## **Practice** | Five things to know about ...

## **Anterior epistaxis**

Ameen Biadsee MD, Alan Gob MD, Leigh Sowerby MD MHM

- Cite as: CMAJ 2022 October 3;194:E1322. doi: 10.1503/cmaj.220391
- Direct compression of the nasal alae (lower third of the nose) with the head tilted forward will stop many bleeds

  Epistaxis is the primary reason for 1 in 313 ED visits. Correct application of pressure is the only intervention required in about 20% of cases.
- 2 Topical medications and cautery can control anterior nasal bleeding that cannot be resolved with direct compression

  Topical medications (such as oxymetazoline, tranexamic acid or lidocaine with epinephrine on a cotton pad) can help control bleeding.<sup>3</sup>

  Once a source of bleeding is visualized, it can be cauterized using chemical (silver nitrate) or electrical cautery. Bilateral cauterization of the septum can cause septal perforation and should be avoided.
- Resorbable packing or tamponade may be necessary in about one-fifth of cases

Around 20% of epistaxis cases that present to the emergency department require nasal packing. Resorbable packing (carboxymethylcellulose, gelatin sponge, or gelatin and thrombin slurry) does not require removal and is best suited for patients with bleeding disorders. Patients with persistent bleeding may require tamponade with a nonresorbable pack.

- Anticoagulation is associated with morbidity from epistaxis

  Patients taking either anticoagulant or antiplatelet therapy are at increased risk of severe epistaxis (odds ratio [OR] 1.8) and hospital admission (OR 2.2) compared with patients not on these medications.<sup>5</sup> In patients with recurrent or uncontrolled epistaxis secondary to coagulopathy, reversal or alternate strategies for anticoagulation should be considered, where possible. Direct oral anticoagulants may have a better safety profile than warfarin or low-molecular-weight heparin.<sup>5</sup>
- Destepistaxis care is important to avoid rebleeding

  Using moisturizers and lubricants (i.e., gel or saline), and air humidification, especially for patients who use continuous positive airway pressure, can protect the mucosa and prevent rebleeds. Avoiding nose picking, heavy lifting and smoking can reduce recurrent episodes.

## References

- Sethi RKV, Kozin ED, Abt NB, et al. Treatment disparities in the management of epistaxis in United States emergency departments. *Laryngoscope* 2018;128:356-62.
- Newton E, Lasso A, Petrcich W, et al. An outcomes analysis of anterior epistaxis management in the emergency department. J Otolaryngol Head Neck Surg 2016;45:24.
- 3. Seikaly H. Epistaxis. N Engl J Med 2021;384:944-51.
- Tunkel DE, Anne S, Payne SC, et al. Clinical practice guideline: nosebleed (epistaxis). Otolaryngol Head Neck Surg 2020; 162(Suppl):S1-38.
- Yaniv D, Zavdy O, Sapir E, et al. The impact of traditional anticoagulants, novel anticoagulants, and antiplatelets on epistaxis. *Laryngoscope* 2021;131:1946-51.

Competing interests: None declared.

This article has been peer reviewed.

Affiliations: Department of Otolaryngology — Head and Neck Surgery (Biadsee, Sowerby), Schulich School of Medicine, Western University, London, Ont.; Department of Otolaryngology — Head and Neck Surgery (Biadsee), Meir Medical Center, Sackler Faculty of Medicine, Tel-Aviv University, Tel-Aviv, Israel; Division of Hematology (Gob), Department of Medicine, Schulich School of Medicine, Western University, London, Ont.

**Content licence:** This is an Open Access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY-NC-ND 4.0) licence, which permits use, distribution and reproduction in any medium, provided that the original publication is properly cited, the use is noncommercial (i.e., research or educational use), and no modifications or adaptations are made. See: https://creativecommons.org/licenses/by-nc-nd/4.0/

**Correspondence to:** Leigh Sowerby, leigh.sowerby@sjhc.london.on.ca