

# Hematology



## Nasal Bleeding

### DDx

#### Local trauma

- Nose picking
- Facial trauma
- Foreign bodies
- Nasal or sinus infections
- Nasal septum deviation

#### Environmental

- Dry cold conditions
- Prolonged inhalation of dry air (Oxygen)

#### Iatrogenic

- Nasogastric tube insertion
- Nasotracheal intubation

#### Medical

- Topical corticosteroids and antihistamines
- Solvent inhalation (huffing)
- Snorting cocaine
- Anticoagulants: Aspirin, warfarin, platelet inhibitors

#### Coagulopathies

- Inherited coagulopathies: von Willebrand disease, hemophilia A & B
- Splenomegaly
- Thrombocytopenia
- Platelet disorders
- Liver disease • Renal failure
- Chronic alcohol abuse • AIDS

#### Vascular Abnormalities

- HTN • Sclerotic vessels
- Hereditary hemorrhagic telangiectasia
- Arteriovenous malformation
- Neoplasm
- Aneurysms
- Septal perforation/deviation
- Endometriosis

## Chief Complain: Nose Bleeding (Epistaxis)

Question	Indication
<b>History of Present Illness:</b>	
Onset	
Duration	
Frequency	
Severity	<i>How much time did it take to stop? What is the estimated amount of blood loss?</i>
Aggravating & reliving factors	
Previous episodes?	
laterality of the nosebleed (unilateral or bilateral)	
Determine whether the bleed occurs after exercise or during sleep or is associated with a migraine.	
Ask about the methods used to stop the bleeding	
Determine whether hematemesis or melena has occurred (bleeding from other sites)	
<b>Important Questions :</b>	
Do you have HTN? Did you notice any bruising on your body? History of recent trauma? Do you take drugs such as aspirin, warfarin (Coumadin)? Recent nasal intubation?	
<b>Systemic review of the system involved :</b>	
Tiredness	Sweating
Pruritus	Bruising
Fever	

**Past medical and surgical history:**

- History of Liver diseases
- Nasal tumors
- Renal failure
- Recent nasal surgery
- Blood transfusions

**Drug and allergy history :**

- Blood thinning drugs
- Non-steroidal anti-inflammatory medications

**Family History :**

- Any liver diseases in the family
- Polycythemia Vera
- Bleeding disorders
- HTN

**Social History:**

- Drug abuse
- Smoking
- Alcohol
- Travel

*Important cause of liver disease and AIDS*

**Menstrual History (if female) :**

Regular or not?

Amount?

*heavy periods suggest bleeding tendency*

**Investigations :**

- Hematocrit count and type and cross-match, if a history of persistent heavy bleeding is present.
- Complete blood count (CBC) with differential, if a history of recurrent epistaxis, a platelet disorder, or neoplasia is present.
- The international normalized ratio (INR)/prothrombin time (PT) if the patient is taking warfarin or if liver disease is suspected.

### **Management :**

Medical approaches to the treatment of epistaxis may include the following:

- Adequate pain control in patients with nasal packing.
- Oral and topical antibiotics to prevent rhinosinusitis and possibly toxic shock syndrome.
- Avoidance of aspirin and other nonsteroidal anti-inflammatory drugs (NSAIDs).
- Medications to control underlying medical problems (e.g. Hypertension, vitamin K deficiency) in consultation with other specialists.

For those who have recurrent or severe bleeding for which medical therapy has failed, various surgical options are available.

### **Complications of Epistaxis :**

- Sinusitis
- Septal hematoma/perforation
- External nasal deformity
- Mucosal pressure necrosis
- Vasovagal episode
- Balloon migration
- Aspiration