



Anatomy of the nose

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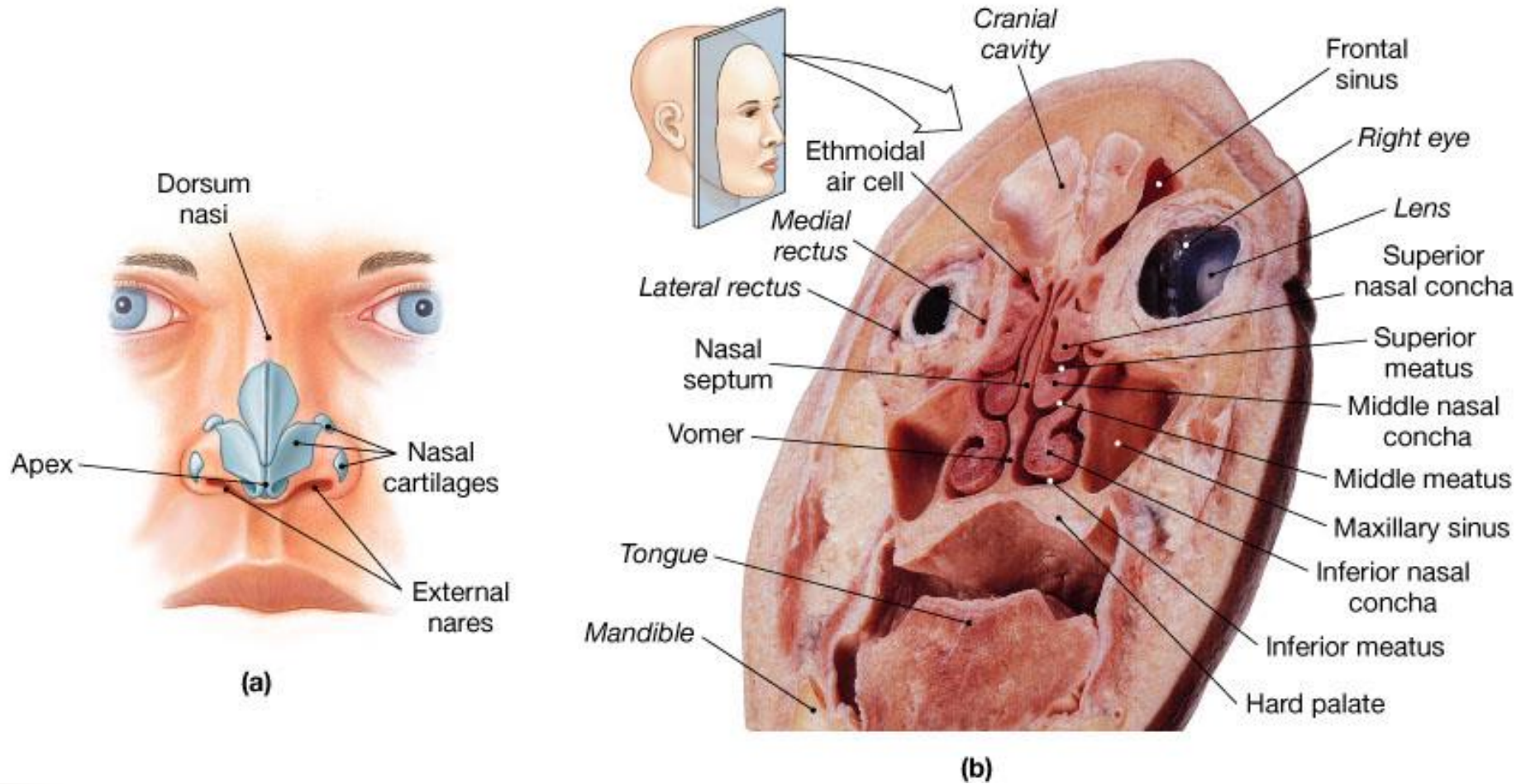


Anatomy of the Nose

- The nose is made up of a framework of bone and cartilage, lined with skin on the outside and with mucosa on the inside .
- The nasal mucosa is lined for the most part with ciliated columnar epithelium except for a small area of highly **specialized olfactory mucosa**, which is receptive to scents and odours and communicates with the olfactory nerve.



The Nose, Nasal Cavity, and Pharynx



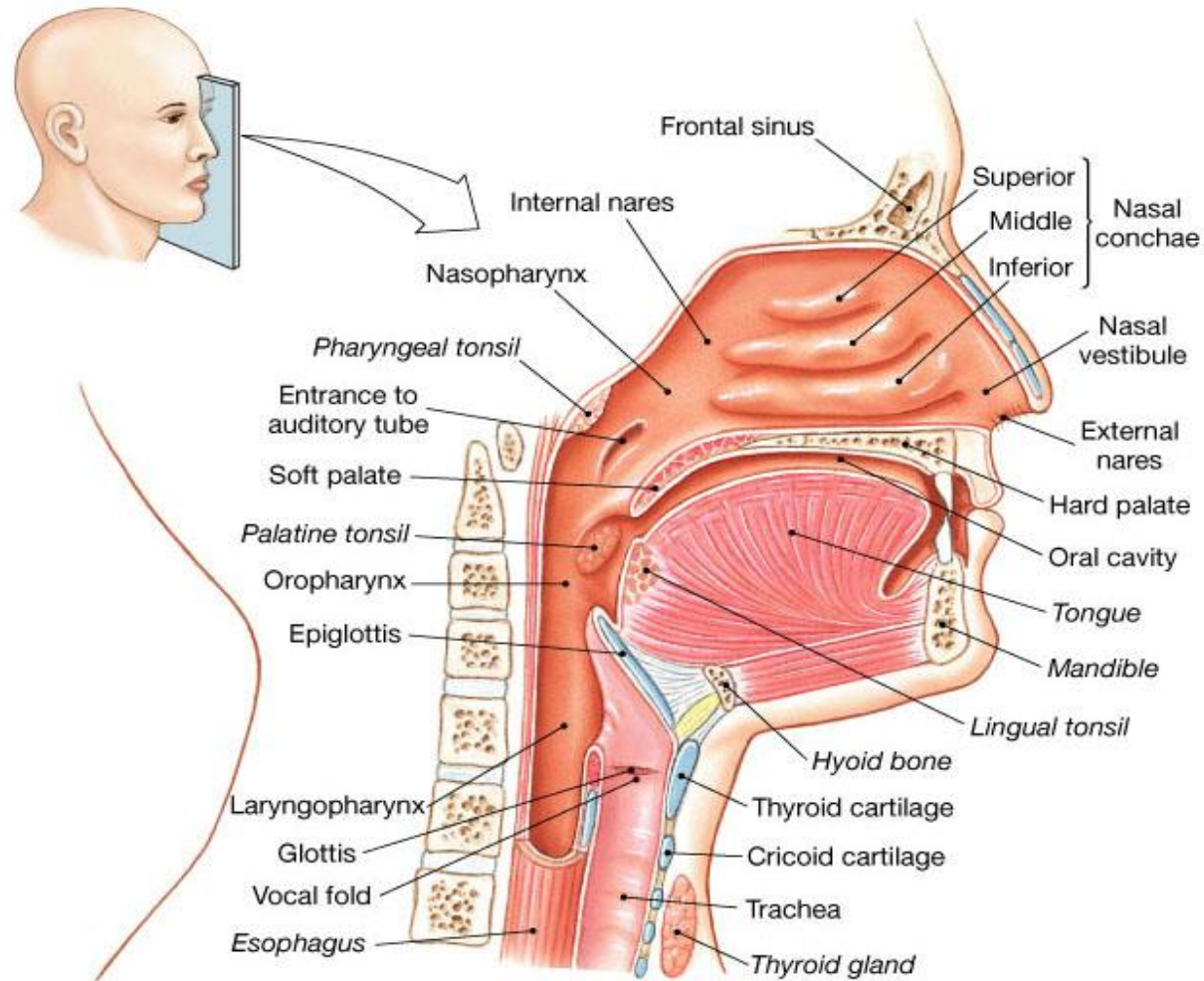


Anatomy of the Nose

- The largest of the cartilages that makes up the nose is the septal cartilage, dividing the nasal cavity in two.
- The anterior part of the nose is termed the nasal vestibule. The posterior nasal apertures are the choanae.
- These open to the upper part of the pharynx – the nasopharynx.



The Nose, Nasal Cavity, and Pharynx



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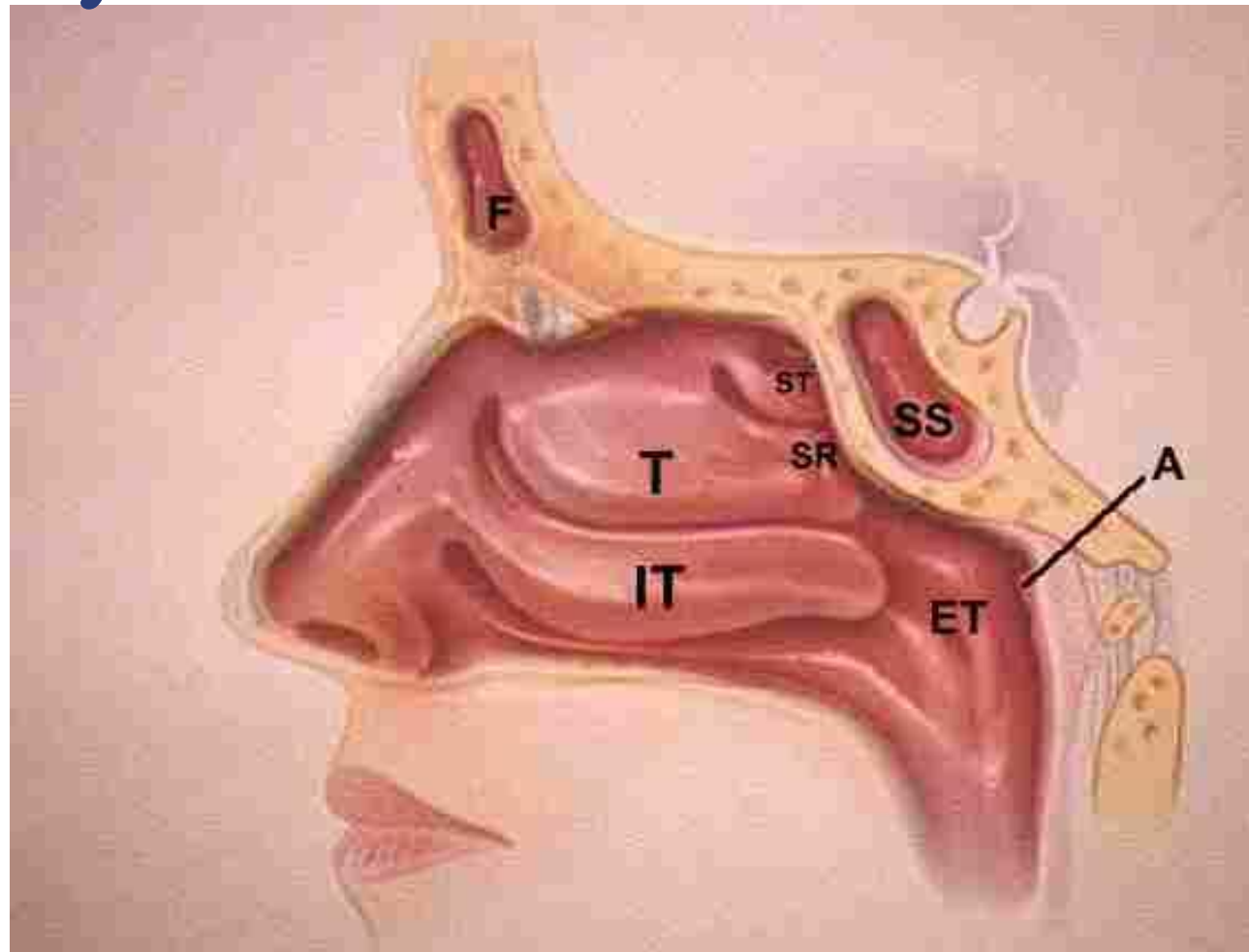


Anatomy of the Nose

- The lateral wall of the nose is contoured with three bony swellings, covered with mucosa, projecting into the nasal cavity.
- These are the turbinates, which can become gorged and swollen when inflamed- ‘rhinitis’ .

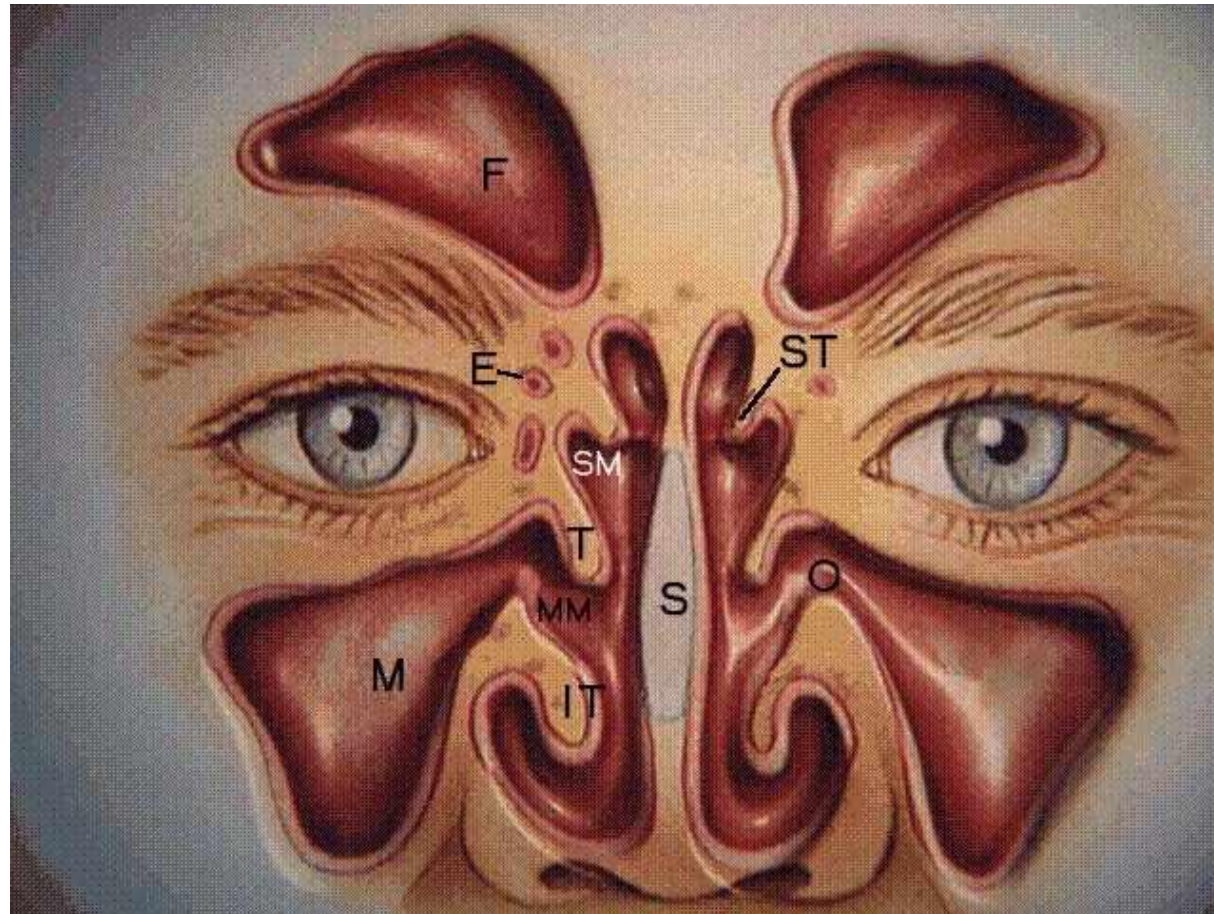


Anatomy of the nose and Sinuses



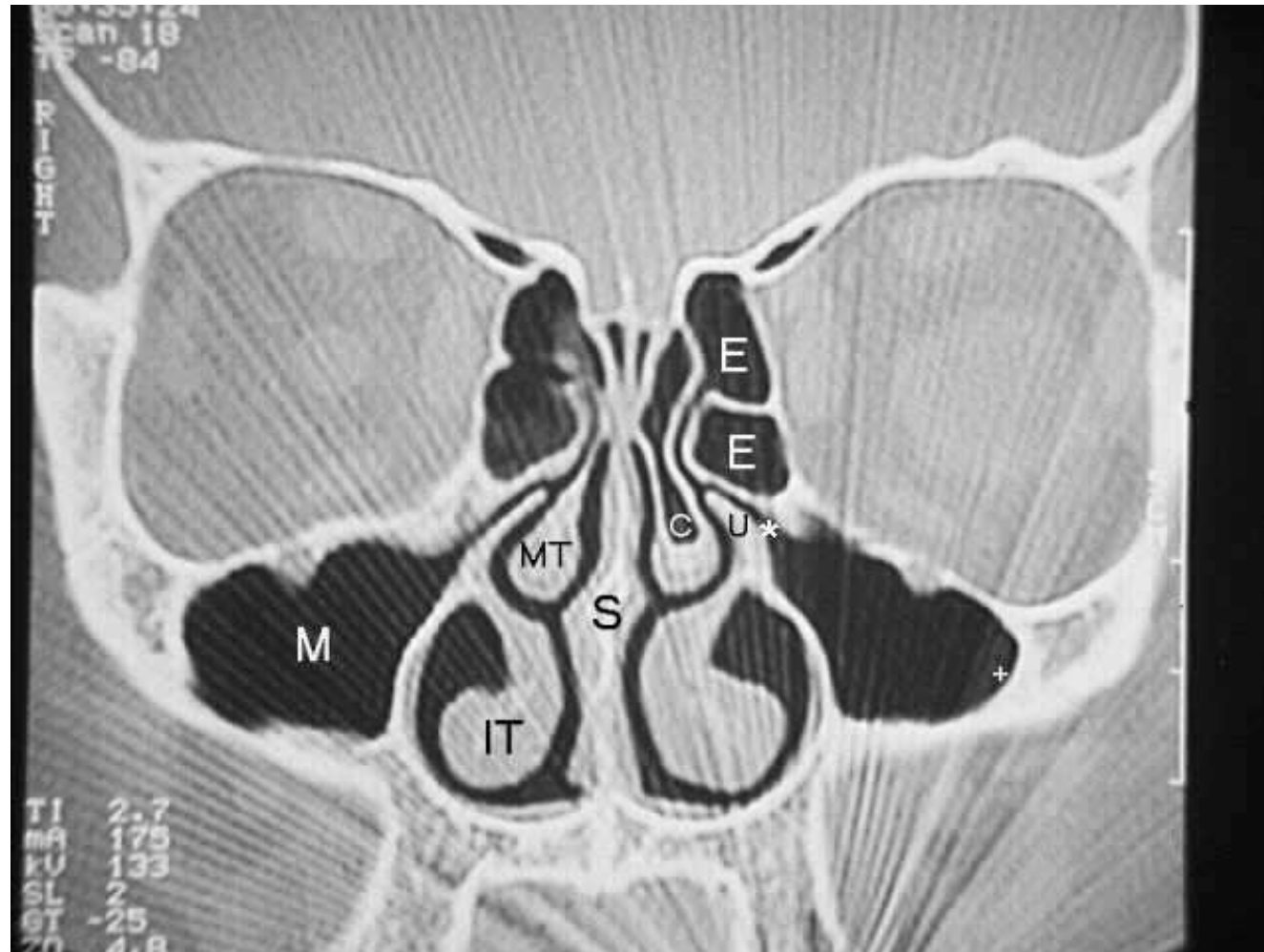


Anatomy of the nose and Sinuses





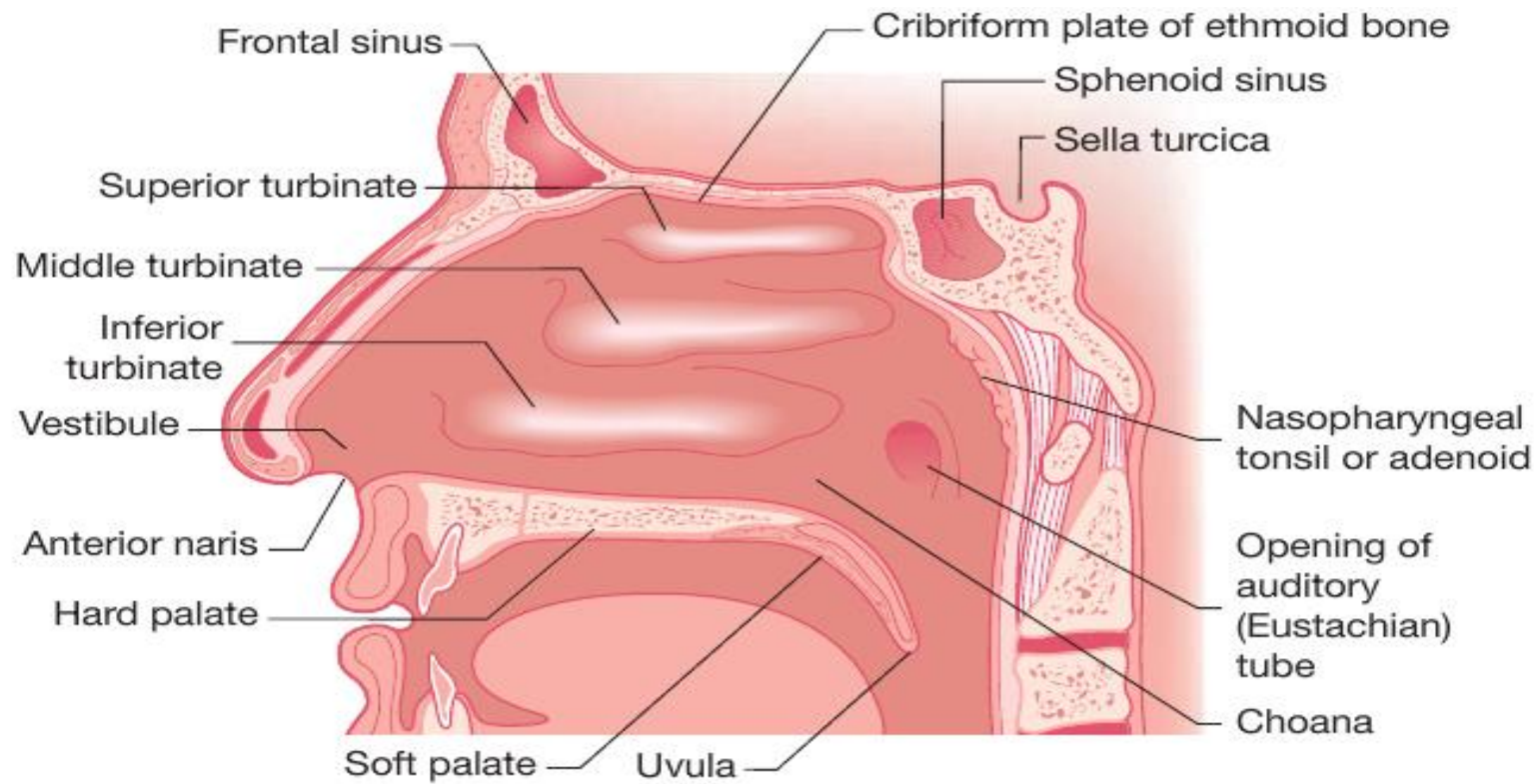
Anatomy of the nose and Sinuses

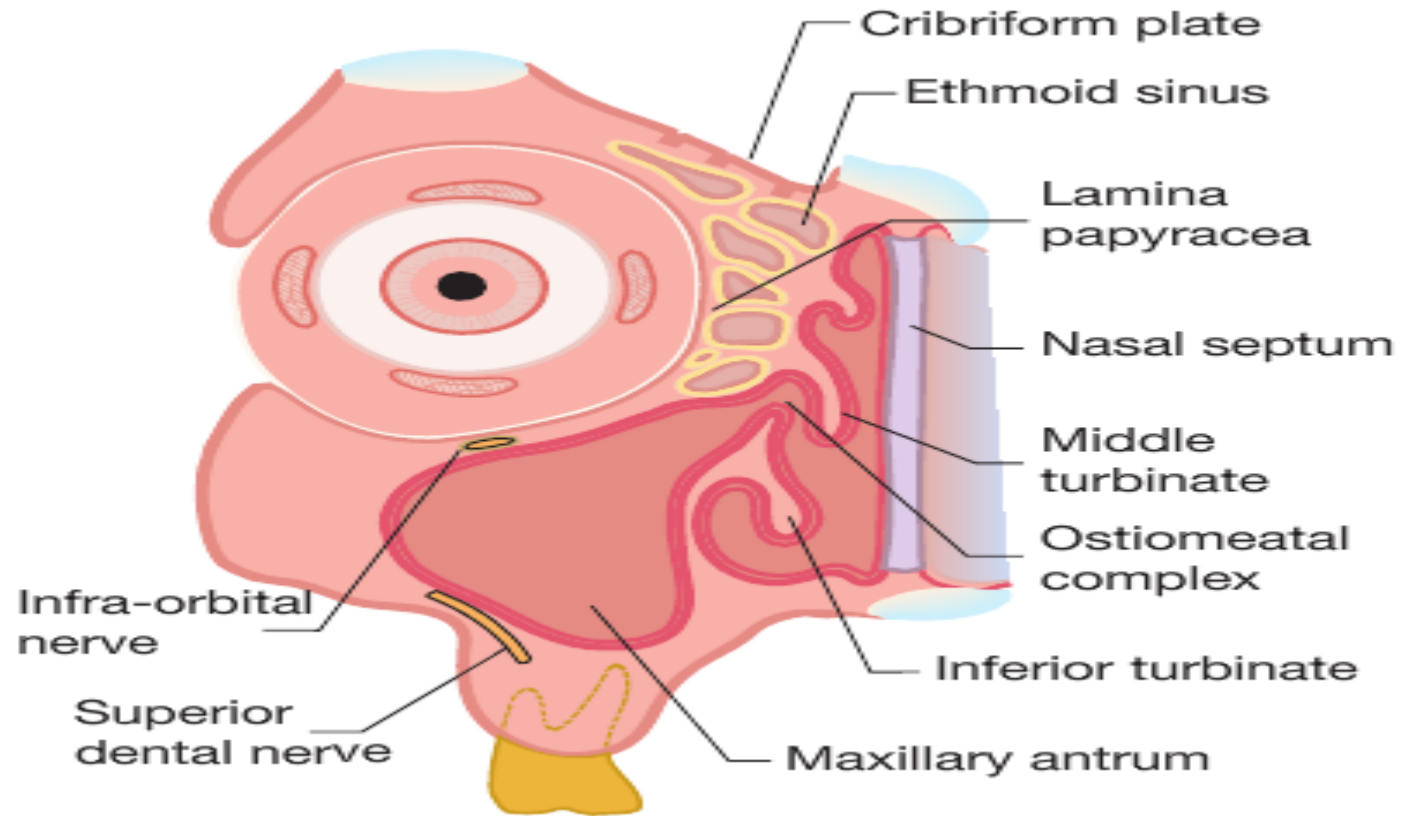




Functions of the Nose

- A conduit for the passage of air-the first part of the respiratory tract
- Parts of the respiratory defense against infection
- Warmed and humidifies inspired air
- Olfaction





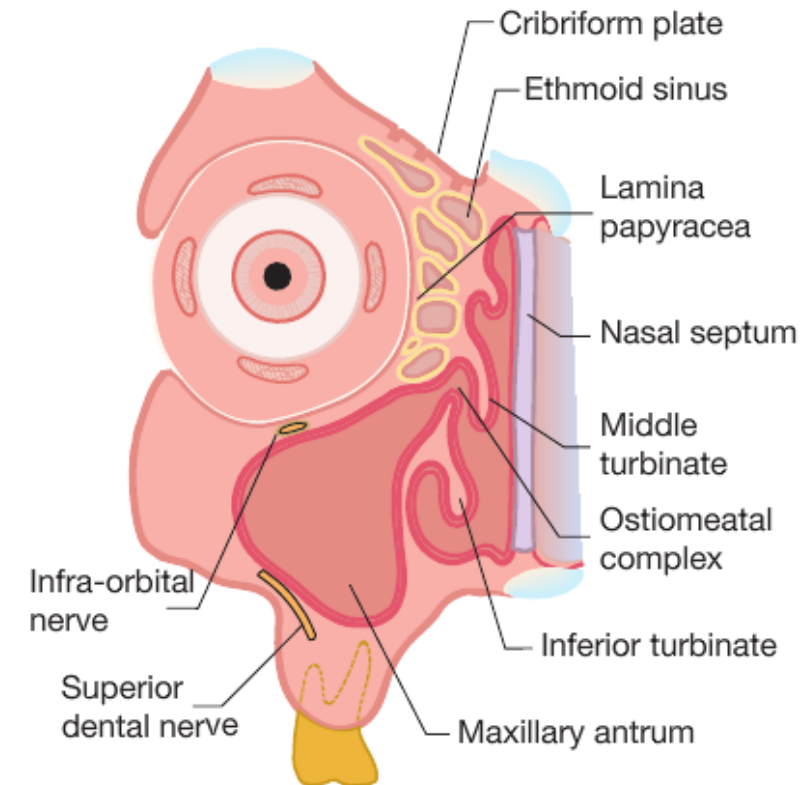


The sinuses

- The paranasal sinuses are a series of air-filled cavities that communicate directly with the nose.
- They are lined with nasal mucosa and are subject to the same diseases as the nose itself – notably inflammatory processes.
- Hence the term ‘rhinosinusitis’ is more accurate than ‘sinusitis’.

The maxillary sinus or 'antrum

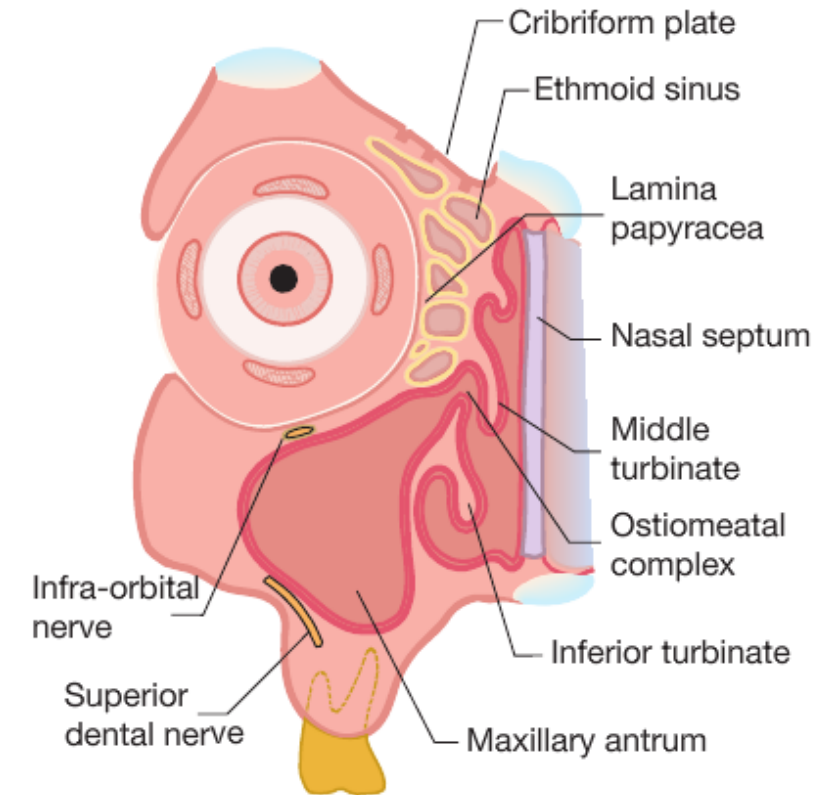
- ❑ The largest of the sinuses with a capacity in the adult of approximately 15 mL.
- ❑ The orbit lies above and the hard palate with the roots of the **second premolar** and **the first two molar teeth** forms the floor
- ❑ Medially the antrum is separated from the nose by the lateral nasal wall made up of the middle and inferior turbinate bones, each with a corresponding recess or 'meatus' below it





The Ethmoidal Sinuses

- form a honeycomb of air cells between the ‘lamina papyracea’ or thin bone at the medial wall of the orbit and the upper part of the nose.
- An upward extension forms the fronto-nasal duct draining the frontal sinus. The frontal sinus is within the frontal bone in the forehead and the sphenoidal sinus is in the midline within the sphenoid bone behind the nose.





frontal sinus and sphenoid sinus

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- the sphenoidal sinus is in the midline within the sphenoid bone behind the nose.

