

Nasal Discharge Related Anatomy

Erin Malone

Nasal discharge can be any of the following:

- ▶ No air (see congenital notes)
- ▶ Pus
- ▶ Blood
- ▶ Serum

Serous discharge may be normal. It is rarely indicative of a surgical lesion



Discharge
can be
unilateral
or
bilateral

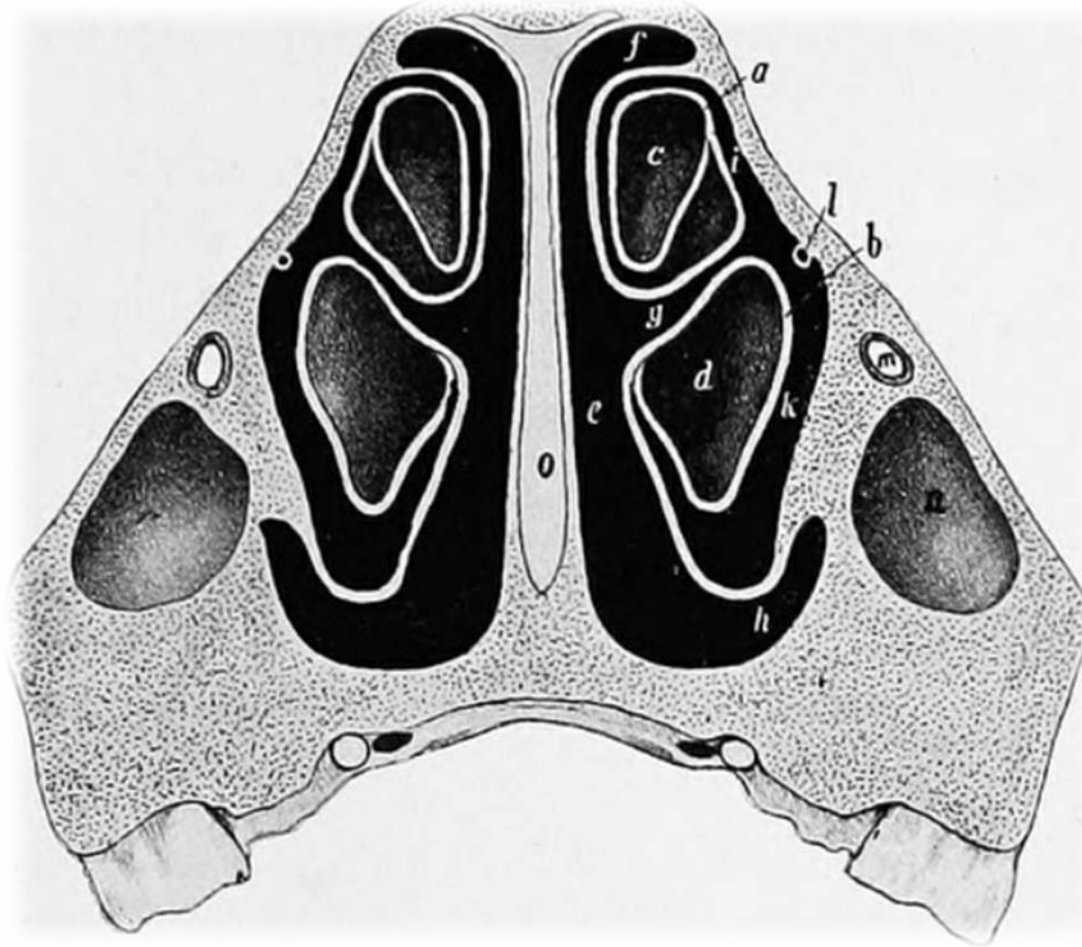


Nasal discharge can come from any of the following:

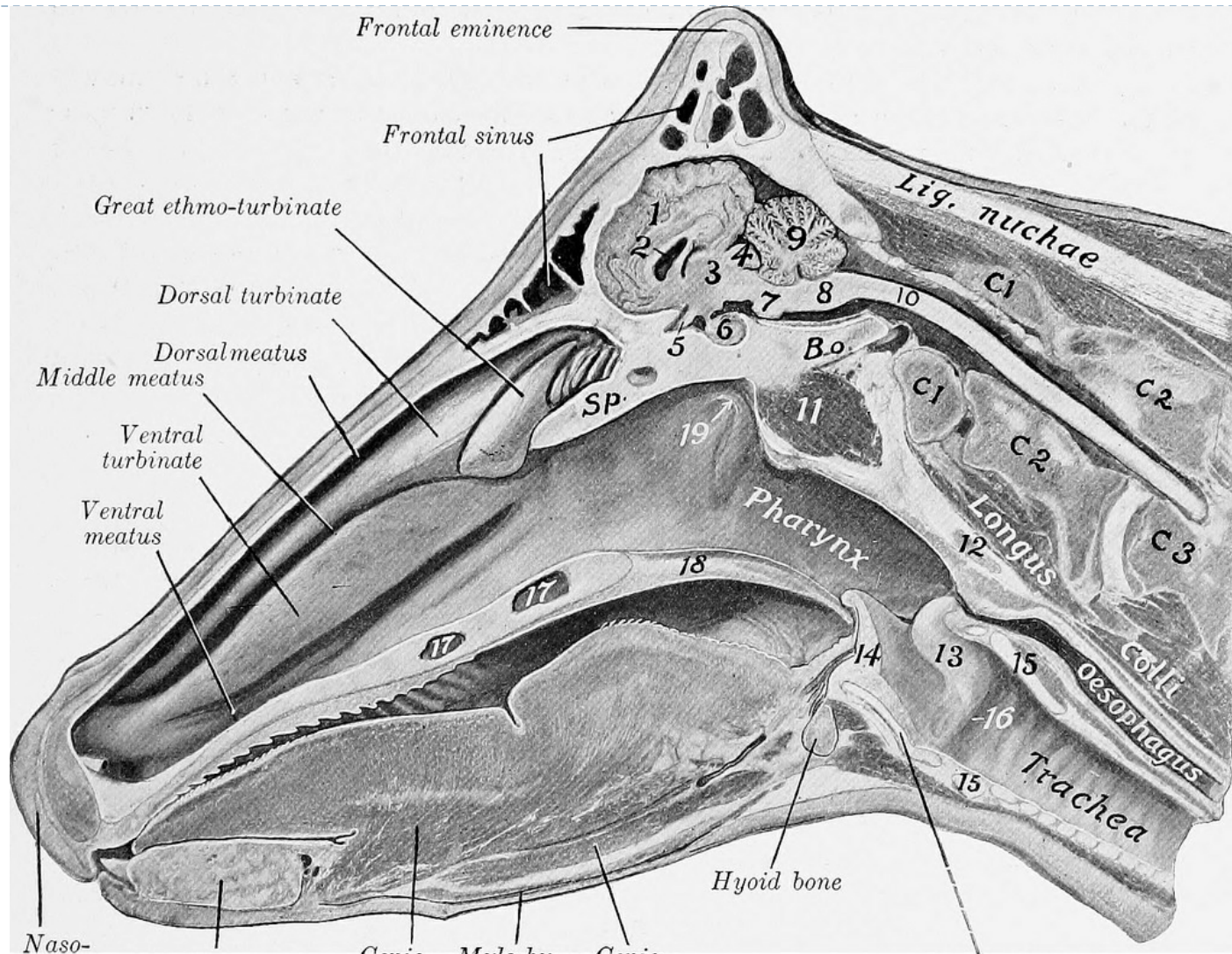
- ▶ Nasal passageway
- ▶ Sinus
- ▶ Guttural pouch
- ▶ LRT
 - ▶ Trachea
 - ▶ Lungs



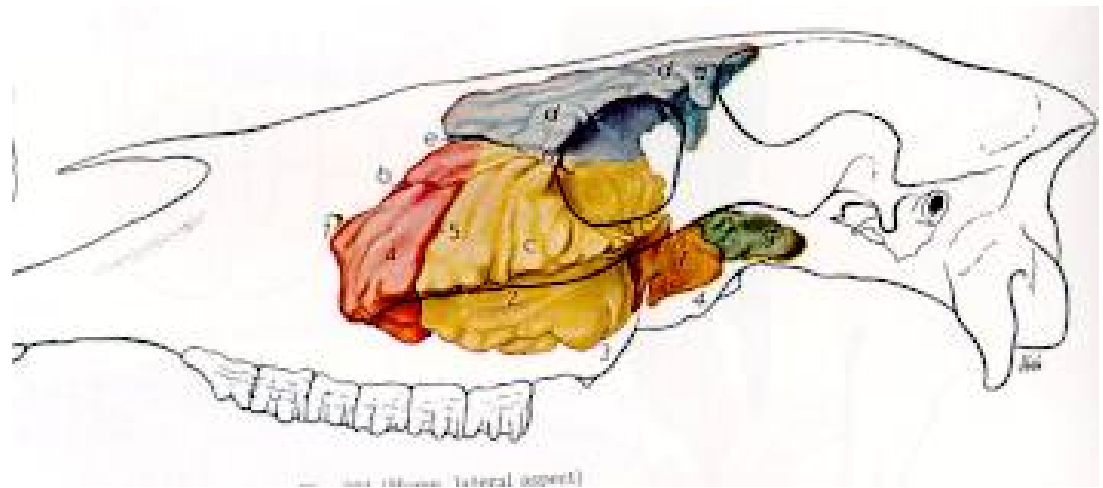
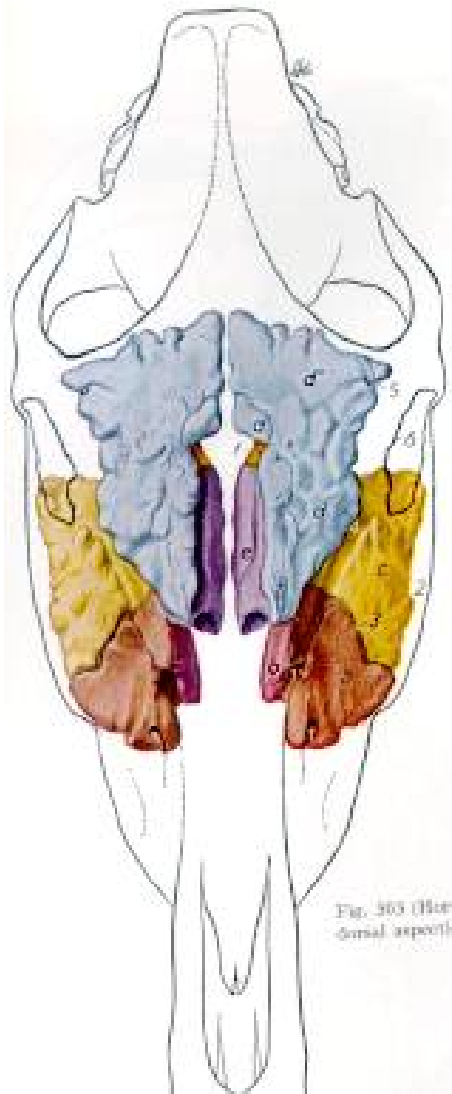
Unilateral nasal discharge comes from proximal to the pharynx due to the complete nasal septum



Unilateral nasal discharge can become bilateral due to retrograde flow to pharynx

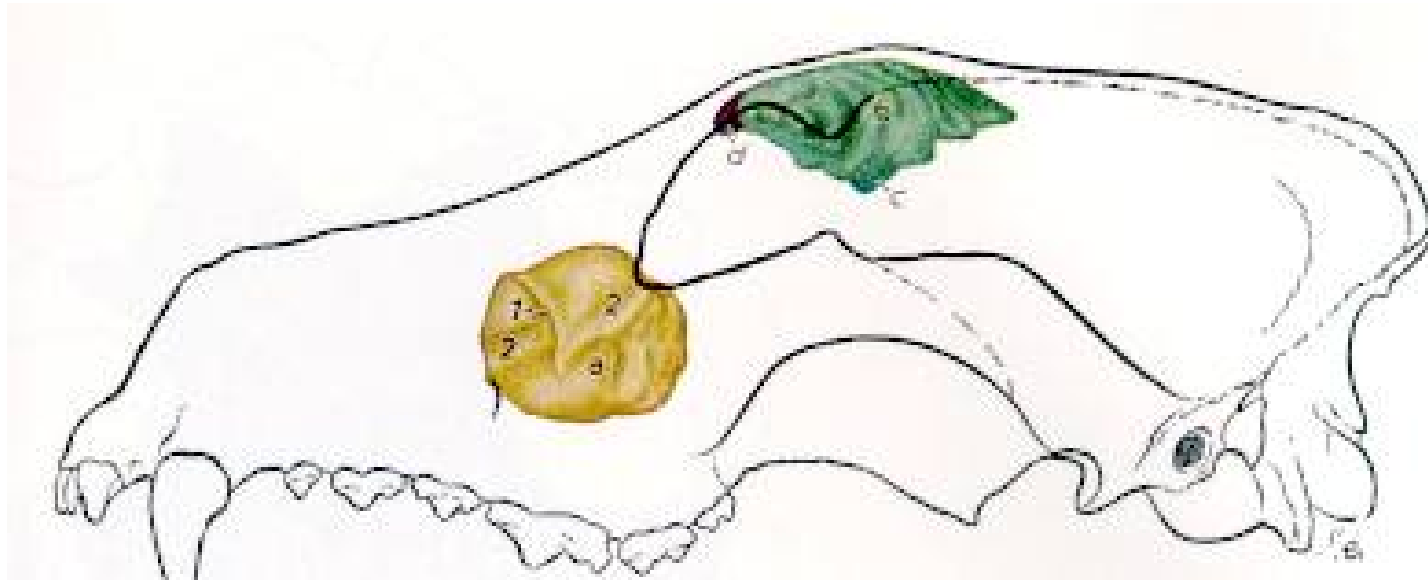


The horse has 7 sinuses. All are paired except the sphenopalatine (green)

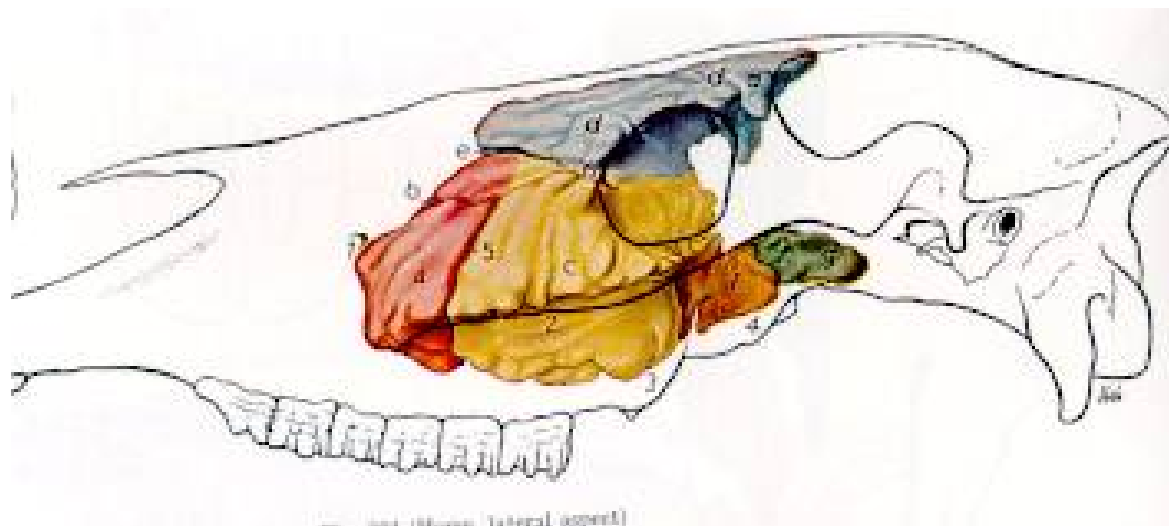
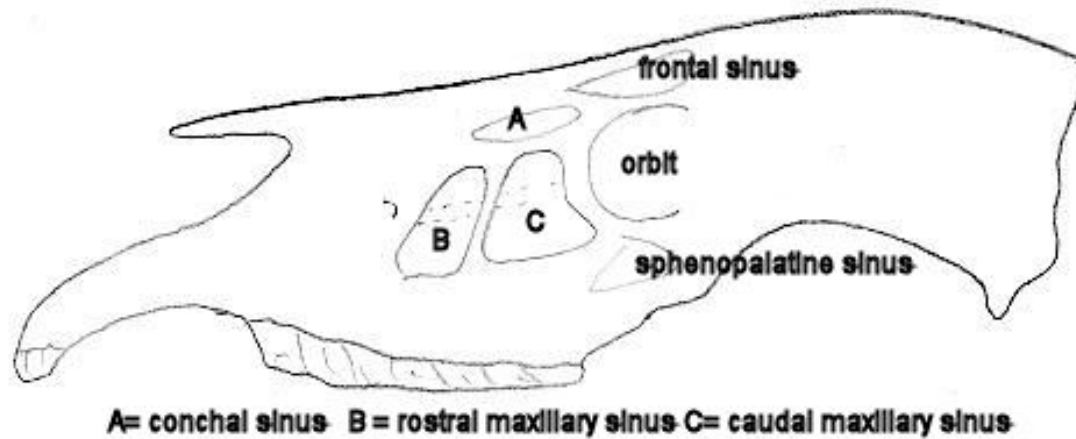




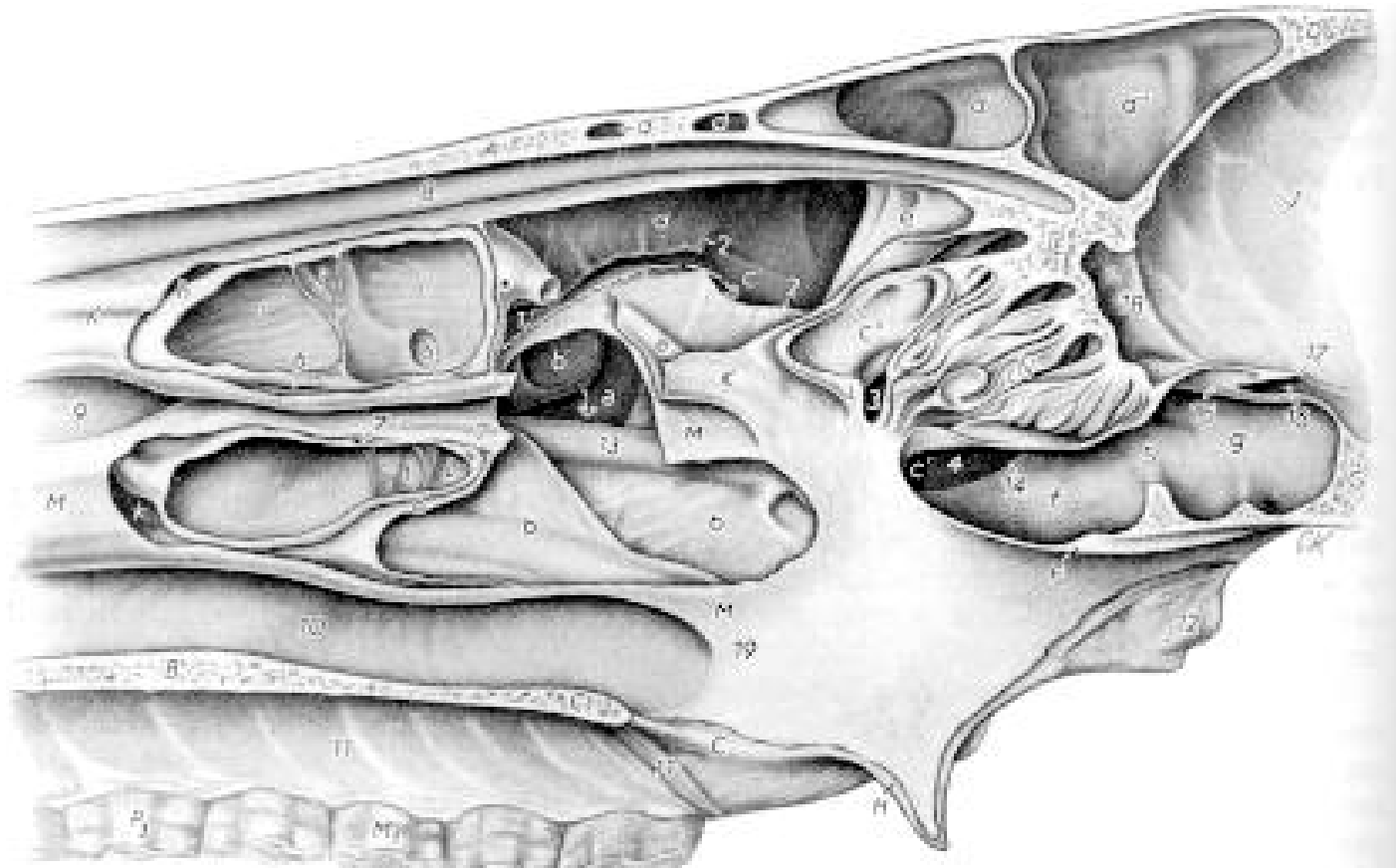
Dogs are simpler



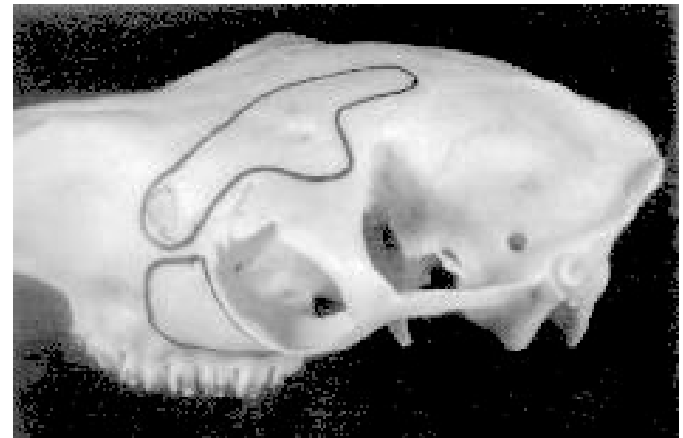
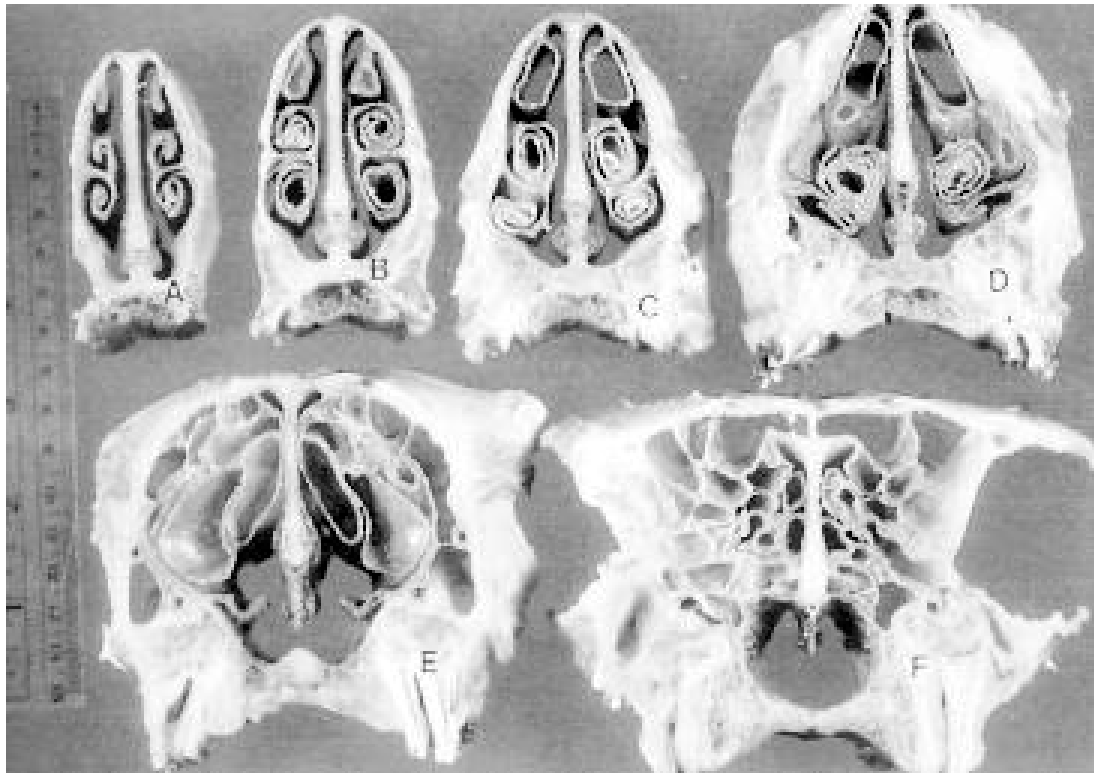
Main sinuses are frontal (blue) and maxillary (red and yellow)



The nasal conchae contain sinuses
(chonchal sinuses)



Camelids have more scrollwork in their conchae



In cattle, the frontal sinus extends into the horns

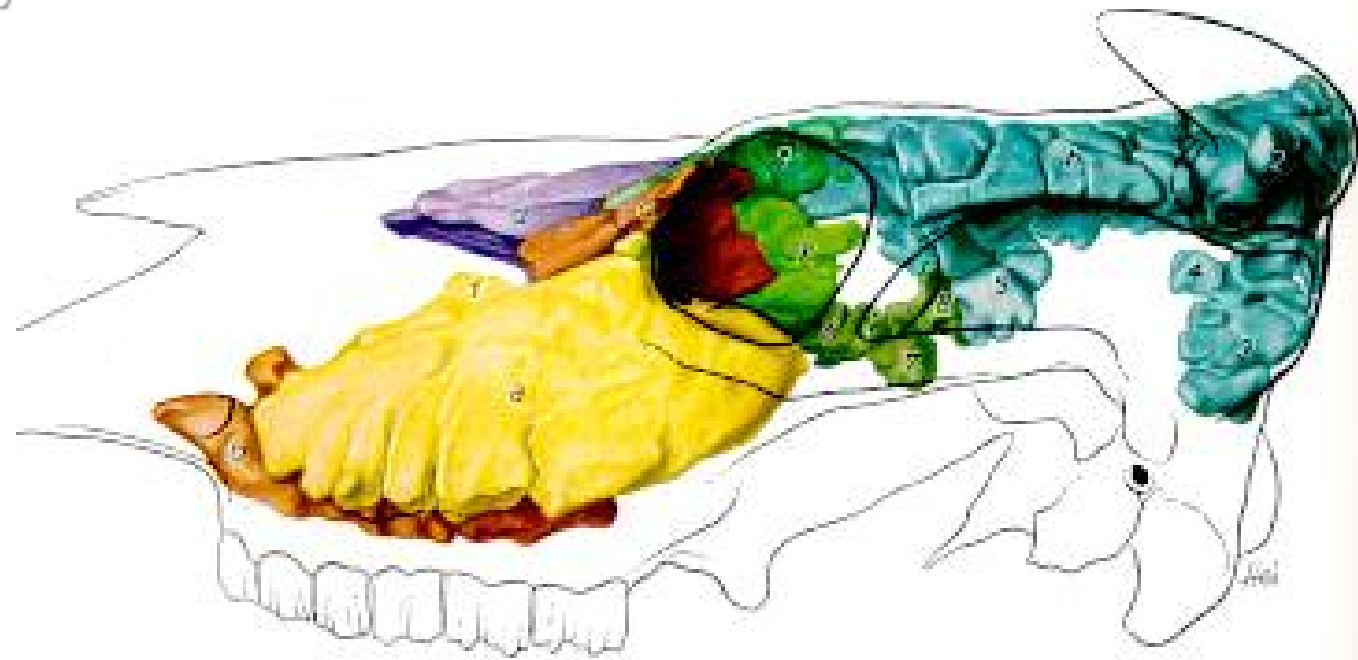
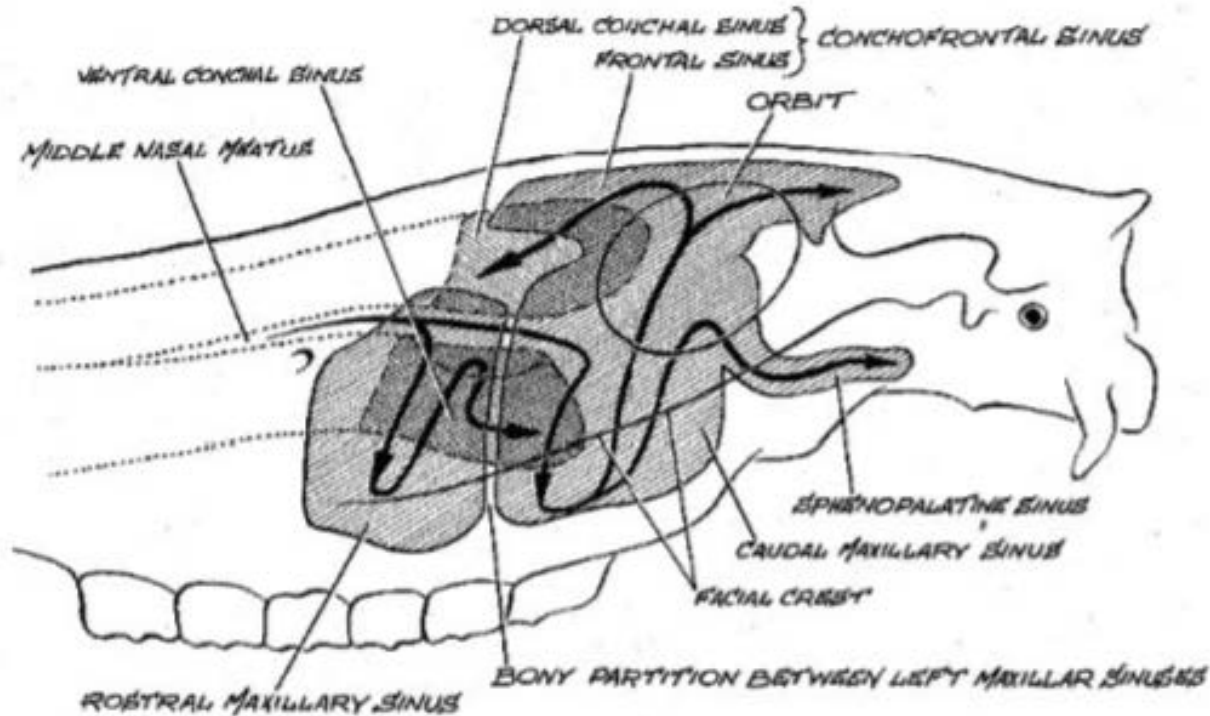


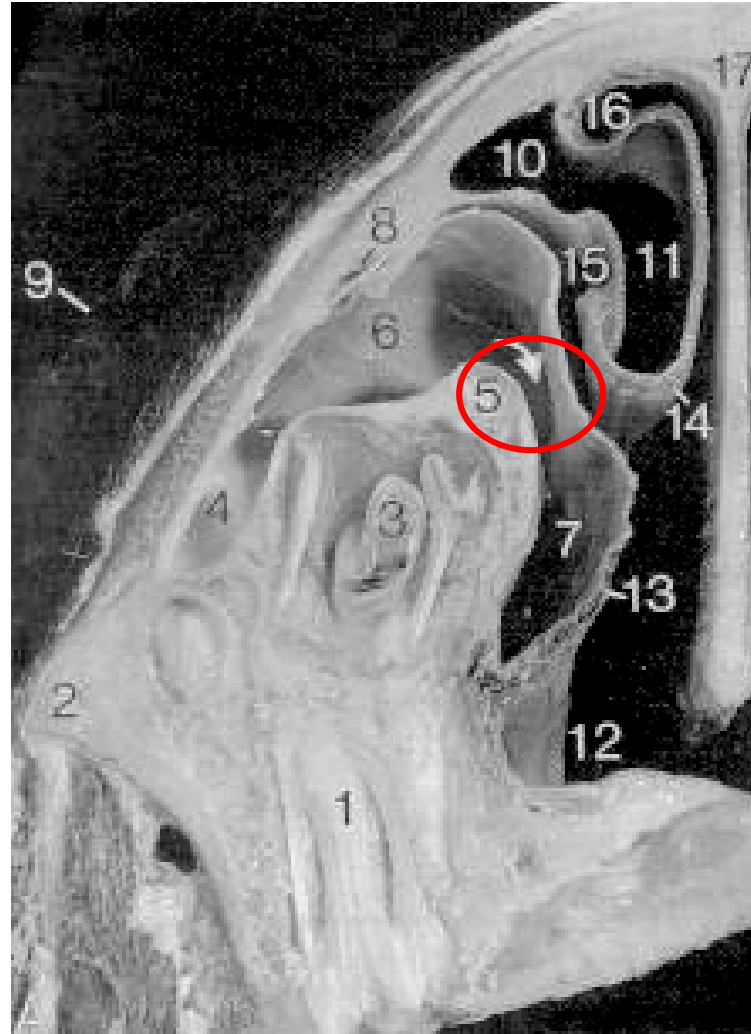
Fig. 297 (Os., lateral aspect)

Sinuses communicate with each other



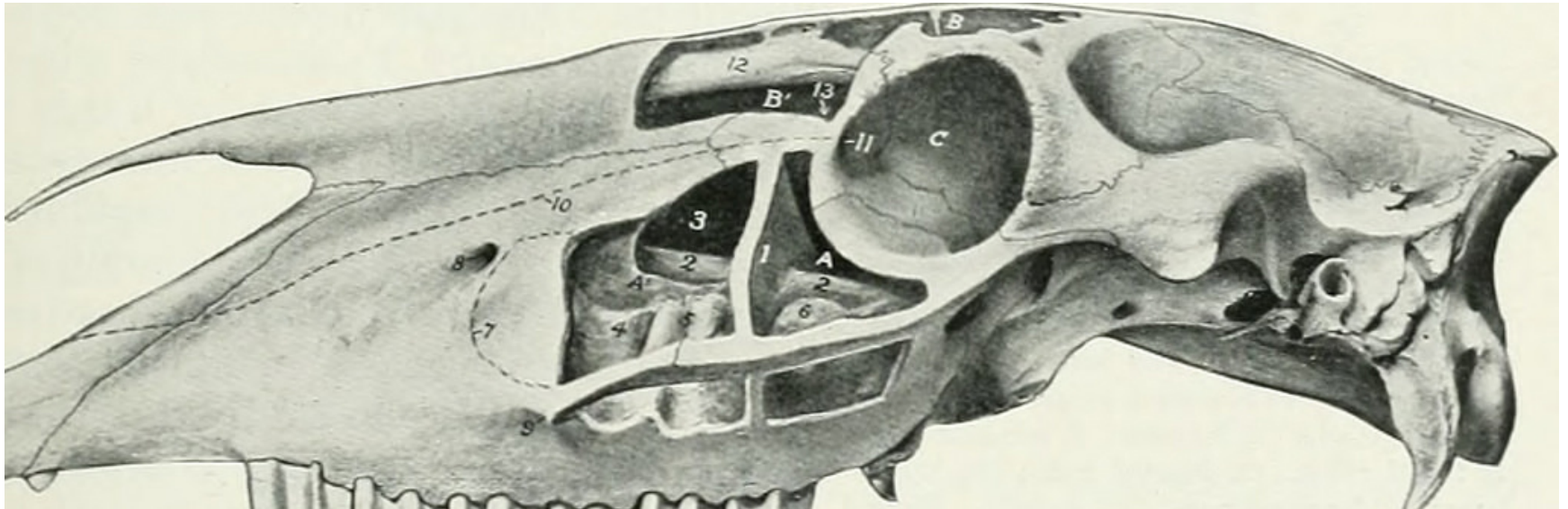
*SCHEMA OF LEFT PARANASAL SINUSES OF HORSE
THE ENTRANCE TO ALL SINUSES IS FROM THE MIDDLE NASAL MEATUS.*

Sinuses drain distally and empty into the nasal passageway through the nasomaxillary aperture

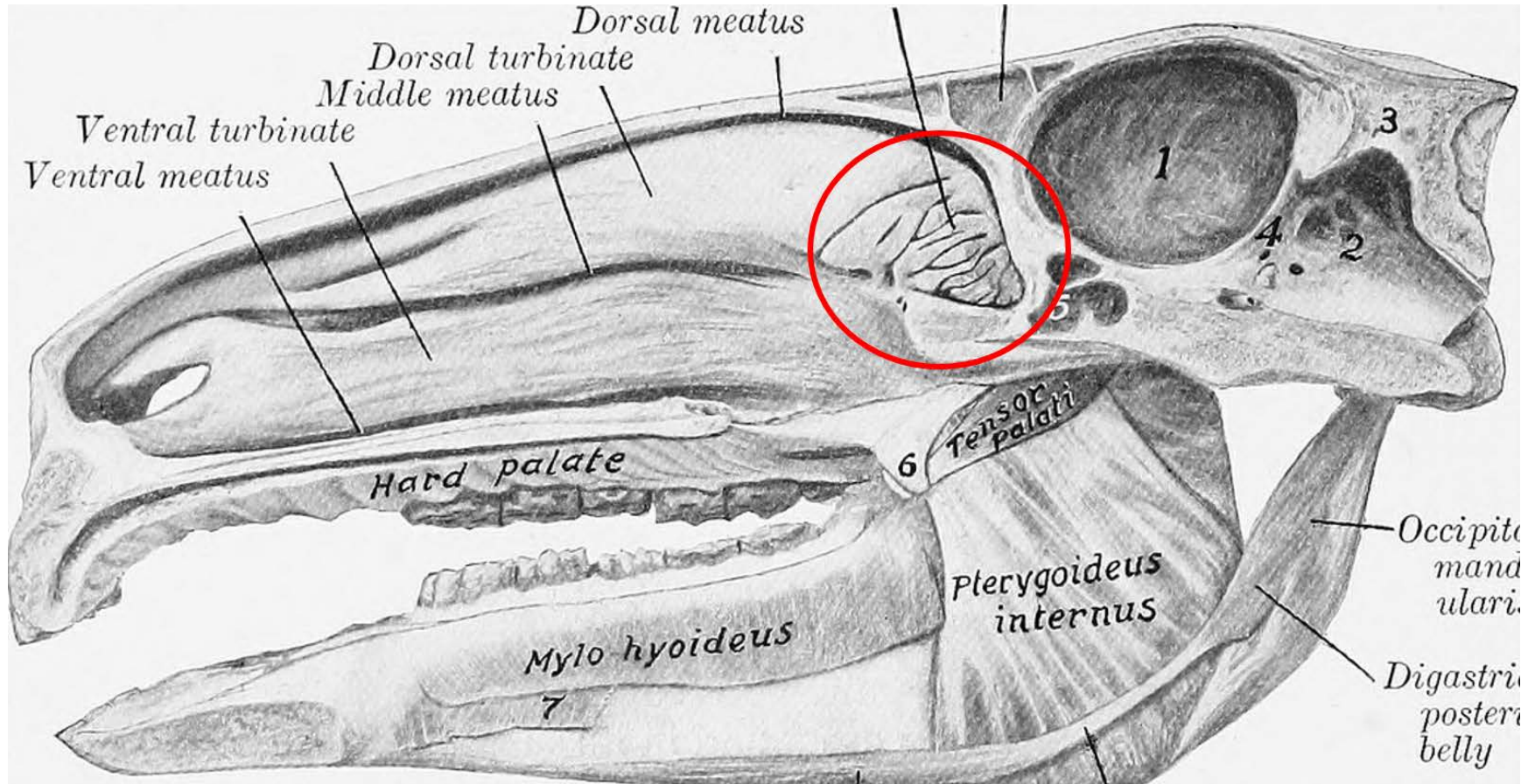


▶ The anatomy of the domestic animals; S Sisson

Tooth roots extend into the maxillary sinus



The ethmoid turbinates are at the back of the pharynx, directly in front of the cranial vault



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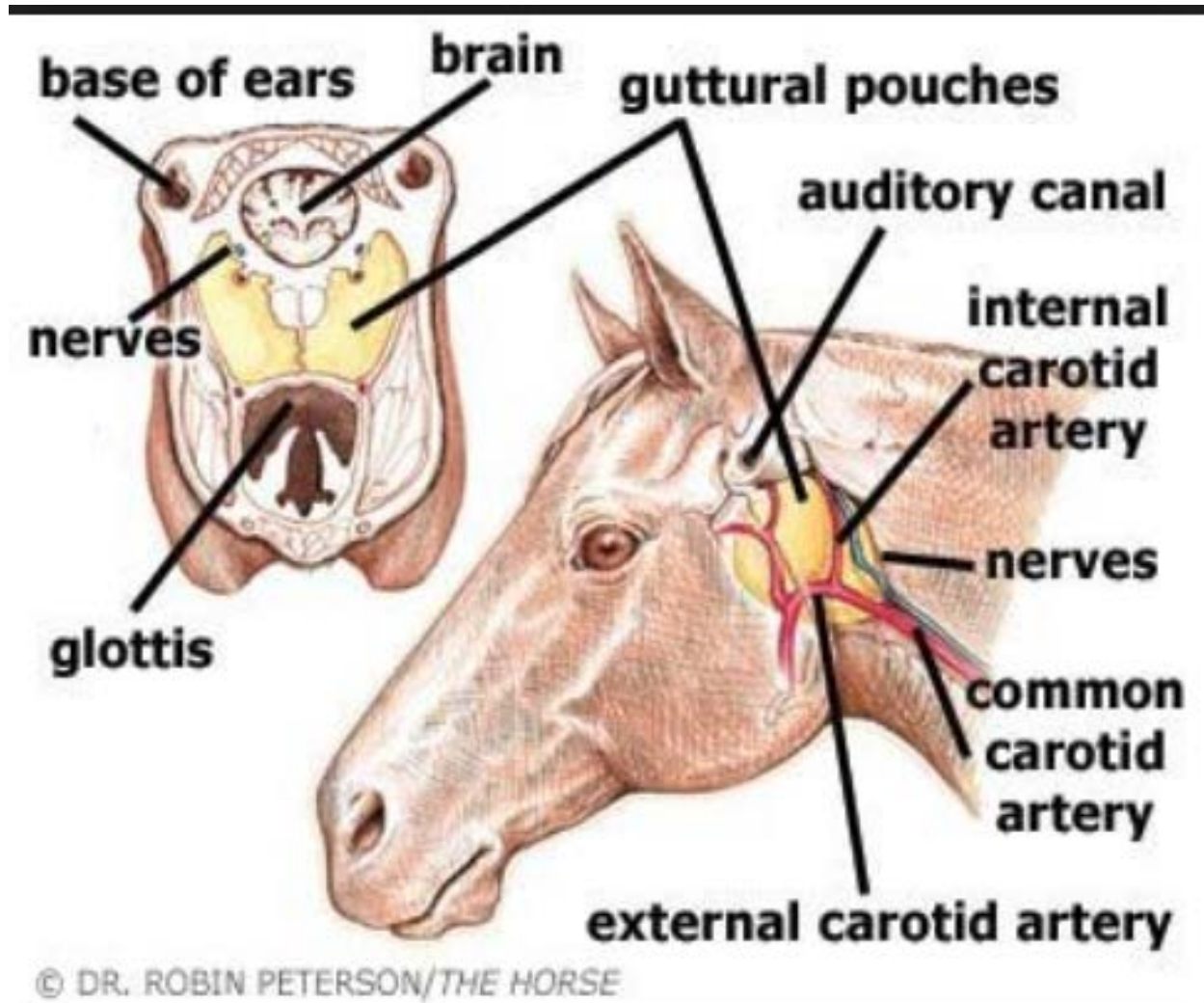
▶ <https://www.youtube.com/watch?v=d8eS9eSoVrI>

Guttural pouch openings (A & C) are rostral to the larynx (DEF) and the pharyngeal recess (B)

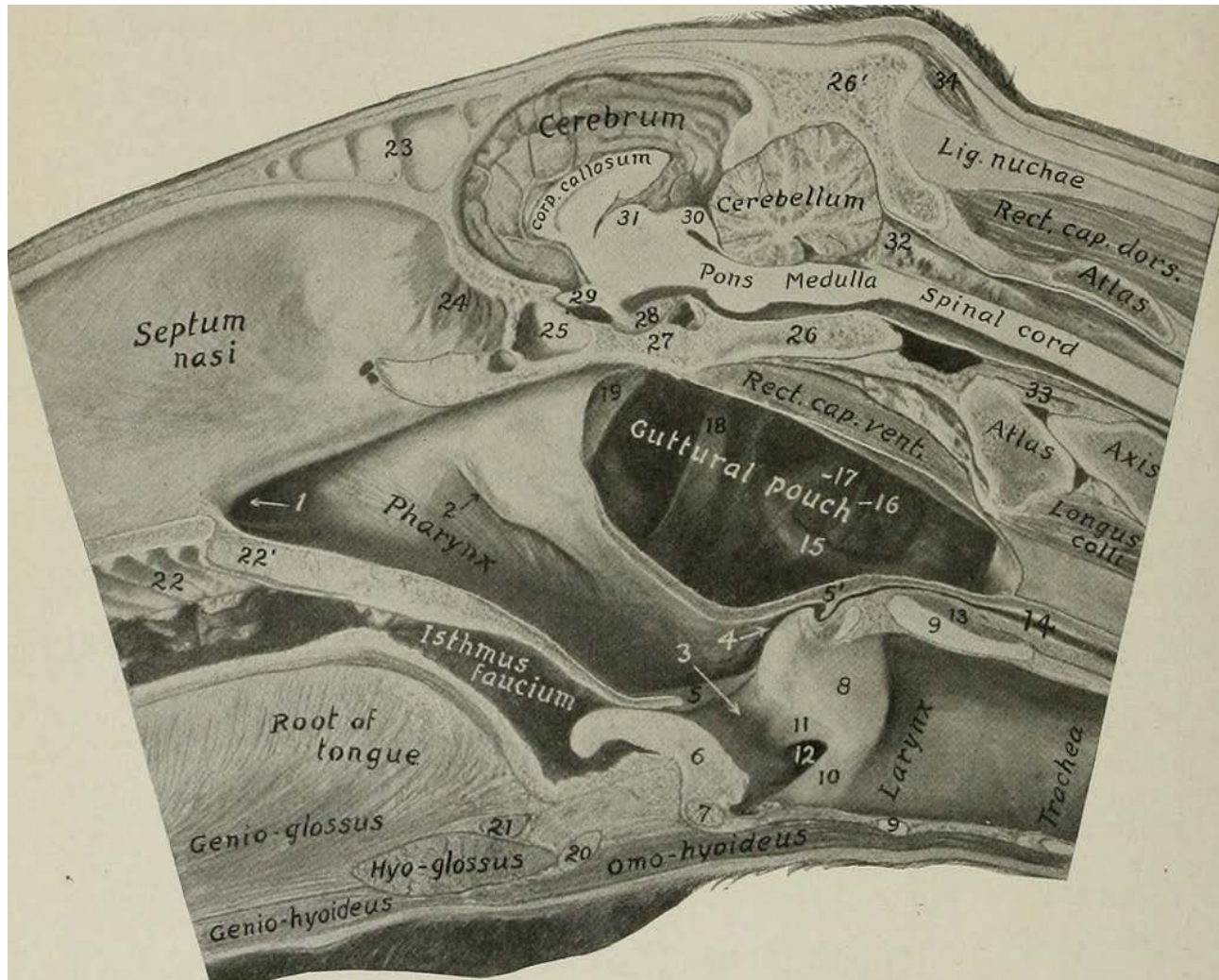


▶ Guttural pouches are extensions of the Eustachian tube and are believed important in brain cooling

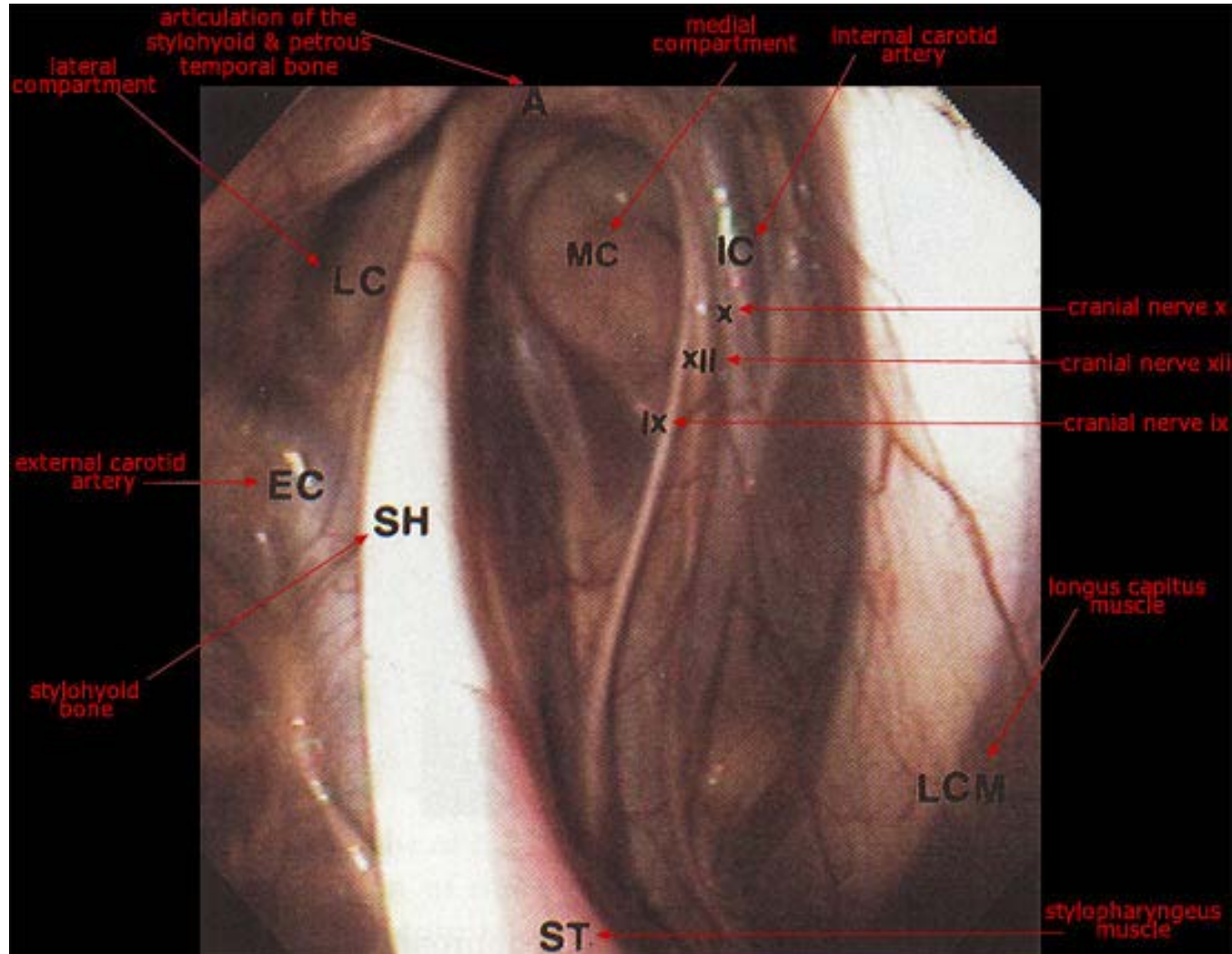
Guttural pouches live above the larynx and below the brain



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The guttural pouch contains multiple nerves, arteries and the stylohyoid bone



▶ <http://cal.vet.upenn.edu/projects/eqairway/nrmlgutt2.htm>