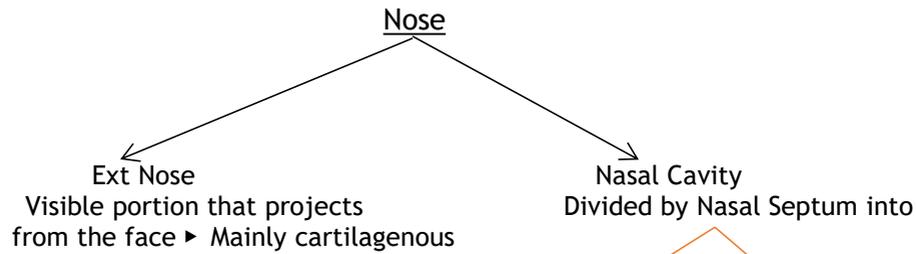


# Nose



- Lt. Cavity Rt. Cavity**
- Both has :
1. Wide floor
  2. Narrow roof
  3. Irregular lat wall
  4. Smooth med wall

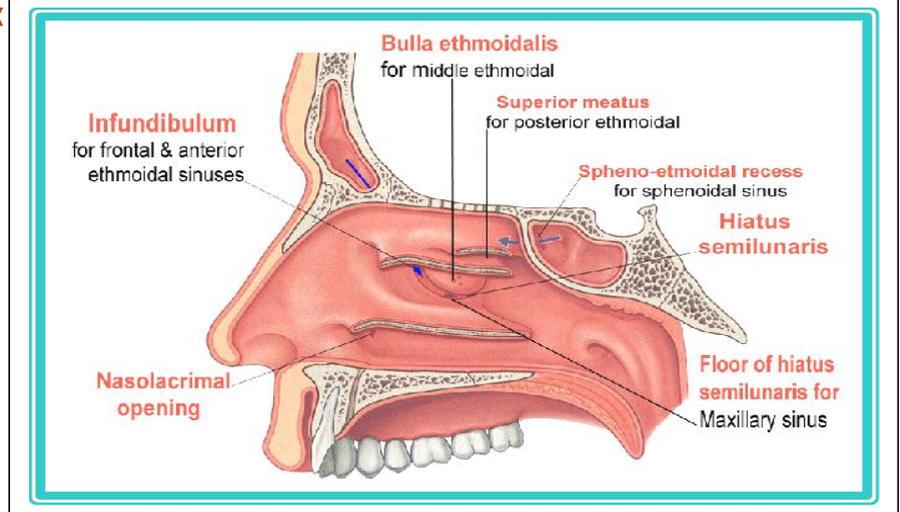
Roof	Floor	Medial wall	Lat wall
Frontal Nasal Ethmoid Sphenoidal	Maxilla ▶ Palatine process Palatine ▶ Horizontal plate	(Nasal Septum)▶ osseocartilagenous ◦Septal cart ◦Perpendicular plate of ethmoid ◦ <b>Vomer</b>	Sup&Mid co ▶ ethmoid.  Inf co▶ individual bone.

Incisive Foramen:  
-Nasopalatine n  
-GPa.  
**GPF** :  
-GP a. } **Hard Palate**  
-GP n. }  
**LPF** :  
-LP a. } **Soft palate**  
-LP n. }

Deviated to the rt side ;rarely in the center ,if so ▶  
**Rhinoplasty**  
Ppl w/ centered septum  
▶ snoring , breathing difficulty

**3** curved shelves ▶ Sup , mid ,inf conchae  
**4** spaces ▶  
\* Spheno-ethmoidal recess.  
\* Sup meatus.  
\* Mid meatus.  
\* Inf meatus.  
↓  
receive openings of paranasal sinuses and the nasolacrimal duct.

Opening	What sinus receive?
Sphenoethmoidal recess	sphenoid sinus.
Sup meatus	post. ethmoid s.
Mid meatus : <b>Bulla ethmoidalis</b> Hiatus semilunaris (Crescent-shaped groove)	M. ethmoid s. <b>Ant</b> ▶ <b>A. ethmoid s.</b> Floor ▶ Maxillary
Infundibulum	Frontal sinus
Inf meatus	Nasolacrimal opening.



▪ The lacrimal sac drains inferiorly ▶ the nasolacrimal duct▶ opens in the inf meatus ▶ explains why we have **rhinorrhea** when crying  
Cx correlate :  
Dry sclera ▶ lack of lubrication due to tears absence  
▶ Tx:**scleroplasty**  
▪ Blocked tear duct is common in newborns (as a congenital deformity)▶  
Ex:  
**blocked lacrima puncta** (which is located in the inside corners of your upper and lower eyelids) .  
Also ,blockage can occur at anypoint in the tear drainage sys from the puncta to the nose (nasolacrimal duct)

Regions of nasal cavity :

**Nasal vestibule:**

✓ Lined by **modified** skin and contains coarse hair.

**Respiratory region:**

- ✓ The **largest** [ lower 2/3rd].
- ✓ Lined by **respiratory** epithelium.
- ✓ **Red in color** → rich blood supply.

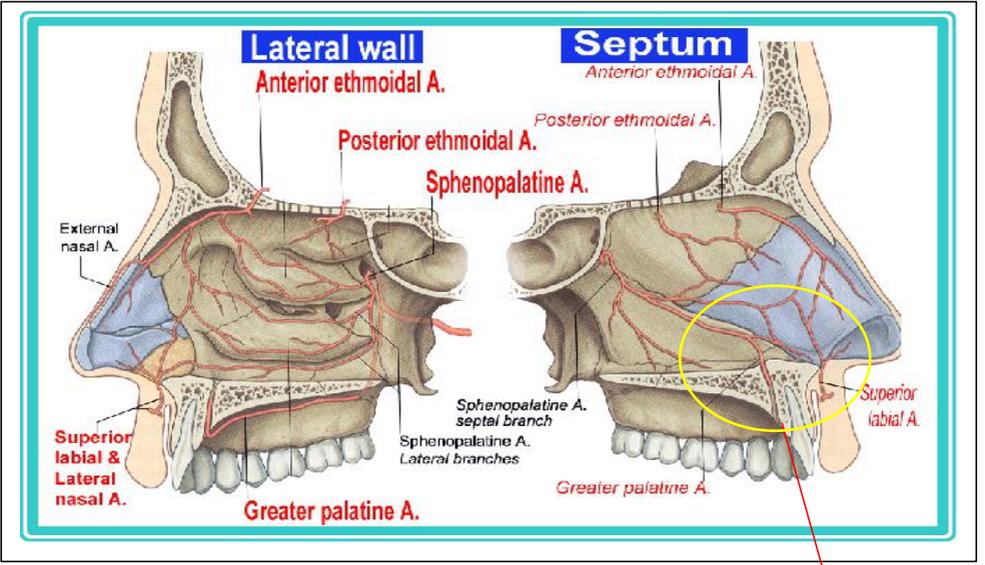
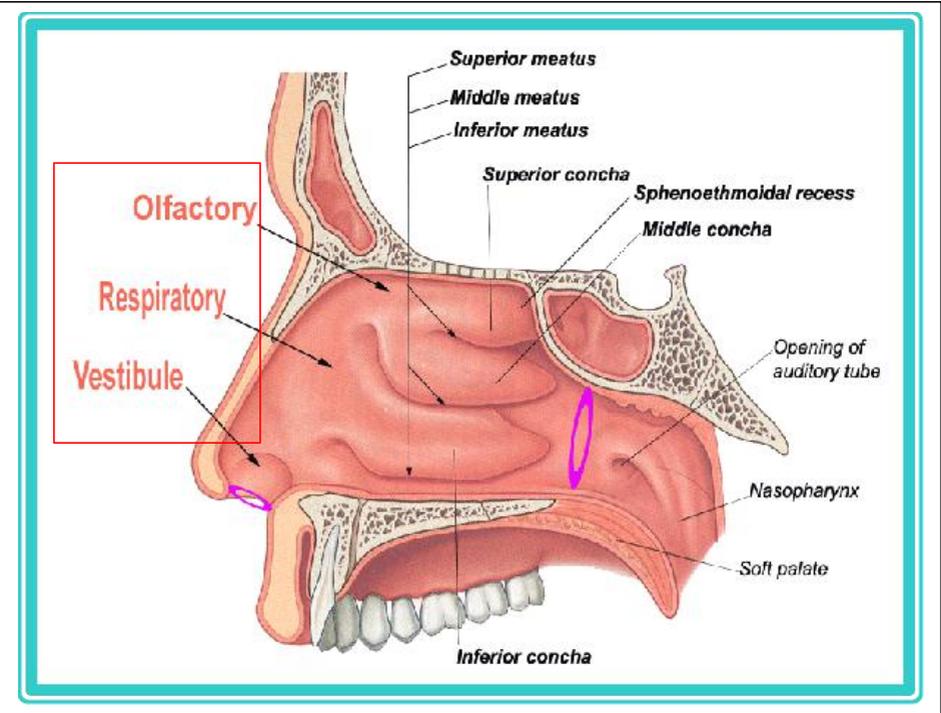
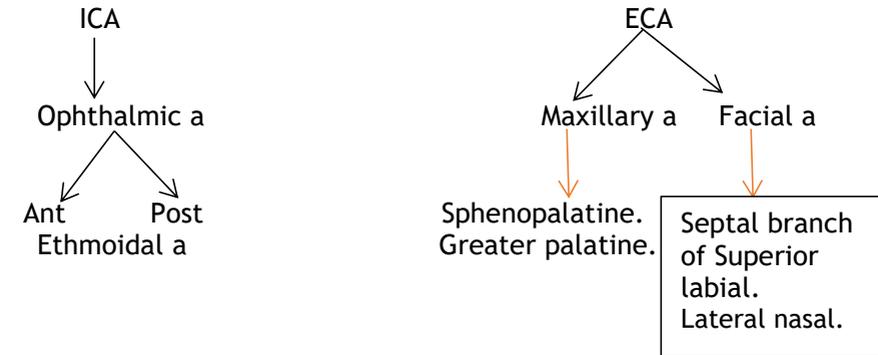
**Olfactory region:**

- ✓ Cover the apex of roof and a similar area of superior concha [ upper 1/3rd].
- ✓ Lined by olfactory epithelium.
- ✓ Yellow color → poor blood supply.
- ★ **Should be moist to function** ★.

people who are in continuous exposure to chemicals will get **anosmia** due to **dryness of the mucous membrane lining the olfactory region** in medial border of nasal cavity

Usually → untreatable

# Arterial Supply



**GP a and septal branch of sphenopalatine a** anastomose anteriorly to supply the nasal septum , along w/ **superior labial a & ant ethmoidal a**

### Little's / Kieselbach Area

An extensive anastomosis b/w vessels in the medial wall, where vessels are close to the surface.

A major site of epistaxis nosebleed.

Lies at the ant part of nasal septum - 2.5cm from naris, opposite the vestibule.

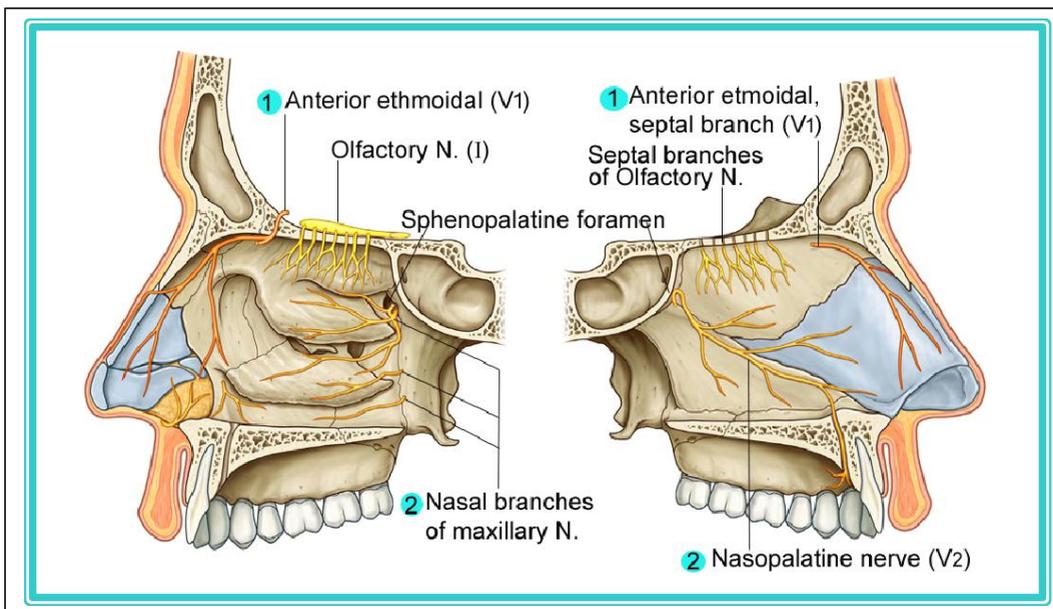
Anastomosis b/w:  
**Sphenopalatine A.**  
**Greater palatine A.**  
**Anterior ethmoidal A.**  
**Superior labial A.**

Part	General Sensation (SPAS)	Special Sensation
Nasal Cavity	1. Ant ethmoidal n (continuation of nasociliary n ; branch of ophthalmic n V1) 2. Nasal branches of maxillary n V2	Branches of Olfactory N (roof of the cavity) running through the cribriform plate
Nasal Septum	1. Ant ethmoidal n , septal branch (V1) 2. Nasopalatine n (branch of maxillary n) .	Septal branches of olfactory n

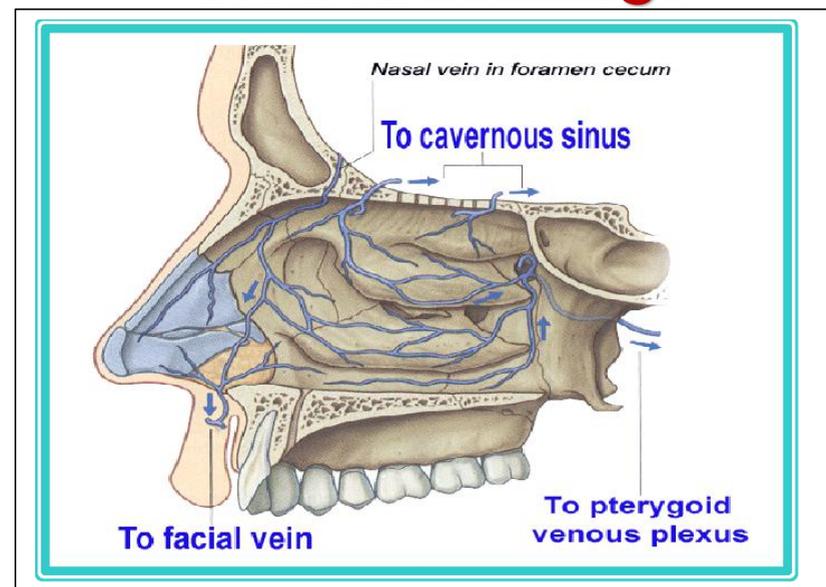
## Innervation

Lateral wall

Septum



## Venous Drainage



1. **Posterosuperior region** → Pterygoid venous plexus.
2. **Anterior regions** → Facial vein.
3. **Anterior and posterior ethmoidal** veins → cavernous sinus.

★ Superior ophthalmic vein → may transmit infections from nose to cranial

★ Nasal Congestion (thus breathing difficulty) can be caused by venous engorgement → nasal mucosal edema