

## PREHOSPITAL ADMINISTRATION OF TRANEXAMIC ACID IN TRAUMATIZED PATIENTS

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Traumas, especially those involving brain injuries, pose a significant challenge to public health and the global economy. Hemostatic complications can worsen these injuries, leading to an increased risk of bleeding and damage progression. Tranexamic acid (TXA), an antifibrinolytic agent, has emerged as a possible intervention to mitigate these complications. The study aims to evaluate the efficacy of pre-hospital administration of tranexamic acid in traumatized patients. This is a literature review, using articles published within the last 5 years in the SciELO and PubMed databases. Inclusion criteria were complete and freely accessible articles in English, while incomplete articles were excluded. Three relevant articles were used for this work. In the first study, administering a second dose of TXA did not significantly impact mortality rates, blood transfusion requirements, thromboembolic complications, organ failure, or length of hospital stay in patients who had already received an initial 1g dose of TXA in the pre-hospital setting. In the PATCH-Trauma study, where continuous TXA use was compared with a placebo group, no significant improvements in outcomes for traumatized patients were observed. Additionally, in a retrospective analysis investigating the association between pre-hospital TXA administration and mortality, as well as functional outcomes in patients with severe Traumatic Brain Injury (TBI), no significant link was found between pre-hospital TXA administration and these outcomes. The results of these studies indicate that both pre-hospital and in-hospital administration of TXA did not provide significant improvements in outcomes for traumatized patients compared to the placebo. Despite initial hopes, the efficacy of TXA in the treatment of severe traumas remains uncertain. Future studies, especially those involving larger populations and multiple centers, are necessary for a deeper understanding of the role of TXA in managing traumatized patients.

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