Epistaxis: Evaluation and Treatment

Daniel J. Morgan, MD[a,b,*], Rick Kellerman, MD[b]

KEYWORDS

• Epistaxis • Uncontrolled nosebleed • Family physician

KEY POINTS

- Epistaxis, or nosebleed, is a common disorder that many patients will experience.
- Most patients go to the emergency room when they have an uncontrolled nosebleed, but they may present to an outpatient office.
- Most nosebleeds are not life-threatening and can be managed conservatively.
- Occasionally, hospital admission, referral to an otolaryngologist physician, and/or blood transfusion may be necessary.

EPIDEMIOLOGY

Although epistaxis can occur at any age, there is a bimodal distribution of children up to age 10 and adults greater than age 50.[1]

The lifetime prevalence of epistaxis is about 60% in the general population. Ten percent will present to a physician, and only a few are ever seen by an otorhinolaryngologist.[1–3] Individuals older than age 50 represent 40% of those requiring medical attention and tend to have more serious bleeds. Children younger than 10 years of age with a nosebleed tend to have an uncomplicated course because their nosebleeds are usually from the anterior nasal blood supply and require limited intervention.[4] Children under the age of 2 with nosebleeds are rare and warrant consideration of trauma (accidental and nonaccidental), nasal foreign body, and/or a systemic medical condition (bleeding disorder).[5]

Thirty-three percent of all emergent admissions for ear, nose, and throat problems are for epistaxis. The median age for hospital admission for epistaxis is 70.[6]

ANATOMY

Nosebleeds from the anterior nasal blood supply are more common than bleeds from the posterior blood supply. In fact, 90% of nosebleeds are from the anterior nasal

Disclosures Funding Sources: None.
Conflicts of Interest: None.
[a] Wesley Medical Center, Wichita, KS, USA; [b] Department of Family and Community Medicine, University of Kansas School of Medicine-Wichita, 1010 North Kansas, Wichita, KS 67214, USA
* Corresponding author.
E-mail address: danthemedicineman5162010@gmail.com

Prim Care Clin Office Pract 41 (2014) 63–73
http://dx.doi.org/10.1016/j.pop.2013.10.007 primarycare.theclinics.com
0095-4543/14/$ – see front matter © 2014 Elsevier Inc. All rights reserved.

blood supply.[7] Most of these occur in the Little's area, where the Kiesselbach plexus of blood vessels is located (Fig. 1). The Kiesselbach plexus is made up of the septal branch of the superior labial artery, the septal branch of the anterior ethmoid artery, and the nasal branch of the anterior ethmoid artery.

Posterior bleeds are much more difficult to evaluate and treat because the posterior nares blood supply is more difficult to access than the anterior nares blood supply. The posterior nasal area is supplied by the posteriolateral branches of the sphenopalatine artery. In rare situations, posterior nosebleeds are due to a malignancy, internal carotid aneurysm, or major trauma (see Fig. 1).

CAUSE

There are several possible causes of nosebleeds that will commonly be seen by primary care physicians. The most common is trauma from nose picking. The Kiesselbach plexus is just inside the opening of the nares and can easily be exposed by excoriation. Nose bleeds from blunt trauma due to a motor vehicle collision or physical altercation is usually from an anterior source. Sinusitis may be associated with bleeding from the nose.

In children, insertion of a foreign body may cause a traumatic nosebleed. The patient or an adult trying to remove the object may inflict traumatic bleeding. If the object has been in place for longer than 24 hours, the bleeding may be accompanied by purulent nasal drainage. Foreign bodies are usually located in the inferior nasal turbinate.[8]

Dry air from the outside environment or from a centrally heated building can result in mucosa that is easily irritated and may bleed with little provocation. Inflammation from viral or allergic rhinitis may cause the nasal mucosa to become friable. Because the nasal turbinates may swell due to underlying allergy or infection, the mucosa may bleed easily and profusely.

One treatment of allergic rhinitis is topical steroids. Topical steroids themselves have been shown to increase the risk of nosebleeds, so consideration must be given to the treatment of nasal allergy symptoms in a patient with a history of nosebleeds.[9]

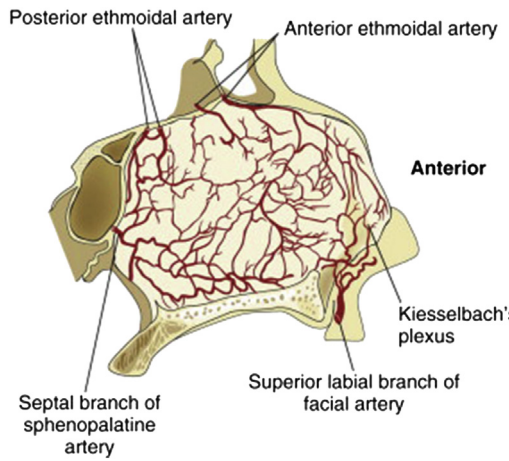

Fig. 1. Blood vessels supplying the nasal passageway. (*From* Savage S. Management of epistaxis. In: Pfenninger JL, Fowler GC, editors. Pfenninger and Fowler's procedures for primary care. 3rd edition. Philadelphia: Saunders; 2011; with permission.)

Download English Version:

https://daneshyari.com/en/article/3821480

Download Persian Version:

https://daneshyari.com/article/3821480

Daneshyari.com