

Comments on published article “Desmopressin nasal spray reduces blood loss and improves the quality of the surgical field during functional endoscopic sinus surgery”

Dear Editor,

We read with interest the article by Safaeian *et al.*^[1] titled “Desmopressin nasal spray reduces blood loss and improves the quality of the surgical field during functional endoscopic sinus surgery.” However, we would like to express a few reservations with the methodology and the conclusions drawn in the study.

Desmopressin has been studied and shown to be effective in the context of platelet defects (inherited and acquired) and storage pool deficiencies. Yet, there is no known mechanism of desmopressin promoting clotting in the absence of these pathologies. A Cochrane review demonstrated no difference in blood loss in non-cardiac surgical patients.^[2] The methodology has several issues; no mention of primary, secondary outcomes, and sample size estimation, no rationale for the gross underdosing of desmopressin (nasal doses should be 10 times the intravenous dose^[3]), as well as inappropriate timing of dose (should have been done 60-90 minutes before start of procedure). The biggest miss is the lack of data about sodium levels. We believe that it is essential to track and report sodium levels in a study involving desmopressin, which is known to have a significant hyponatremic effect.

The conclusions drawn are problematic. Authors report lower blood loss in the desmopressin group, but longer duration of surgery. This defies understanding as logic dictates that a better surgical field should hasten surgery rather than delay it.

The study could have contributed significantly to the debate about the role of desmopressin in non-cardiac surgery had it been better designed; unfortunately it was not.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Safaeian R, Hassani V, Ghandi A, Mohseni M. Desmopressin nasal spray reduces blood loss and improves the quality of the surgical field during functional endoscopic sinus surgery. *J Anaesthesiol Clin Pharmacol* 2021;37:261.
2. Desborough MJ, Oakland K, Brierley C, Bennett S, Doree C, Trivella M, *et al.* Desmopressin use for minimising perioperative blood transfusion. *Cochrane Database Syst Rev* 2017;7:CD001884.
3. DDAVP, Stimat (desmopressin) dosing, indications, interactions, adverse effects, and more. Available from: <https://reference.medscape.com/drug/ddavp-stimate-noctiva-desmopressin-342819>. [Last accessed on 2021 Jul 16].

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