Epistaxis (Nosebleed)

Nosebleed/epistaxis is a common problem occurring in about 60% of people in the United States. Nosebleeds in otherwise healthy children typically are limited bleeds from the anterior nasal septum, caused or aggravated by digital trauma, crusting from nasal inflammation, or nasal foreign bodies.

**ASSESSMENT**

Perform a standard health history and physical exam (HPE) focused on nasal septal blood vessels. Ask questions regarding the onset and duration of the nosebleed and assess with anterior rhinoscopy to establish the location of the bleed.

**HPE RED FLAGS**

**Patient History**
- History of bleeding
- Use of anti-coagulant medication
- Use of anti-platelet medication
- Intranasal drug use

**Family History**
- Bleeding
- Hemorrhagic telangiectasia (HHT) syndrome

Consider diagnosis of HHT syndrome if you see nasal and/or mucosal telangiectasias.

Persistent or recurrent nasal bleeding in adolescent males, particularly unilateral nosebleed in the presence of nasal obstruction, may suggest juvenile nasopharyngeal angiofibroma—an uncommon benign but locally invasive vascular tumor.

**MANAGEMENT/TREATMENT**

Apply firm, sustained compression to lower third of nose, with or without assistance, for 5+ minutes.

Patient with identified site of bleed—consider topical vasoconstrictor, nasal cautery and/or lubricating agent. When cauterizing, anesthetize bleeding site and cauterize only active/suspected site(s) of bleeding.

When bleeding precludes location of bleeding site despite compression:
- Treat ongoing, active bleeding with nasal packing and referral to ENT
- If you suspect a bleeding disorder, or if patient uses anticoagulation or antiplatelet medications, use resorbable packing
- Educate about type of packing used, timing and plan for removal, post-procedure care, and any signs/symptoms causing need for prompt reassessment

Try first-line treatments (above) prior to transfusion, or reversal/withdrawal of anti-coagulation medications (when bleeding is not life-threatening). Educate on prevention, home treatment and when to seek additional medical care.

**WHEN TO REFER**

Refer patients with persistent bleeding not controlled with compression and in need of prompt management to Cincinnati Children’s Emergency Department.

Refer patients with recurrent bleeding not controlled by medical treatment to Cincinnati Children’s Otolaryngology.

If you have clinical questions about patients with nosebleeds, email ENT@cchmc.org.

Tool developed by Cincinnati Children’s physician-hospital organization (known as Tri-State Child Health Services, Inc.) and staff in the James M. Anderson Center for Health Systems Excellence. Developed using expert consensus and informed by Best Evidence Statements, Care Practice Guidelines, and other evidence-based documents as available. For Evidence-Based Care Guidelines and references, see www.cincinnatichildrens.org/evidence.
Epistaxis (Nosebleed)

Inclusion Criteria
Patients with bleeding from the nostril, nasal cavity or nasopharynx that is enough to need medical advice/care, including heavy, long-lasting or recurrent bleeding.

Patient Presents

Standard Workup
- Situational History
- Family History
- Physical Exam

HPE RED FLAGS

Patient History
- History of bleeding
- Use of anti-coagulant medication
- Use of anti-platelet medication
- Intranasal drug use

Family History
- Bleeding
- Hemorrhagic telangiectasia (HHT) syndrome

If you see nasal and/or mucosal telangiectasias, consider diagnosis of HHT syndrome. Check for nasal obstruction, especially unilateral obstruction, in adolescent males with persistent or recurrent nasal bleeding, to rule out juvenile nasopharyngeal angiofibroma.

Any Red Flags?

Prompt management required?

Emergency Department

Active bleeding?

Yes
- Apply nasal compression

No

Bleeding controlled?

Yes
- Perform anterior rhinoscopy
  - Risk factor assessment

No
- Persistent
  - Risk factor assessment
  - Consider topical vasoconstrictors, lubricants, and patient education
  - Decision for nasal packing or nasal cautery

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link at 1-888-636-7997.