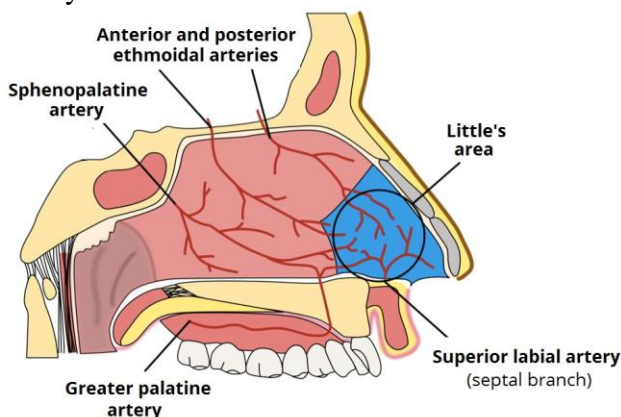




- **Epistaxis:**

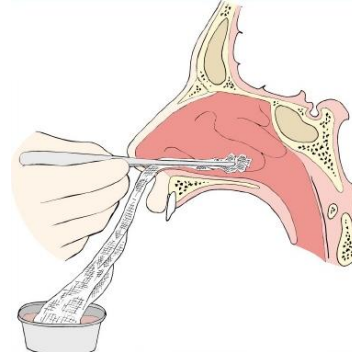
- **Definition:** Epistaxis is simply bleeding from the nose which can be unilateral or bilateral and can occur at any age.
- **Commonest site:** Little's area which has Kiesselbach's plexus (that is the site of anastomosis of the 4 major arteries supplying nasal septum). These arteries are:
 - ✓ Anterior and posterior ethmoidal arteries.
 - ✓ Sphenopalatine artery.
 - ✓ Greater palatine artery.
 - ✓ Superior labial artery.



- **What are the causes of epistaxis?**
 - ✓ Local causes:
 - ❖ Idiopathic (70% of cases!).
 - ❖ Trauma (most common): fracture, iatrogenic (e.g. after septoplasty) or self-traumatized (nose picking especially in children).
 - ❖ Chemicals: cocaine or nasal sprays.
 - ❖ Foreign bodies (especially in children): suspect it in a child presenting with foul-smelling breath, nasal discharge and intermittent epistaxis.
 - ❖ Infection (e.g. rhinosinusitis).
 - ❖ Inflammatory: tertiary TB or syphilis, Wegner granulomatosis or sarcoidosis.
 - ❖ Tumors (mention them at the end of your list):
 - Benign: nasal polyps or inverted papilloma.
 - Malignant: Squamous cell carcinoma or adenocarcinoma.
 - ✓ Systemic causes:
 - ❖ Medications:
 - Warfarin: affects extrinsic pathway; antidote is vitamin K.
 - Heparin: affects intrinsic pathway; antidote is protamine.
 - ❖ Coagulopathies (e.g. hemophilia or vWD).
 - ❖ Vascular diseases.
 - ❖ HTN (considered as an indirect cause).
- **Management:**
 - ✓ Patient must lean forward and pressure applied on anterior-inferior part of the nose. Why leaning forward? → to prevent aspiration of blood and to know if bleeding has stopped.



- ✓ If this doesn't work → packing with topical vasoconstrictor (adrenaline + xylocaine). Xylocaine is a local anesthetic which works by blocking sodium channels thus preventing propagation of nerve impulses. It is combined with adrenaline (which works on α -receptors of blood vessels to cause vasoconstriction) thus reducing absorption of this local anesthetic and its complications.
- ✓ If this doesn't work → cautery which can be
 - ❖ Chemical: silver nitrate or acetic acid.
 - ❖ Electrical (DO NOT cauterize both sides of the septum as this can result in septal perforation).
- ✓ If this doesn't work → pack again with BIPP pack which is placed bilaterally (Bismuth Iodine Paraffine Paste) for 24-48 hours. Admit the patient to hospital and set him in IV antibiotics. Notice that the pack is removed gradually (to decrease the chance of rebleeding).



- ✓ If this doesn't work → ligation of arteries
 - ❖ If bleeding is from anterior part of the septum, ligate anterior ethmoidal artery, ophthalmic artery but not internal carotid artery (because it supplies the brain and forms the anterior circulation).
 - ❖ If bleeding is from the posterior part of the septum, ligate sphenopalatine artery, maxillary artery or external carotid artery.
- ✓ If this doesn't work → embolization under angiography is done.