 to 35 C)
- Moderate hypothermia - core temperature 82 to 90 F (28 to 32 C)
- Severe hypothermia – core temperature below 82 F ( less than 28 C)

**International Normalized Ratio (INR):** Laboratory test measuring the time for blood to clot.

**Thrombocytopenia:** Decreased number of blood platelet count. SVH reference range normal 130 to 400 k/ul.

**Trauma:** A severe, abrupt injury to the human body that is caused by mechanical, environmental, thermal, or other physical force.

**GUIDELINE:**

1. If a trauma patient meets the following criteria, administration of tranexamic acid should be considered:
  - Meeting hypothermia definition or a temperature measured at less than or equal to 36C.
  - Coagulopathy demonstrated with an INR of greater or equal to 1.3.
  - Thrombocytopenia demonstrated with a platelet count of less than or equal to 200 k/ul.
  - Acidosis demonstrated with a blood pH of less than or equal to 7.20.
2. Tranexamic acid should be considered within the first three hours after traumatic injury at a dosing of:
  - One gram given intravenous route over ten minutes. Followed by one gram given intravenous route over eight hours.

**REFERENCES:**

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