

## عنوان مقاله:

Which Route of Tranexamic Acid Administration is More Effective to Reduce Blood Loss Following Total Knee  
?Arthroplasty

## محل انتشار:

مجله استخوان و جراحی عمومی، دوره 4، شماره 1 (سال: 1395)

تعداد صفحات اصل مقاله: 5

## نویسندگان:

Sohrab Keyhani - *Orthopedic Surgeon, Akhtar Orthopedic Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

Ali Akbar Esmailiejah - *Orthopedic Surgeon, Akhtar Orthopedic Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

Mohammadreza Abbasian - *Orthopedic Surgeon, Akhtar Orthopedic Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

Farshad Safdari - *Orthotist and Prosthetist, Bone Joint Related Tissues Research Center, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

## خلاصه مقاله:

Background: The most appropriate route of tranexamic acid administration is controversial. In the current study, we compared the efficacy of intravenous (IV) and topical intra-articular tranexamic acid in reducing blood loss and transfusion rate in patients who underwent primary total knee arthroplasty. Methods: One hundred twenty ۱۲۰ patients were scheduled to undergo primary total knee arthroplasty. Patients were randomly allocated to three equal groups: IV tranexamic acid (۵۰۰ mg), topical tranexamic acid (۳ g in ۱۰۰ mL normal saline) and the control. In the topical group, half of the volume was used to irrigate the joint and the other half was injected intra-articularly. The volume of blood loss, hemoglobin (Hb) level at ۲۴ hours postoperative, and rate of transfusion was compared between groups. Results: The blood loss and Hb level were significantly greater and lower in the control group, respectively ( $P < 0.05$ ). Also, the rate of transfusion was significantly greater in the control group ( $P < 0.05$ ). However, IV and topical groups did not differ significantly in terms of measured variables. No patient experienced a thromboembolic event in our study. Conclusion: Tranexamic acid is a useful antifibrinolytic drug to reduce postoperative blood loss, Hb drop, and rate of blood transfusion in patients undergoing total knee arthroplasty. The route of tranexamic acid administration did not affect the efficacy and safety.

## کلمات کلیدی:

Blood loss, Blood transfusion, Hemoglobin, Total knee arthroplasty, Tranexamic acid, Route of administration

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1262536>



