



Epistaxis (Nosebleed) - One of the most common ENT Emergencies



Nosebleeds are very common. They are mainly of two types:
Anterior which accounts for 90% of the nosebleeds
Posterior which is less common but may require hospitalisation

The source of anterior nosebleeds lies within Kiesselbach's plexus also known as Little's area on the anterior nasal septum. About 60% of adults have experienced an episode of a nosebleed during their life among which around 10% of nosebleeds require medical intervention.

Nosebleed affects mainly:

- Children between 2 to 10 years of age
- Elderly between 50 to 80 years old of age

CAUSES

Local Causes

- Digital manipulation
- Deviated nasal septum
- Localised trauma
- Use of nasal cannula in chronically ill patients

Systemic causes

- Alcoholism
- Uncontrolled hypertension
- Vascular malformations
- Coagulopathy disorders

Environmental factors

- Allergies
- Environmental dryness especially in winter

Rare cause

- Intranasal tumour

Medications

NSAIDs like ibuprofen, naproxen, and aspirin, anticoagulants like warfarin, platelet aggregation inhibitors like clopidogrel, excessive use of topical nasal steroid sprays, excessive use of alternative medications like vitamin E, ginkgo, and ginseng and drug abuse with illicit drugs like cocaine.

DIAGNOSIS

History taking:

About duration, severity, frequency, inciting event, and self-interventions done before seeking hospital care.

Drug history:

About the use of anticoagulants, aspirin, NSAID, topical nasal steroid use, drug and alcohol use.

Family history:

Related to coagulopathy and vascular or collagen disease. Anterior bleeding can be identified by direct visualization using a nasal speculum and light source whereas a posterior nosebleed is not easy to visualise and is indicated by active bleeding into the posterior pharynx. Nasal endoscopy aids in identifying the bleeding source. Blood tests such as CBC, coagulative studies and radio imaging tests such as X-ray or computed tomography can be used for diagnosis.

MANAGEMENT

Firstly ensure the airway is patent then assess the haemodynamic status. All patients with moderate to severe nose bleeding should have two large-bore intravenous lines and an infusion of crystalloid. The monitoring of oxygen and haemodynamic stability is vital.

Treatment for anterior bleeding can be started by applying direct pressure by pinching the nose over the cartilaginous tip instead of over the bony areas for a few minutes to try to control the bleeding. If that doesn't work vasoconstrictors such as oxymetazoline or thrombogenic foams or gels can be used. It is essential to remove all clots with suction before starting the treatment. If topical treatments don't produce any results, identification and cauterization of the bleeding vessel with silver nitrate can be done. Anterior nasal packing with absorbable packing material such as surgical or fibrillar, or with devices such as anterior epistaxis balloons, or nasal tampons can be used if the former is unsuccessful. In the case of managing posterior nasal bleeding, longer nasal tampons can be used to provide some more posterior pressure. Posterior nasal packing should only be performed by experienced personnel as it requires admission and telemetry monitoring, and sometimes intubation.

DIFFERENTIAL DIAGNOSIS

- Nasal tumour
- DIC
- Haemophilia
- Von Willebrand disease
- Rhinitis
- Foreign body in the nose
- Drug toxicity, etc.

PREVENTION

- Avoid nose-picking
- Keep your fingernails short
- Do not blow your nose too often or too forcefully
- Blow your nose gently especially in wintertime and during allergy seasons
- Protect your nose by wearing protective gear
- Avoid excessive alcohol drinking and smoking



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