

## عنوان مقاله:

Comparison of Tranexamic Acid and Dexmedetomidine on Bleeding in Endoscopic Sinus Surgery

## محل انتشار:

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## خلاصه مقاله:

**Introduction:** The quality of the surgical field during the surgery is impaired when bleeding occurs. This study compared the effect of tranexamic acid and dexmedetomidine on the rate of bleeding during endoscopic sinus surgery (ESS). **Materials and Methods:** In this one-blind clinical trial, 22 patients with chronic rhinosinusitis who were candidates for ESS at Be'sat Hospital in Hamedan were randomly assigned to two groups. Group A received dexmedetomidine at a dose of 1 µg/kg, and group B received tranexamic acid at a dose of 10 mg/kg immediately after induction of anesthesia intravenously within 15 minutes. The two groups were evaluated and compared regarding the quality of the surgery field with the Boezaart scale, volume of intraoperative bleeding, hemodynamic changes, and complications up to 90 minutes after the beginning of surgery. **Results:** The mean volume of intraoperative bleeding in group A ( $181.67 \pm 86.66$ ) was significantly higher than in group B ( $110.28 \pm 61.23$ ) ( $P = 0.000$ ). At 15, 30, and 60 minutes, the quality of the surgical field in group B was better than group A ( $P = 0.038$ ), while at 90 minutes, there was no statistically significant difference ( $P = 0.450$ ). The mean arterial pressure in group A at 15 minutes was higher than in group B ( $P = 0.003$ ); at 60 and 90 minutes, it was lower, and the difference was statistically significant ( $P = 0.01$ ). On the other hand, in 30 minutes, the mean arterial pressure in group A was higher than in group B, without a significant difference ( $P = 0.07$ ). Moreover, there was no statistically significant difference between the average surgery time ( $P = 0.25$ ) and the frequency of complications ( $P = 0.405$ ). **Conclusions:** Based on the results, tranexamic acid is preferable to injectable dexmedetomidine to control and reduce bleeding during ESS.

## کلمات کلیدی:

Chronic Rhinosinusitis, Dexmedetomidine, Tranexamic acid, Sinus endoscopy

