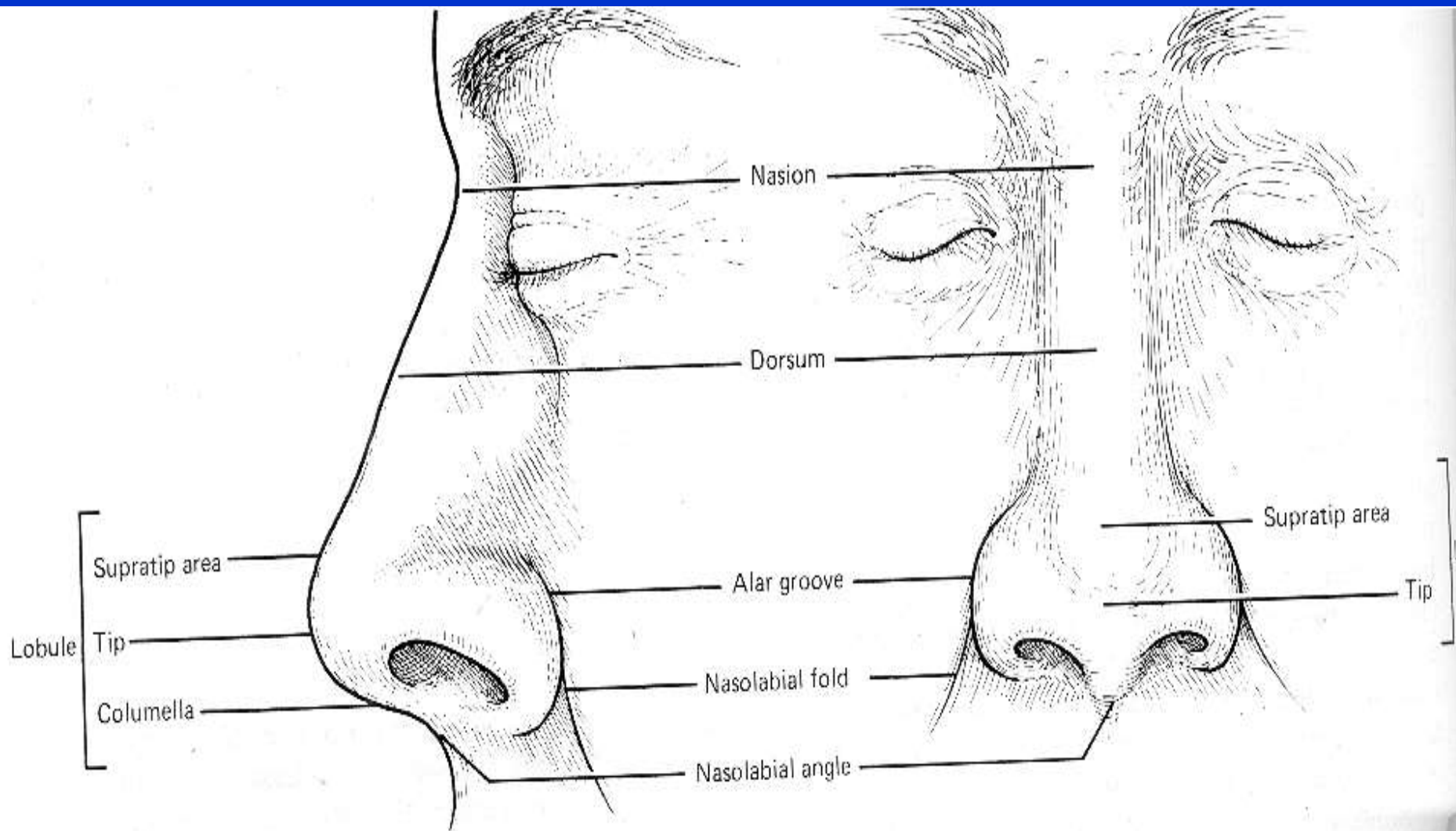
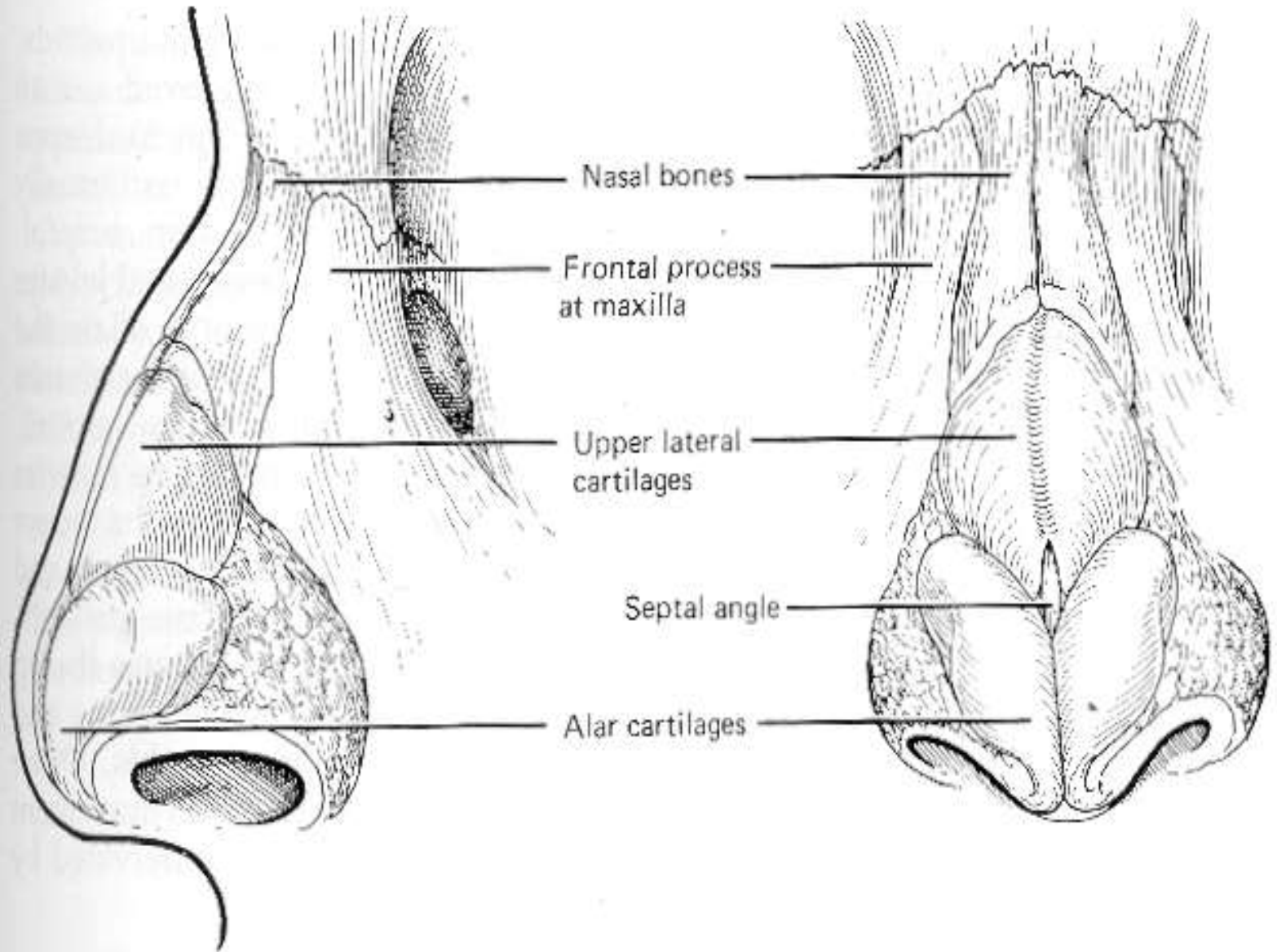


# **Anatomy of nose and paranasal sinuses**



15.4 Surface anatomy of the nose



# Nasal vestibule

- Is part of external nose and is lined by skin and contains hair called vibrissae
- It is limited above and behind by curved ridge, the limen nasi

# Nasal fossae

- The right and left nasal fossae are separated by nasal septum
- The nasal fossa includes only that part which is lined by mucous membrane
- Each nasal fossa communicates with paranasal sinuses and nasopharynx

# Nasal fossa floor

- Palatine process of maxilla and horizontal parts of palatine bone

# Nasal fossa roof

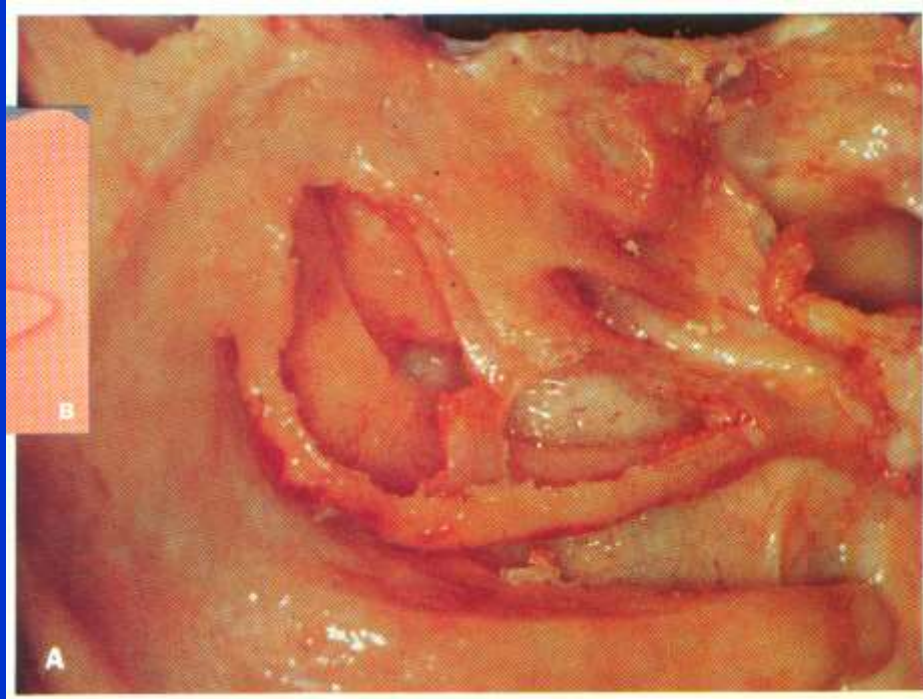
- Nasal process of frontal bone ,cribriform plate of ethmoid ,and body of sphenoid bone

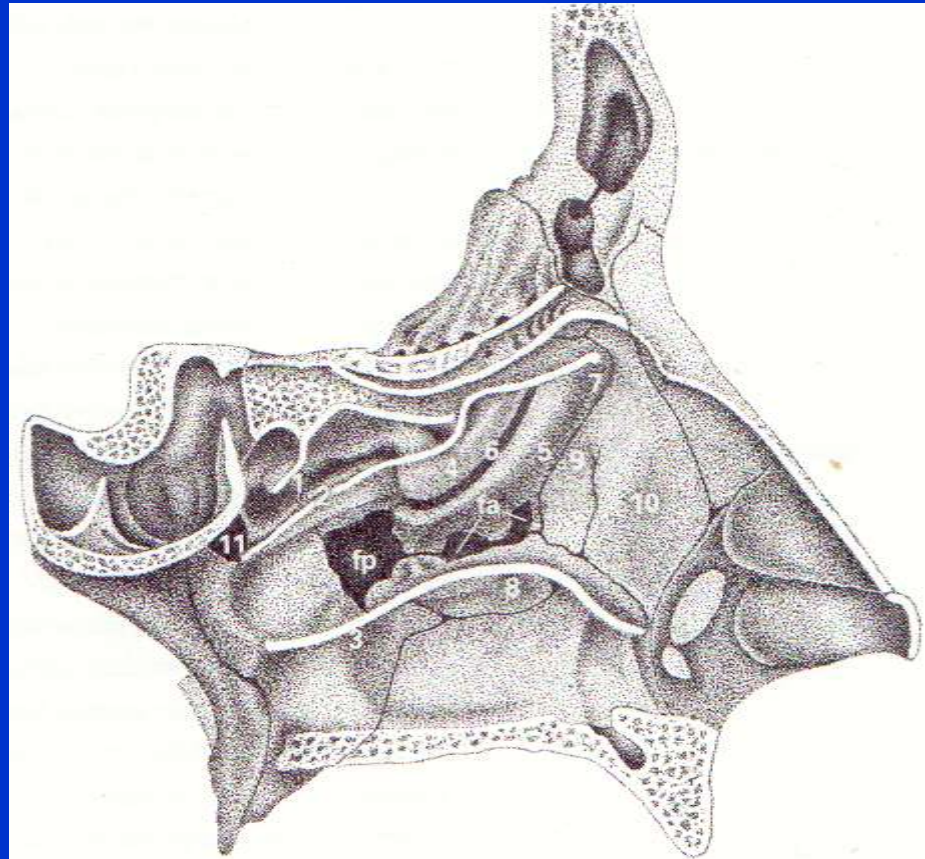
# Lateral wall

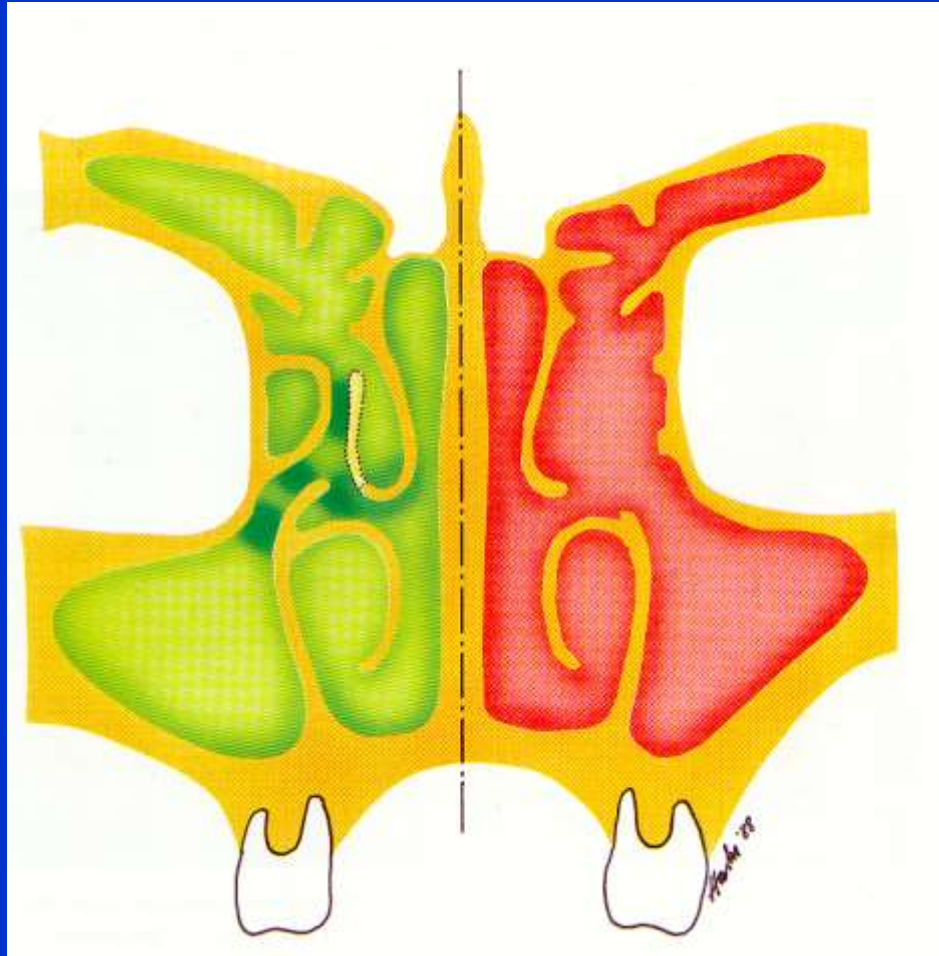
- Medial walls of maxilla bone
- Lateral mass of ethmoid and lacrimal bone
- Ascending process of maxilla
- Perpendicular part of palatine bone and medial pterygoid plate

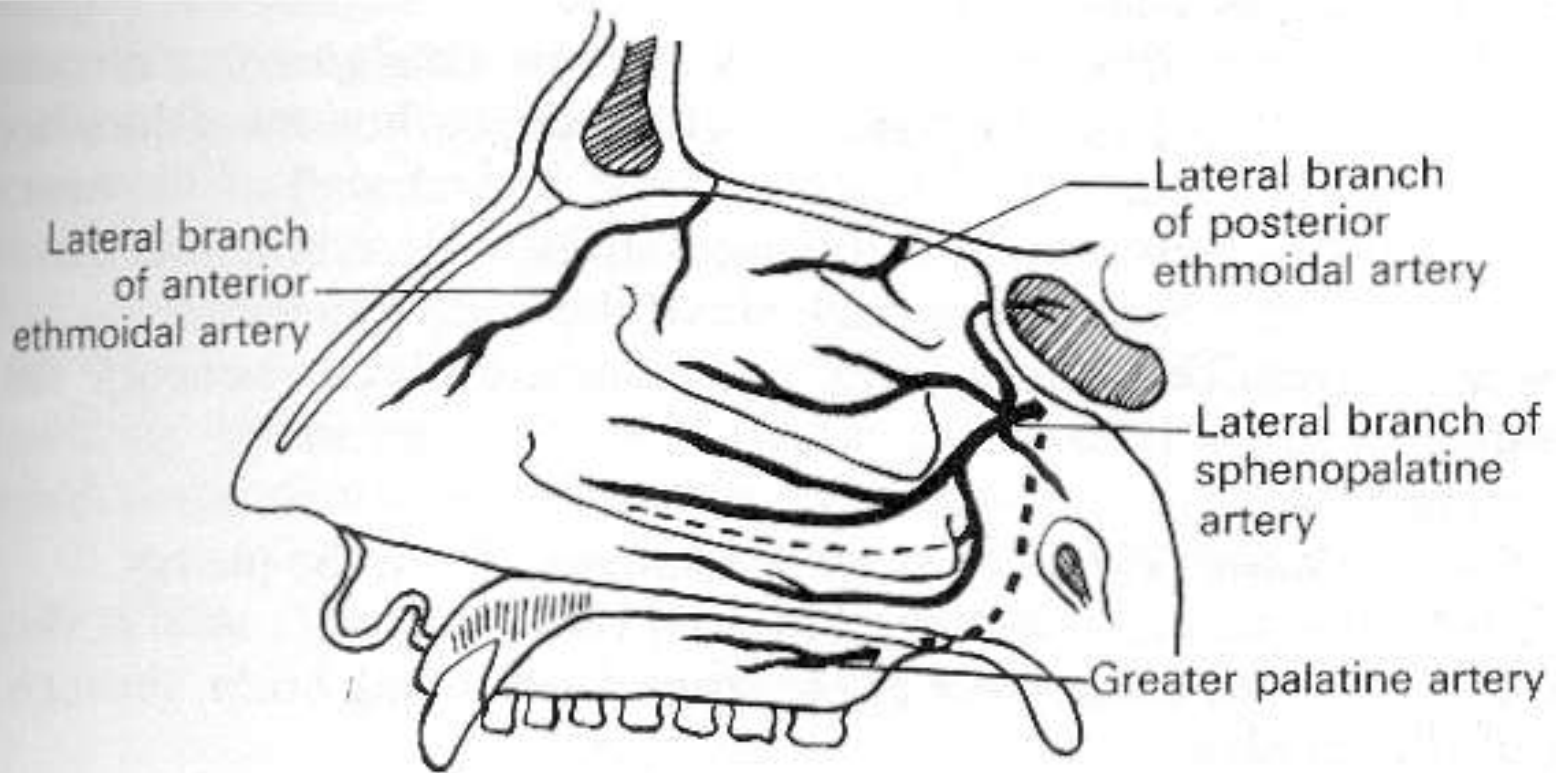






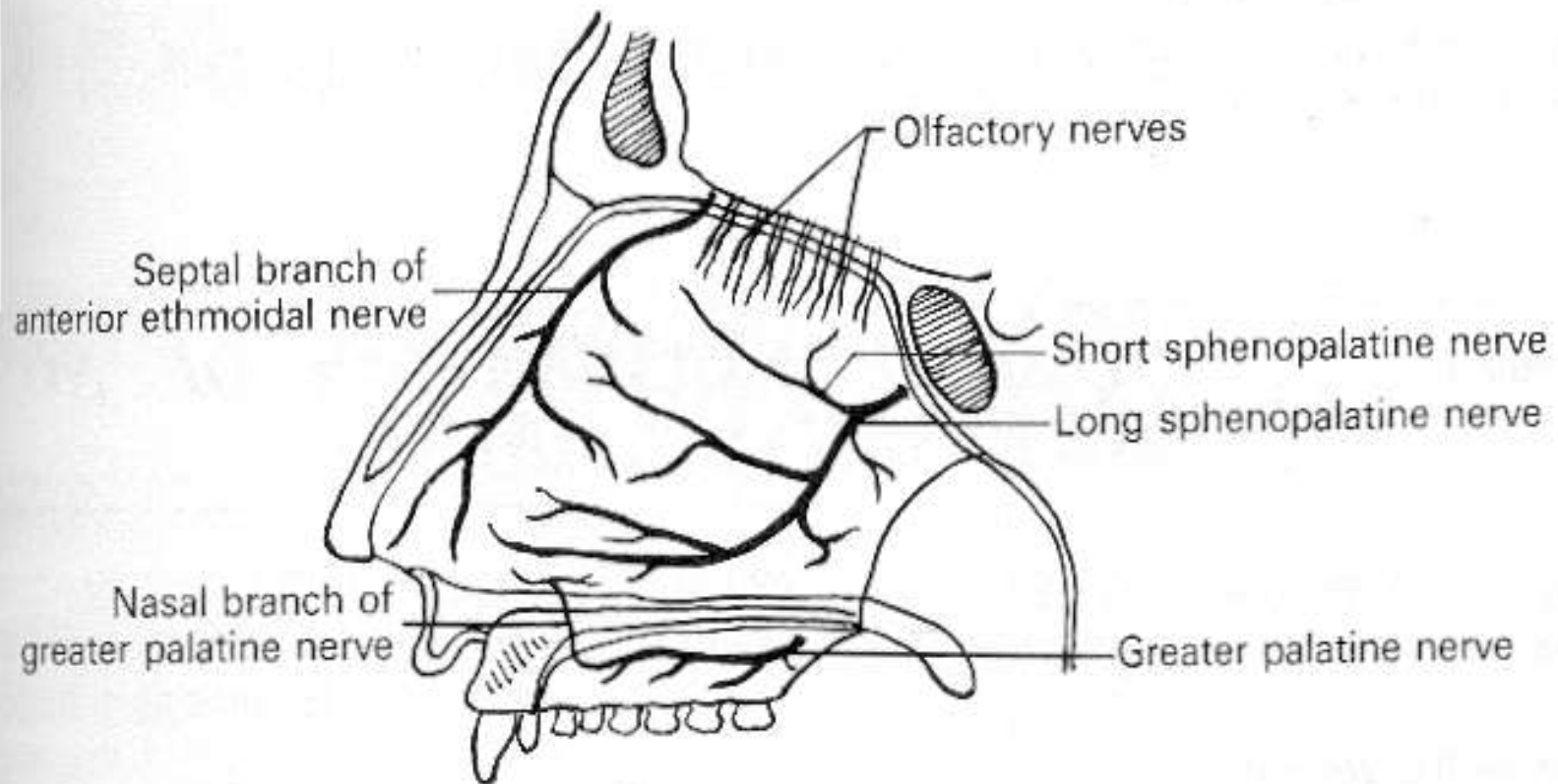




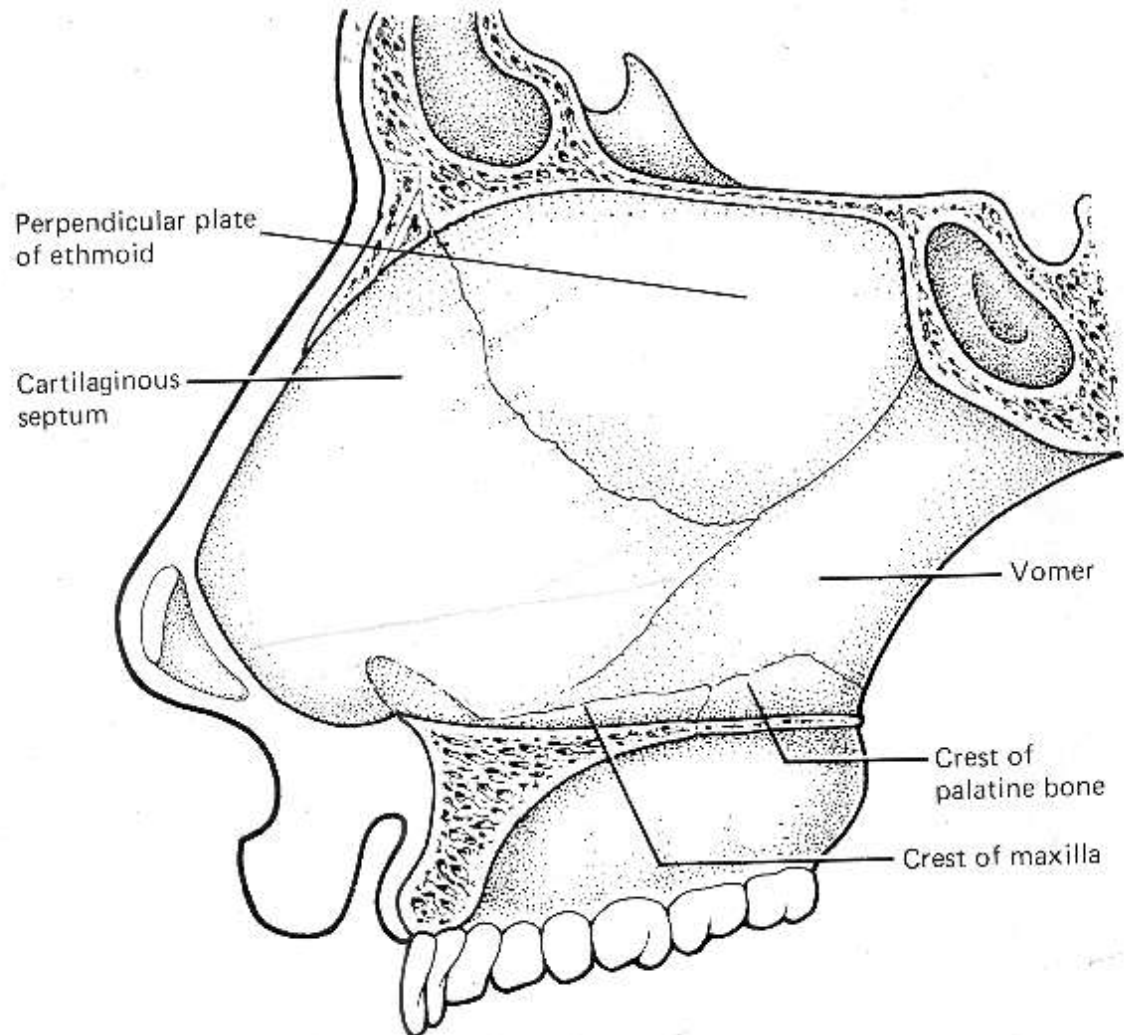


*a*

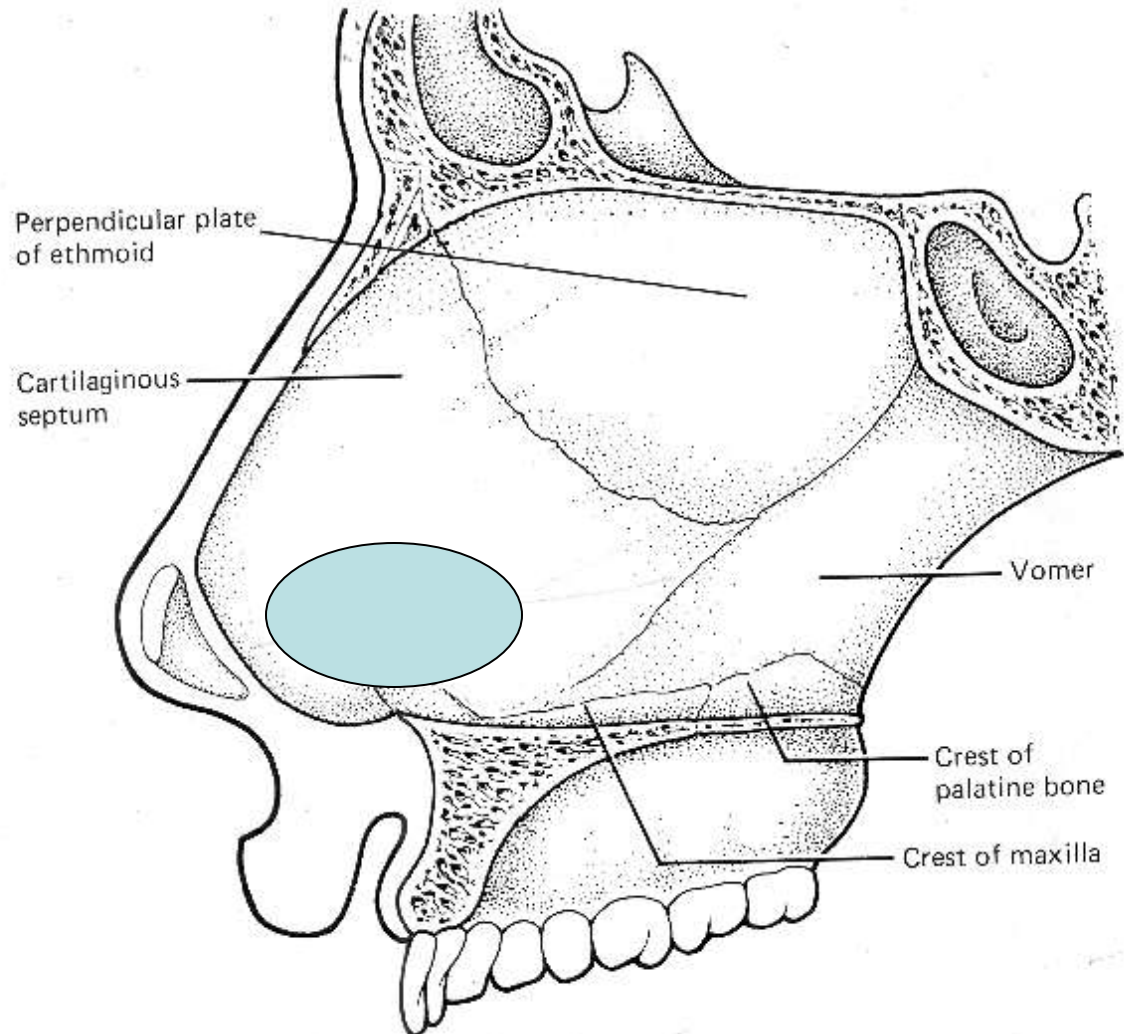




*b*



250 *Rhinoplasty*





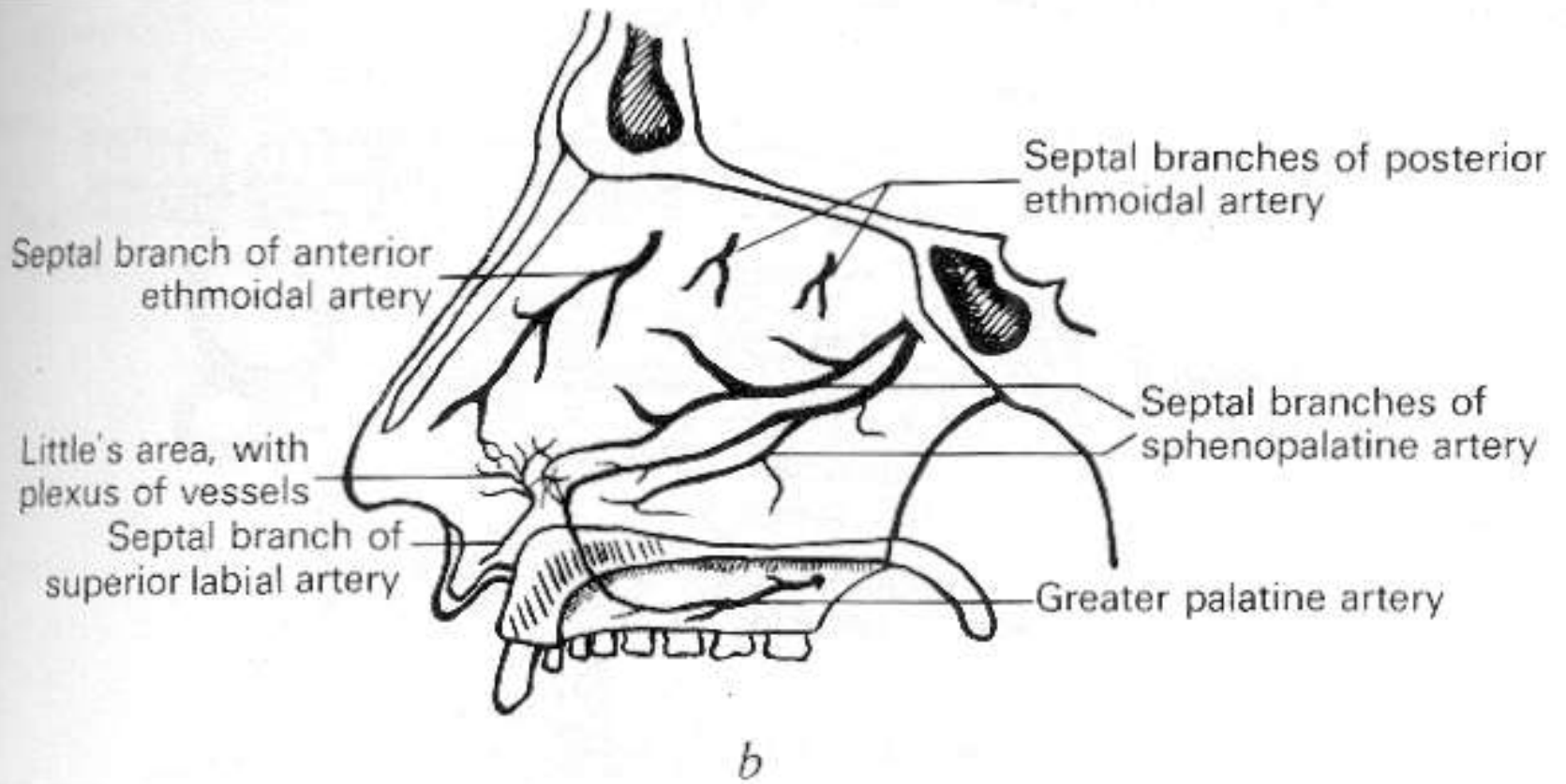
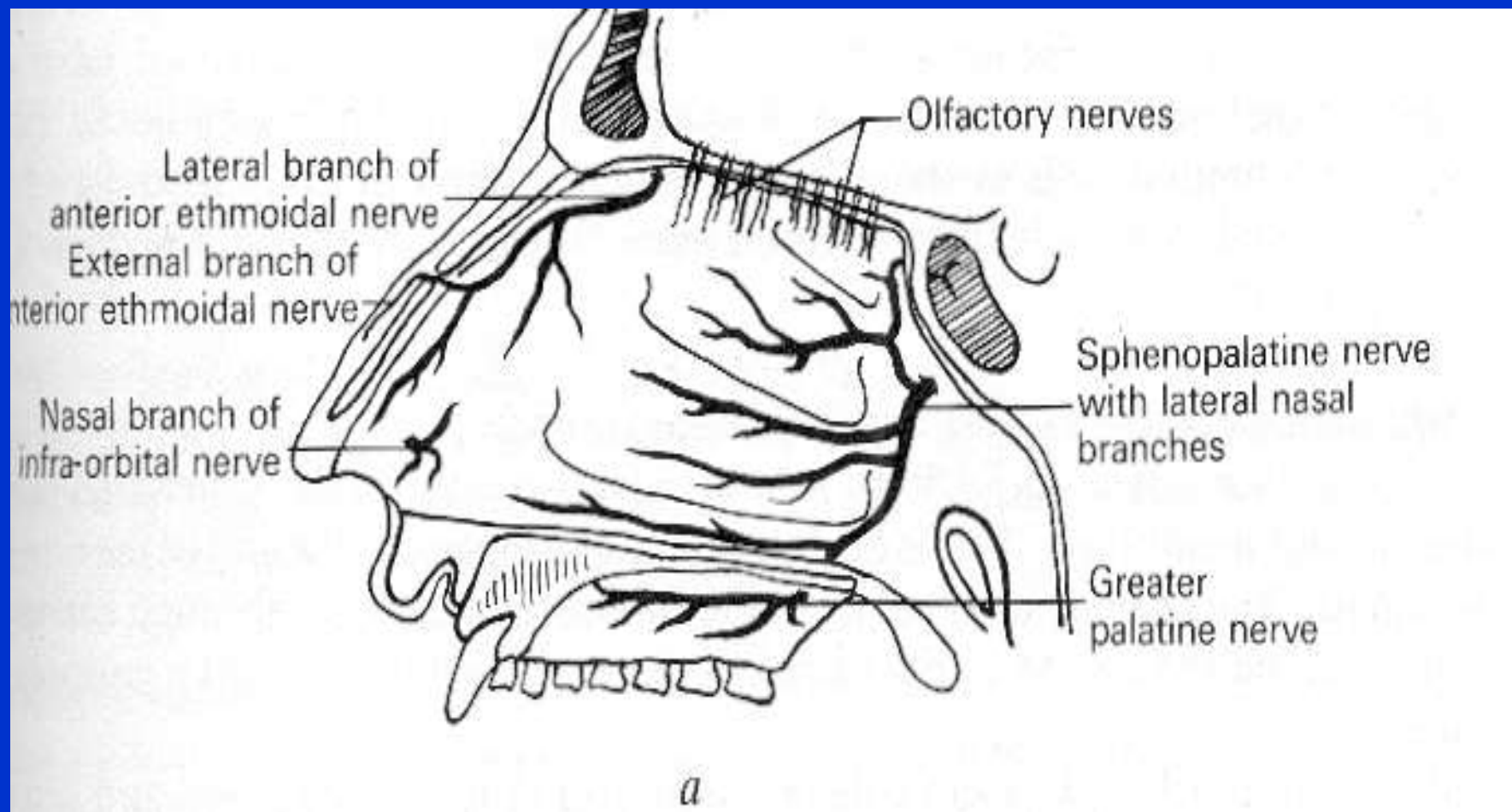


Fig. 30.7. *a*. Blood supply of nose (lateral wall), *b*. Blood supply of nose



# Paranasal sinuses

- These are air spaces within certain bones of the skull. There are four on each side.
- Maxillary sinus
- Ethmoid sinuses
- Frontal sinus
- Sphenoid sinus

# Maxillary sinus

- Is pyramidal in shape. It occupies the body of the maxilla.
- The base lies medially .
- The apex is in the zygomatic portion of the maxilla.
- It is the largest of the sinuses.
- Average capacity is 15ml in adults
- Medial wall is the party wall between the sinus and nasal fossa

# Maxillary sinus cont.

- Apex may extend into zygomatic process of maxilla
- Roof is the thin floor of orbit .It is grooved by infraorbital nerve
- Floor is formed by alveolar process and hard palate. In children it lies at or above the level of floor of nasal fossa.In adults it lies one cm. below the nasal fossa floor. The roots of many teeth may be related to floor.

# Maxillary sinus cont.

- Posterior wall is pierced by dental canals which transmit the posterior superior dental vessels and nerves to molar teeth.
- Anterior wall separates the sinus from skin of the cheek. It contains the anterior superior dental vessels and nerves and the foramen for the infraorbital nerve.

# Ethmoid sinuses

- 7-15 in number
- Divided into anterior and posterior group
- Anterior cranial fossa lies above, the orbit is lateral to these.
- Lacrimal sac is also lateral
- Optic nerve is closely related to posterior group

# Frontal sinus

- An upward extension of anterior ethmoid cells.
- Present in frontal bone
- Average capacity is 7 ml. Opens into middle meatus



