

INFOGRAPHICS IN ANESTHESIOLOGY

Complex Information for Anesthesiologists Presented Quickly and Clearly



Fibrinolysis Transitions Adverse Outcomes in Trauma

Trauma can cause hypo- and hyperfibrinolysis, which are both associated with worse outcomes. Empiric tranexamic acid (TXA) inhibits hyperfibrinolysis and improves outcomes.



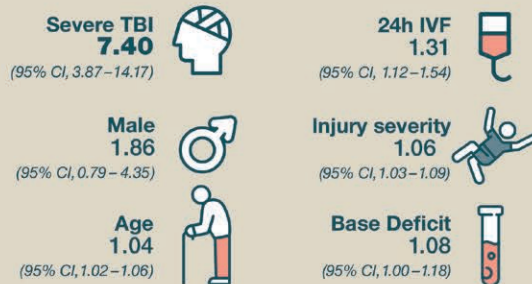
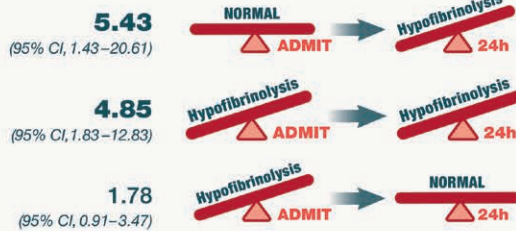
A secondary analysis was performed of a trauma observational study,¹ where TXA was given for hypotension after hemorrhage protocol activation. Fibrinolysis was assessed on admission and at 24h with ROTEM.

No TXA
(n = 432)

TXA
(n = 299)

In patients without TXA, the following factors were associated with multiorgan dysfunction by adjusted odds ratios:

Fibrinolysis trajectories



In patients with TXA:

~~Hyperfibrinolysis~~
Hyperfibrinolysis is abolished.

↑ Hypofibrinolysis ADMIT → Hypofibrinolysis 24h
Persistent hypofibrinolysis is increased.

There is an association with reduced early mortality.

EARLY 14% vs. 29% LATE
(*P* = 0.015)

Adverse late outcomes are more closely related to 24 h maximum fibrinolysis. TXA alters early fibrinolysis, but late mortality in patients with hypofibrinolysis at 24h is not increased.

IVF, intravenous fluid; ROTEM, rotational thromboelastometry; TBI, traumatic brain injury.

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1. Rossetto A, Vulliamy P, Lee KM, Brohi K, Davenport R: Temporal transitions in fibrinolysis after trauma: Adverse outcome is principally related to late hypofibrinolysis. ANESTHESIOLOGY 2022; 136:148-61