Tranexamic Acid for trauma-related hemorrhage.

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Abstract:
Trauma-related deaths represent a leading cause of mortality among persons younger than 45 years. A significant percentage of these are secondary to hemorrhage. In trauma, massive and rapid loss of blood creates an imbalance in hemostasis. Mainstays of resuscitation include surgical interventions, restoring intravascular volume, and pharmacologic interventions. Providers continue to search for improved pharmacologic options for achieving hemostasis. Tranexamic acid is an antifibrinolytic and inhibits fibrinolysis by blocking the lysine-binding sites on plasminogen. Tranexamic acid works to stabilize and inhibit the degradation of existing clots. Tranexamic acid has been prospectively proven to reduce mortality in trauma-related hemorrhage. Its use will likely expand into such areas as resuscitation and massive transfusion protocols and the prehospital setting. Therefore, it is critical for emergency medicine providers to be familiar with appropriate use of tranexamic acid in order to maximize efficacy and decrease the potential adverse events.