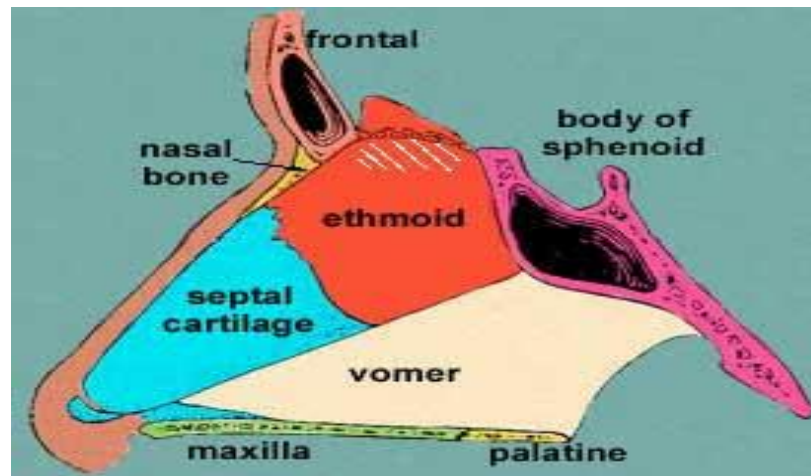


Epistaxis

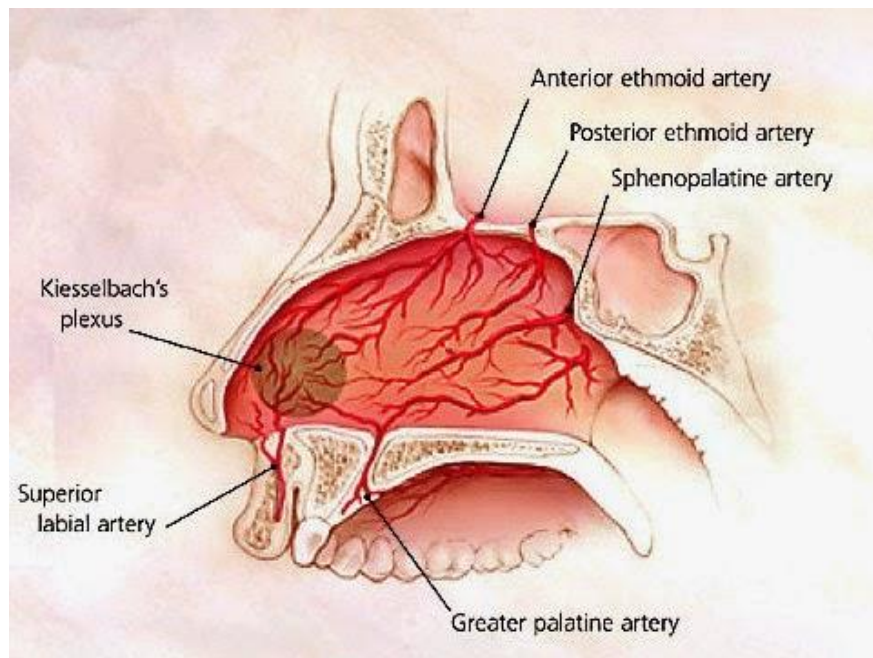
Greek term “*epistazo*” means to bleed from nose



Blood supply of the nasal septum

Woodruff's plexus // posterior part of inf. Meatus

Kiesselbach's plexus // ant. Part of the septum (Little's area) 90%



Epidemiology

- Lifelong incidence of epistaxis in general populations is about 60%
- Fewer seek medical attendance
- Peak incidence in children(2-5 yrs) & adult (50 -80 yrs).

AETIOLOGY

- *Aetiological factors:*

1. Idiopathic : 80%
2. Trauma : Digital, external nasal trauma or iatrogenic.
3. Coagulopathy : Idiopathic thrombocytopenia (ITP) Disseminated intravascular coagulopathy (DIC) .
4. Drugs : Warfarin, aspirin, clopidogrel, (NSAIDs)
5. Chronic granulomatous disease : Wegener's granuloma, sarcoidosis
6. Neoplastic: Angiofibroma, inverted papilloma, squamous cell cancer
7. Hereditary : Hereditary haemorrhagic telangiectasia (HHT), haemophilia, Von Willebrand's factor deficiency.

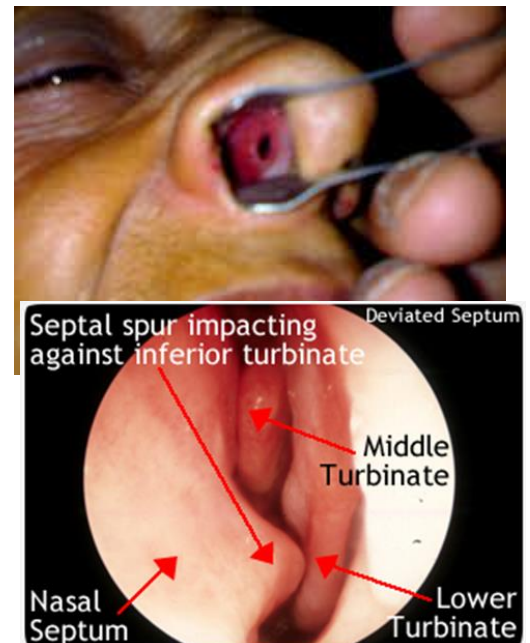
- Aetiological associations:

1. Septal abnormalities : Spurs, perforations
2. Alcohol
3. Hypertension

Evaluation and Management

History and Physical Exam

1. Age,
2. Amount of bl. loss ,onset duration, intermittent or continuous , spontaneous or induced, unilat or bilat. Bleeding from other site, fainting , type of packs was previously used indicate of severity .
3. Medical History and Blood disease ,blood transfusion
4. Medications: antiplatelet , anticoagulants.
5. Social History: cocaine abuse, alcoholism, smoking



6. Family history , pregnancy

7. Toxin Exposure: ammonia, gasoline, phosphorus.

8. Other :trauma ,high altitude living ,allergy, sinusitis rhinitis, URI

Physical Examination

- patient should sit up with body tilted forward
- initial attempt to stop bleeding by applying pressure to nasal alae for several minutes
- decongestant/anesthetic agents .
- adequate lighting, nasal speculum, suction machine ,attempt to localize active bleeding (examine for abrasions, foreign bodies, masses, sign of infection ...etc.).
- general ex. : vital signs ,pallor ,jaundice, ecchymosis, melena, haematuria, haemoptysis
- for chronic or recurrent epistaxis without an obvious bleeding source
patient should undergo an endoscopic exam

Investigations:

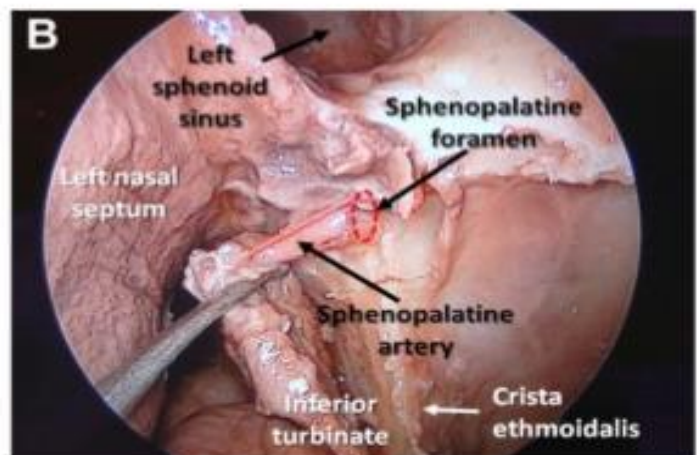
- C.B.F. , E.S.R. , B/ FILM
- Proth. time, partial thromboplastin time ,bleeding time and clotting time.
- Liver enzymes(Liver function tests).
- S. Fibrinogen ,ferritin .
- Blood group
- Clotting factors.
- Renal function tests

Management

- *Control significant bleeding before lengthy history*
- *Steps:*
 - 1- *first aids and resuscitations*
 - 2- *localization of bleeding*
 - 3- *control bleeding*
 - 4- *assess blood loss.*
 - 5- *prevention*

First aids & resuscitation

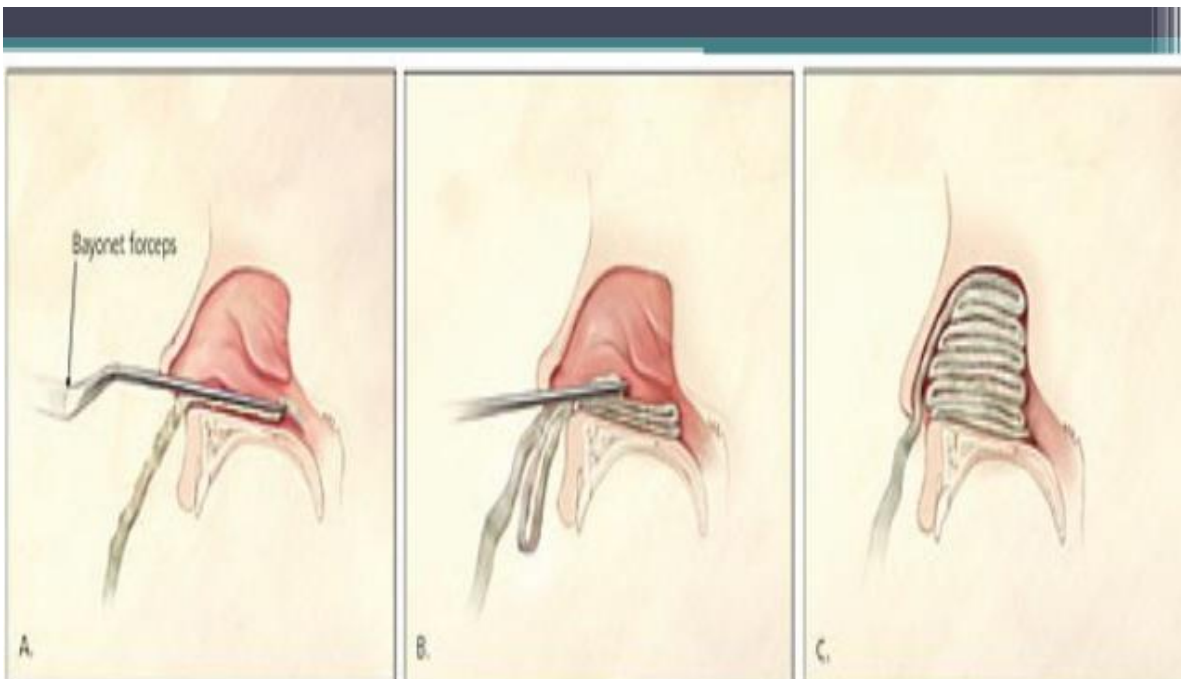
- ABC
- Neck should not be hyperextended to prevent blood flow into the stomach or possible aspiration.
- Trotter`s method:
 - blood in mouth should not be swallowed.
 - mouth breathing.
 - direct pressure over the cartilaginous part of the nose for 5minutes is usually sufficient
 - gauze moisten with epinephrine may be placed to promote vasoconstriction
- applying of pledget soaked with anesthetic-vasoconstrictor solution into nasal cavity to anesthetize and shrink the mucosa.
- Localization the site of bleeding ..
- Cauterize the bleeding point with silver nitrate stick under L/A or electrocautery under local or general anesthesia.
- If bleeding stops , blood sample should be sent for investigation and cross matching especially in severe cases.
- Intravenous infusion to replace hypovolaemia
- Antibiotics ,analgesia and sometime sedation may be essential.





Anterior Nasal Packing

- Roller gauze soaked with petroleum jelly and an antibiotic ointment
- Success rate 85%

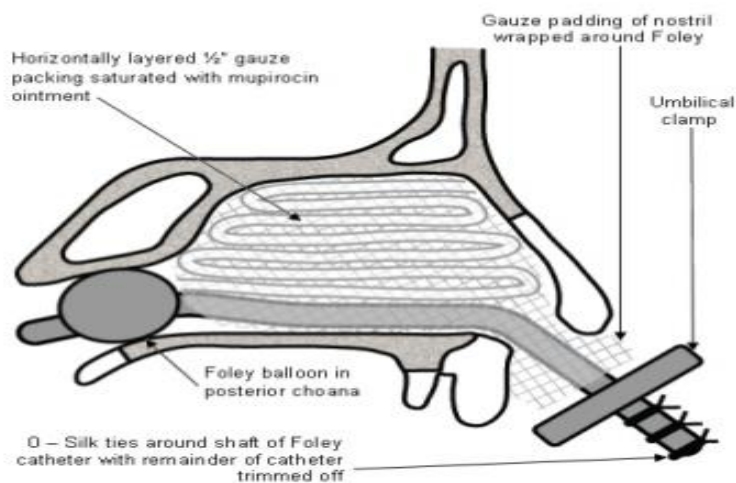




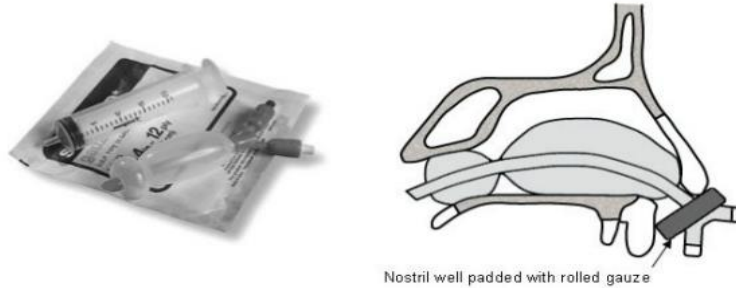
Posterior Nasal Packing

- **Indications:**
 - Failure of anterior packing
 - High suspicion of posterior bleeding
 - Older patient with atherosclerosis
 - Patient with bleeding diathesis
- **Contraindications**
 - Facial trauma
 - Shock
 - Altered mental status

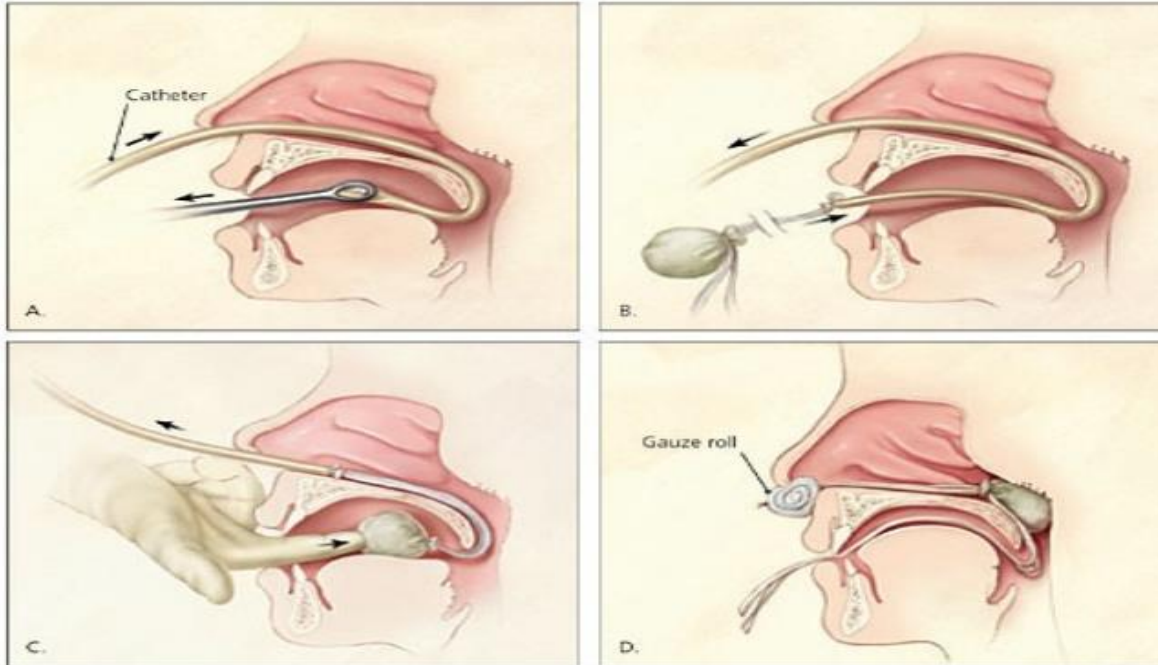
• Foley catheter



- Double-balloon catheter



- Gauze method



Surgical Intervention

- Indications:
 - Bleeding continues despite adequate packing and resuscitation
 - Nasal anomaly (septal deviation)
 - Patient's refusal or intolerance to packing
- Arterial ligation
 - External carotid artery
 - Internal maxillary artery transorally or transnasally
 - Ethmoidal arteries
 - Most commonly ligated vessel is SPHENOPALATINE ARTERY
- Angiography and vessel embolization

Prevention

- Control of hypertension
- Correction of bleeding disorders
- Humidifier or vaporizers
- Nasal saline sprays, ointment, vaseline
- Avoid hard nose blowing or sneezing
- Sneeze with mouth open
- Avoid nose picking
- Control the use of medications

Thank you,,,