Epistaxis From an Unusual Site: An Endoscopic View

Jae-Hoon Lee, MD¹ and Ha Min Jeong, MD¹

A 70-year-old man presented at our hospital complaining of an episode of acute epistaxis involving the left nostril. No contributory medical conditions were identified. The patient denied a history of anticoagulant medication. We examined his nasal cavity using a nasal endoscope but found no blood clots or debris to suggest recent bleeding. Repeated endoscopic examination using topical vasoconstriction similarly failed to identify a bleeding source. The patient was discharged with advice to return if he experienced another episode of acute epistaxis.

He revisited our hospital a week later, having experienced another episode of acute epistaxis. Using topical vasoconstriction, we again attempted to find the bleeding site. No evidence of bleeding was found on the left side of his nasal cavity. Endoscopic examination of the inferior meatus, middle meatus, septum, floor of the nose, and postnasal space was performed. During this examination, we observed a blood vessel on the upper anterior surface of the middle turbinate (Figure 1A). Acute epistaxis occurred as soon as light suction was applied to this vessel (Figure 1B). The bleeding source was successfully cauterized with suction cautery under local anesthesia (Figure 1C). The patient reported no further episodes of epistaxis at follow-up.

Although there is no agreed definition of posterior epistaxis, one study has defined this as bleeding posterior to the piriform fossa or aperture.¹ Anterior epistaxis can be identified when the bleeding site is visible on anterior rhinoscopy. The first step in the treatment of epistaxis is identification of the bleeding source, which can be done by careful endoscopic examination combined with appropriate suction. Most cases of anterior epistaxis situated in the anteroinferior part of the cartilaginous septum are amenable to control by cauterization or nasal packing.

Approximately 10% of all episodes of epistaxis arise from the posterior part of the nose.² Posterior epistaxis is more frequently encountered in the geriatric population.³ Unlike in anterior epistaxis, the bleeding sites remain uncertain and a matter of debate in posterior epistaxis. Thornton et al have reported that most episodes of posterior epistaxis originate from the posterior end of the lateral aspect of the middle and inferior turbinates and the lateral wall of the meatuses.⁴ Chiu et al demonstrated that the majority of episodes of posterior epistaxis arose from the posterior septum¹ and recommended that the posterior septum be examined closely in adults with idiopathic posterior epistaxis.

Precise local control of bleeding is key to the management of epistaxis. Electrocauterization is a simple, successful, and relatively uncomplicated treatment option for posterior

1 Department of Otolaryngology, Institute of Wonkwang Medical Science, Wonkwang University School of Medicine, Iksan, Chonbuk, Korea

Corresponding Author:
Jae-Hoon Lee, MD, Department of Otolaryngology, Institute of Wonkwang Medical Science, Wonkwang University School of Medicine, Iksan, Chonbuk 570-711, South Korea.
Email: leejaehoon64@gmail.com

Figure 1. A, Endoscopic view of the bleeding point (arrowheads) on the upper anterior surface of the left middle turbinate. B, Bleeding in response to light suction. C, Cauterization of the bleeding site.
epistaxis. Endoscopic ligation of the sphenopalatine artery can be considered as an effective surgical modality in the management of epistaxis. In our patient, the bleeding site was identified on the upper anterior portion of the middle turbinate by careful endoscopic examination.

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References
1. Chiu TW, Shaw-Dunn J, McGarry GW. Prospective clinical study of bleeding sites in idiopathic adult posterior epistaxis. Otolaryngol Head Neck Surg. 2007;137(3):390–393.
2. Bhatnagar RK, Berry S. Selective surgical packing for the treatment of posterior epistaxis. Ear Nose Throat J. 2004;83(9):633–634.
3. Yüksel A, Kurtaran H, Kankılıç ES, Ark N, Uğur KS, Gündüz M. Epistaxis in geriatric patients. Turk J Med Sci. 2014;44(1):133–136.
4. Thornton MA, Mahesh N, Lang J. Posterior epistaxis: identification of common bleeding sites. Laryngoscope. 2005;115(4):588–590.
5. Howe DJ, Wazir U, Skinner DW. Outcomes of endoscopic sphenopalatine artery ligation for epistaxis: a five-year series from a single institution. Ear Nose Throat J. 2012;91(2):70–72.