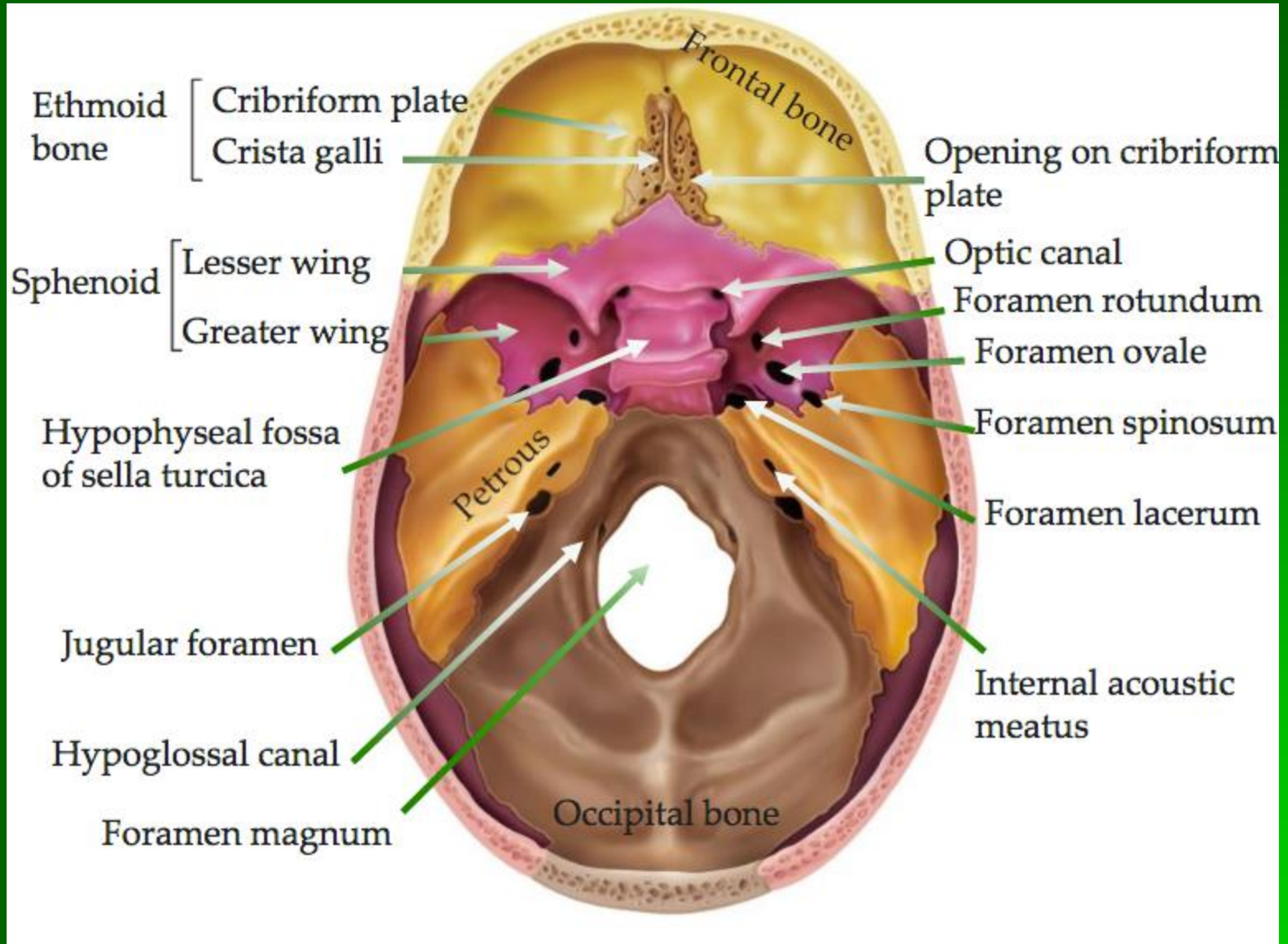




Cribriform plate
Olfactory n (CNI)

Optic canal
Optic n (CNII)

Superior orbital fissure
Oculomotor n (CNIII)
Trochlear n (CNIV)
Ophthalmic n (CNV₁)
Abducens n (CNVI)

Foramen rotundum
Maxillary n (CNV₂)

Foramen Ovale
Mandibular n (CNV₃)

Internal acoustic meatus
Facial n (CNVII)
Vestibulocochlear n (CNVIII)

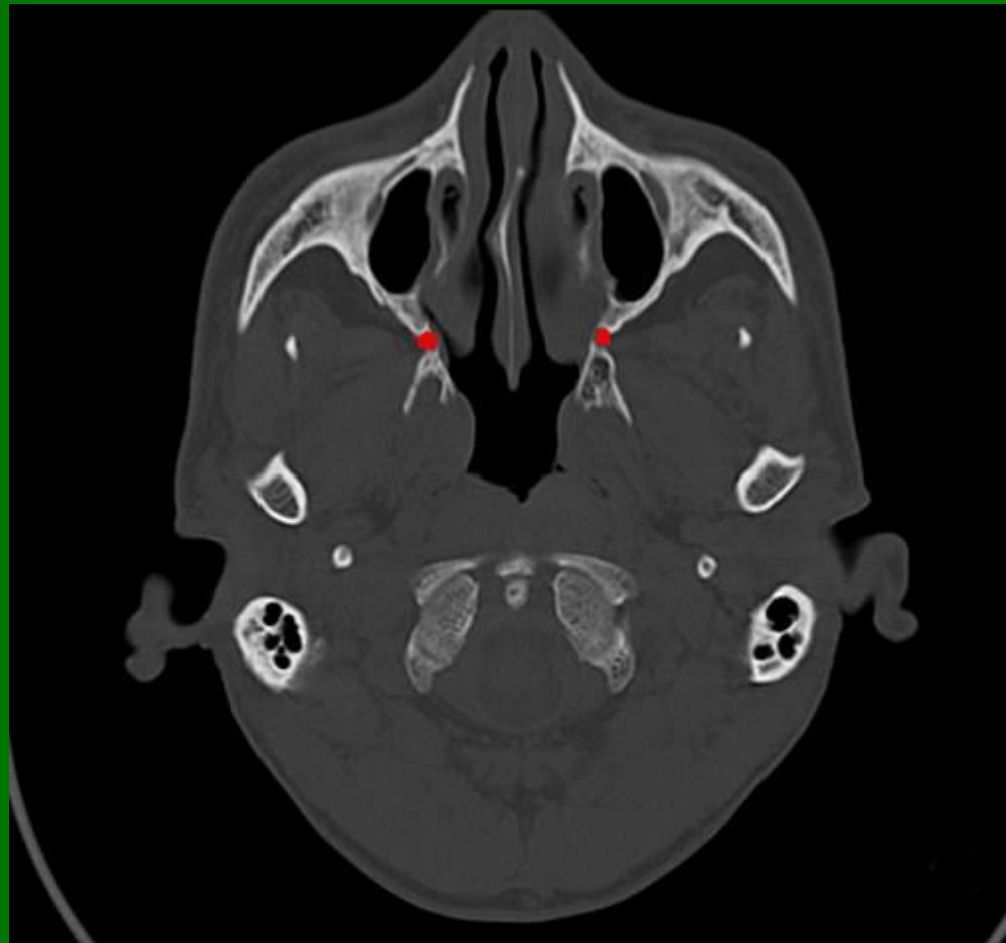
Jugular foramen
Glossopharyngeal n (CNIX)
Vagus n (CNX)
Accessory n (CNXI)

Hypoglossal canal
Hypoglossal n (CNXII)



		Comment	Transmits
Optic canals	Sphenoid bone	Middle cranial fossa to orbital apex	Optic nerves and ophthalmic arteries
Superior orbital fissure	Sphenoid bone	From the middle cranial fossa to the orbital apex	First (orbital) division of the fifth, and the third, fourth and sixth cranial nerves, superior orbital vein and a branch of the middle meningeal artery
Inferior orbital fissure	Between maxilla and sphenoid bones	At its posterior part it forms an opening between the orbit and the pterygopalatine fossa, and more anteriorly between the orbital cavity and the infratemporal fossa	Infraorbital nerve and infraorbital artery and the inferior ophthalmic veins
Foramen rotundum	Sphenoid bone	From the middle cranial fossa to the pterygopalatine fossa	Second (maxillary) division of the fifth cranial nerve
Foramen ovale	Sphenoid bone	From the middle cranial fossa to the infratemporal fossa	Third (mandibular) division of the fifth cranial nerve and the accessory meningeal artery
Foramen spinosum	Sphenoid bone	From the infratemporal to the middle cranial fossa	The middle meningeal artery
Foramen lacerum	Apex of temporal bone		Carotid artery passes through its posterior wall
IAM	Petrous temporal bone	From the posterior cranial fossa to inner ear	Seventh and eighth cranial nerves and the internal auditory artery
Jugular foramen	Junction of occipital and petrous temporal bones	Not visible on SMV	Internal jugular vein, ninth, tenth and eleventh cranial nerves. Inferior petrosal sinus (which drains into the internal jugular vein), and ascending occipital and pharyngeal arterial branches
Hypoglossal canal	Occipital bone		Twelfth (hypoglossal) cranial nerve
Foramen magnum	Occipital bone	From the posterior cranial fossa to the spinal canal	Medulla oblongata/spinal cord, along vertebral and spinal arteries and veins and the spinal root of the eleventh cranial nerve

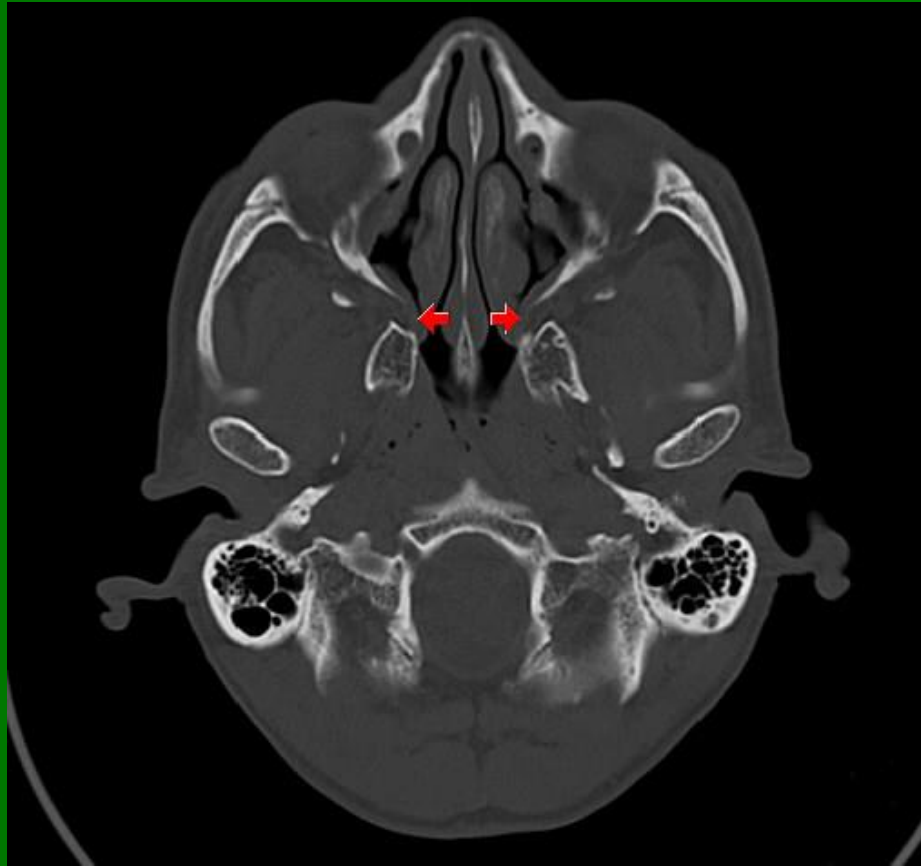
Pterygopalatine fossa



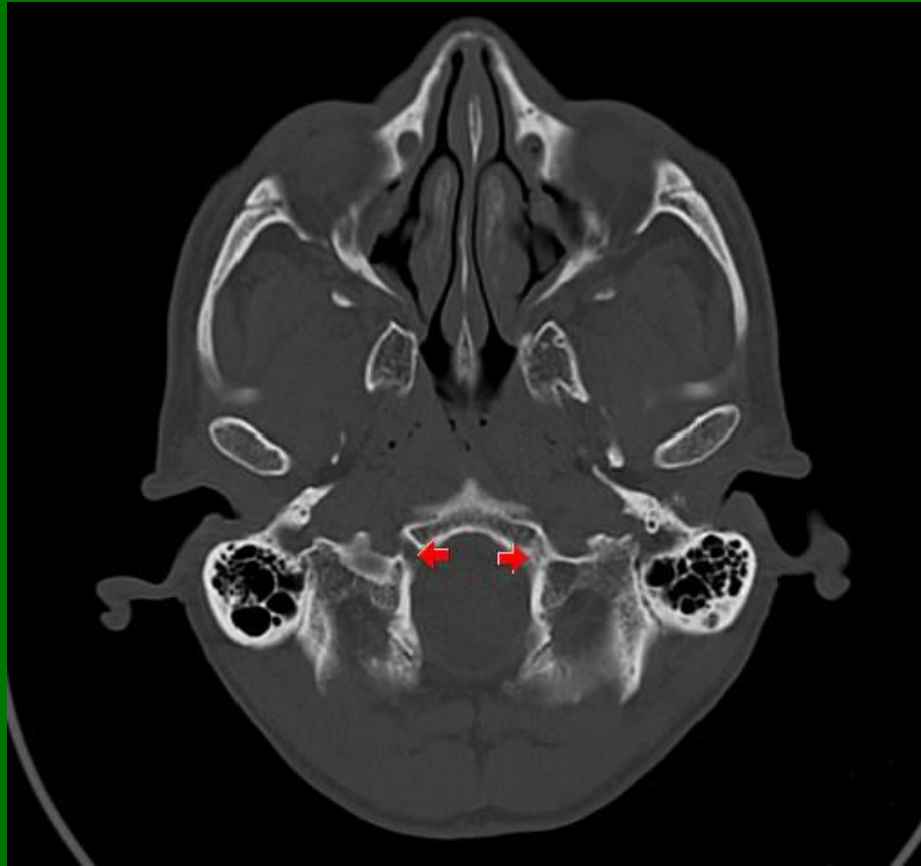
Pterygomaxillary fissure



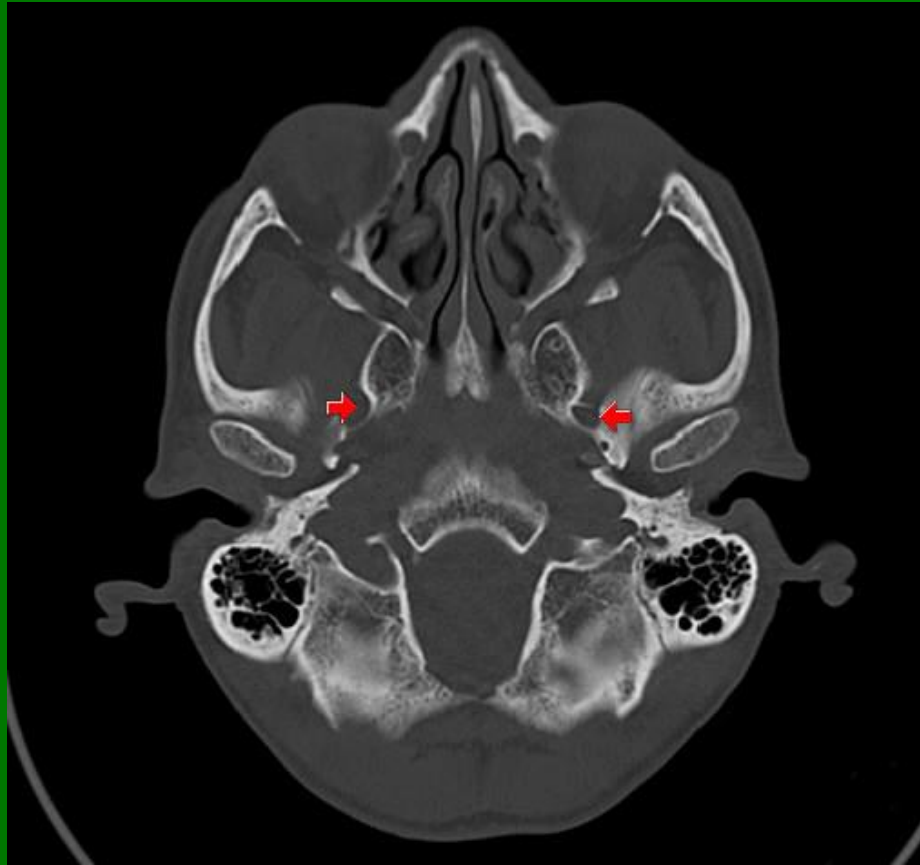
Sphenopalatine foramen



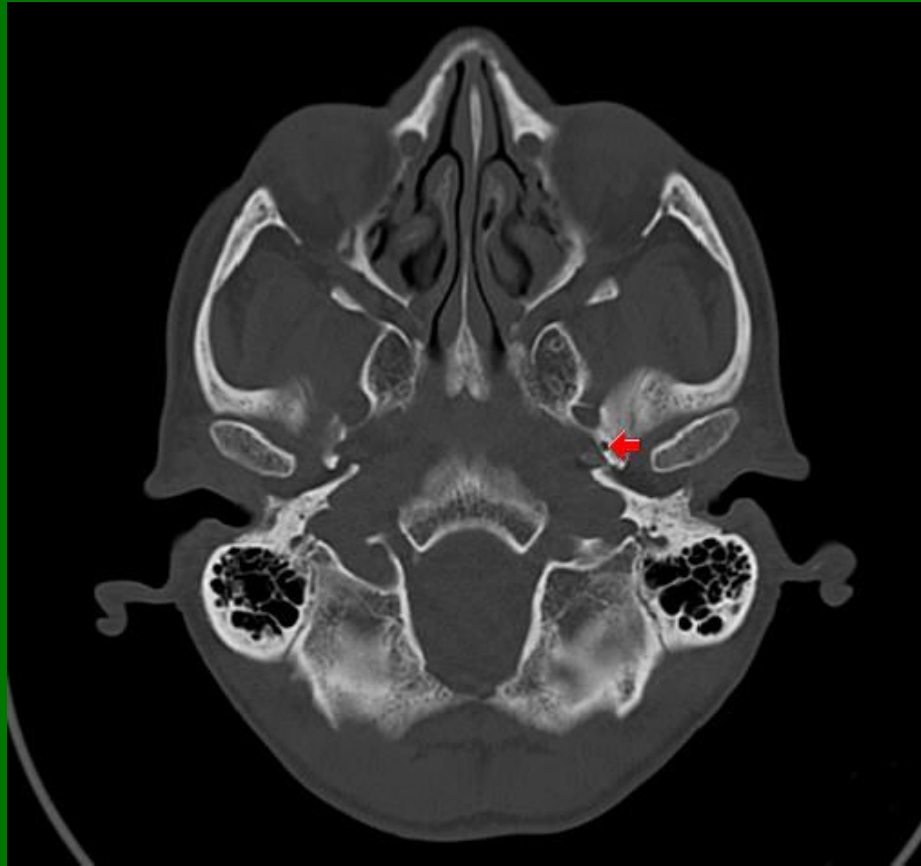
Hypoglossal canal



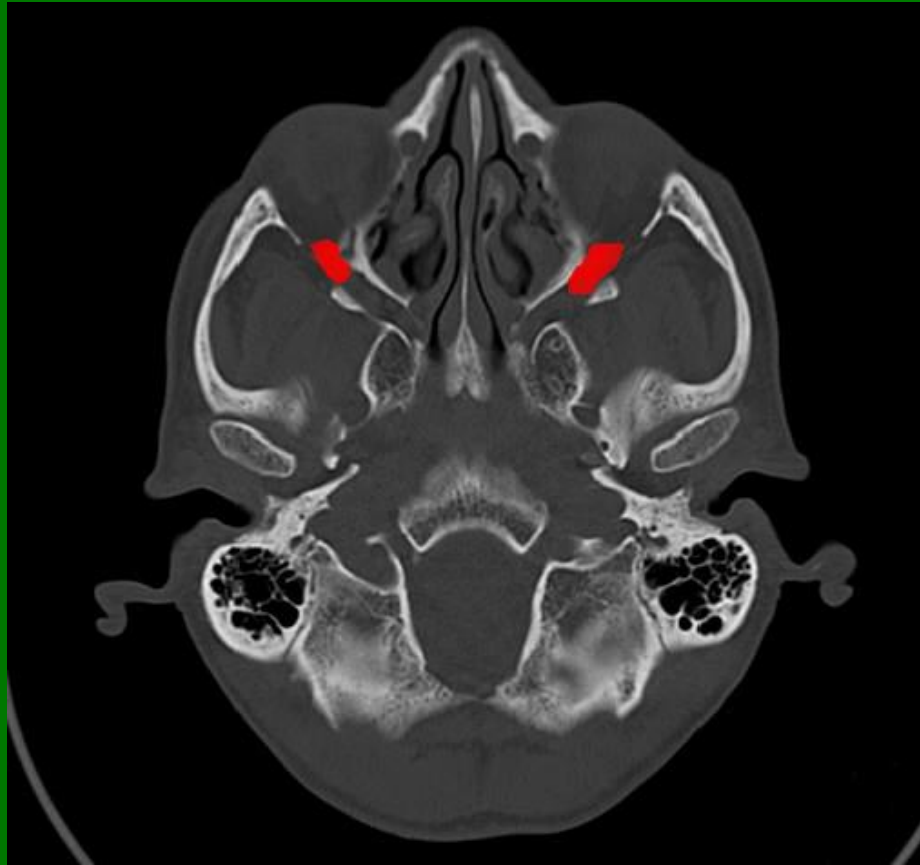
Foramen ovale



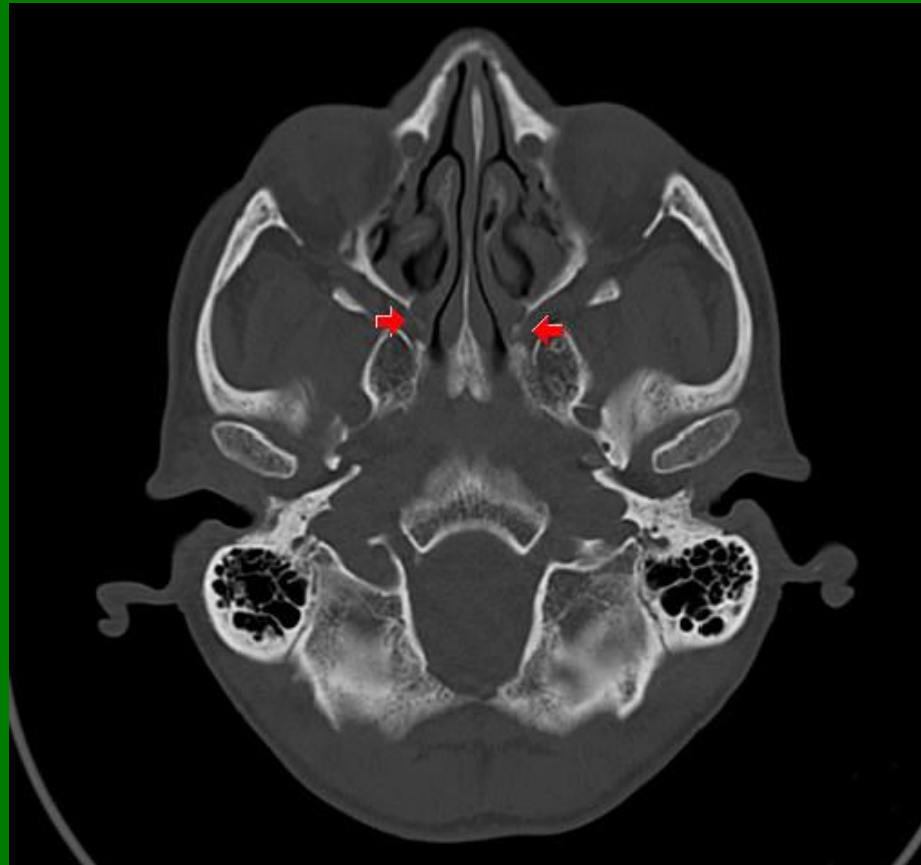
Foramen spinosum



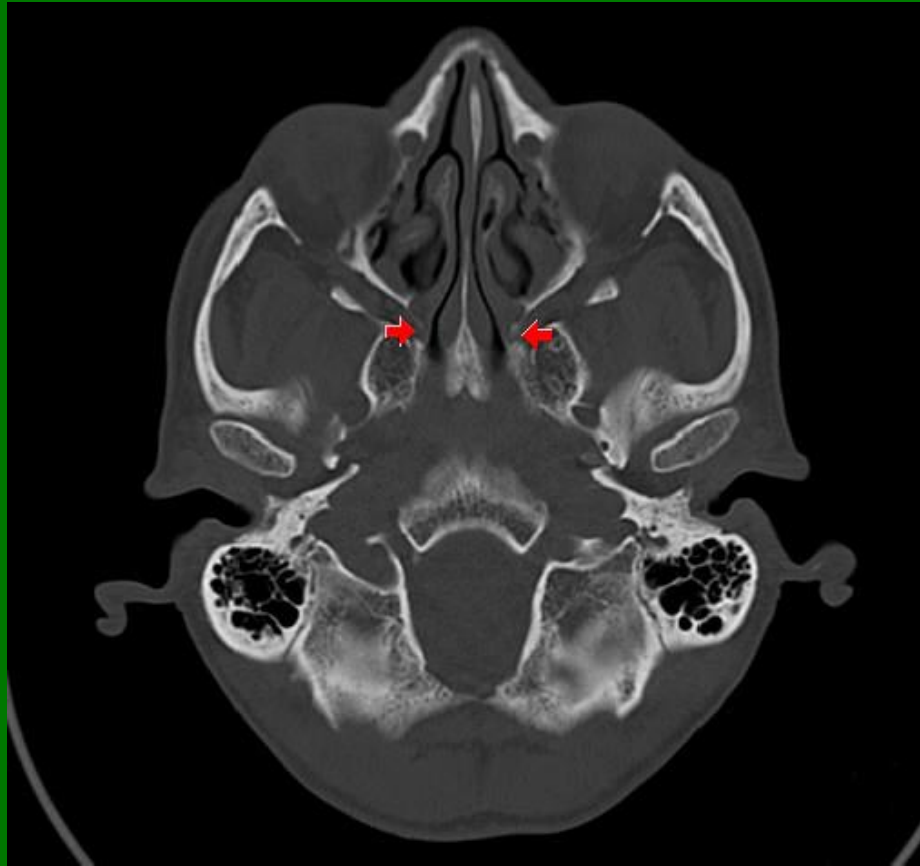
Inferior orbital fissure



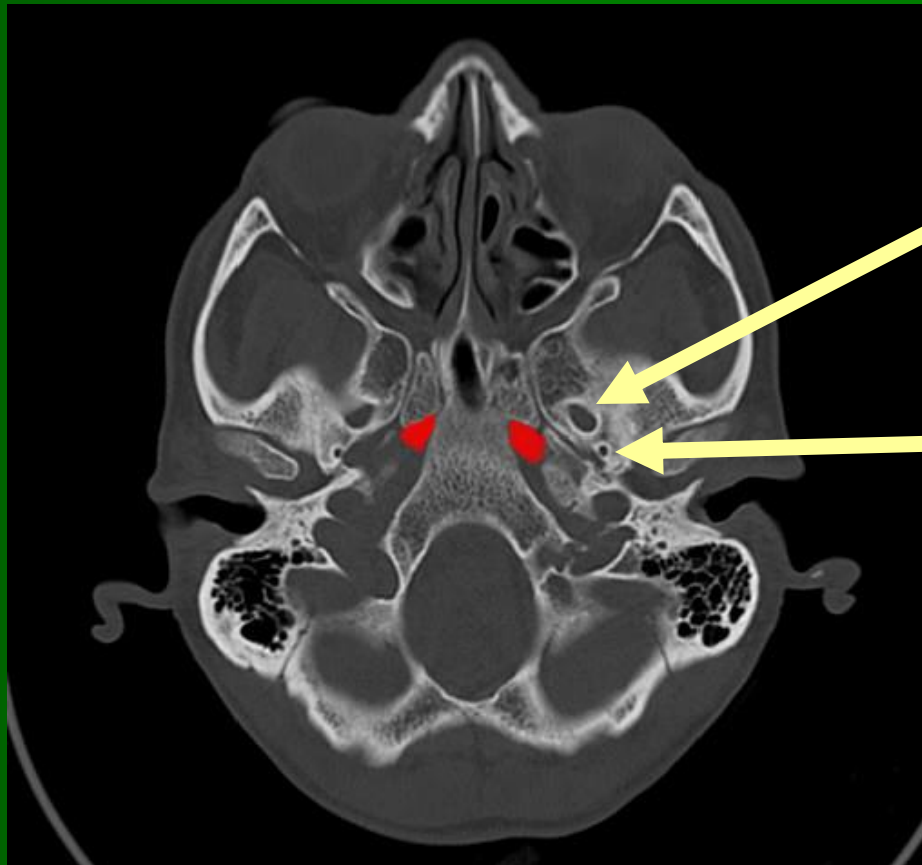
Pterygopalatine fossa



Sphenopalatine foramen



Foramen lacerum



Foramen ovale

Foramen spinosum

Foramen Lacerum

It is located at the base of medial pterygoid plate, anterior to the petrous apex.

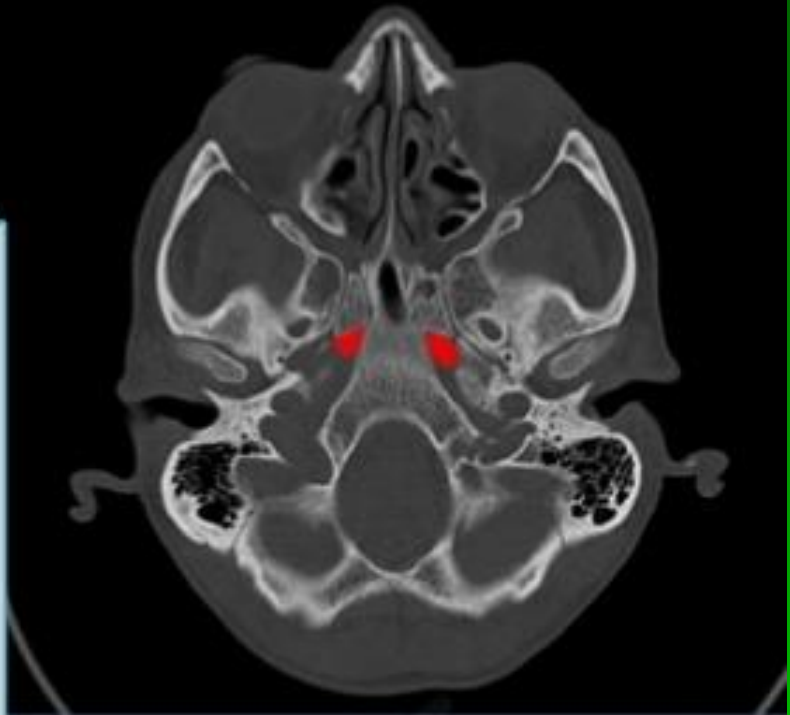
The contents are :-

Structures passing whole length:

1. Meningeal branch of Ascending pharyngeal artery
2. Emissary vein

Other structures partially traversing:

3. Internal carotid artery
4. Greater petrosal nerve.

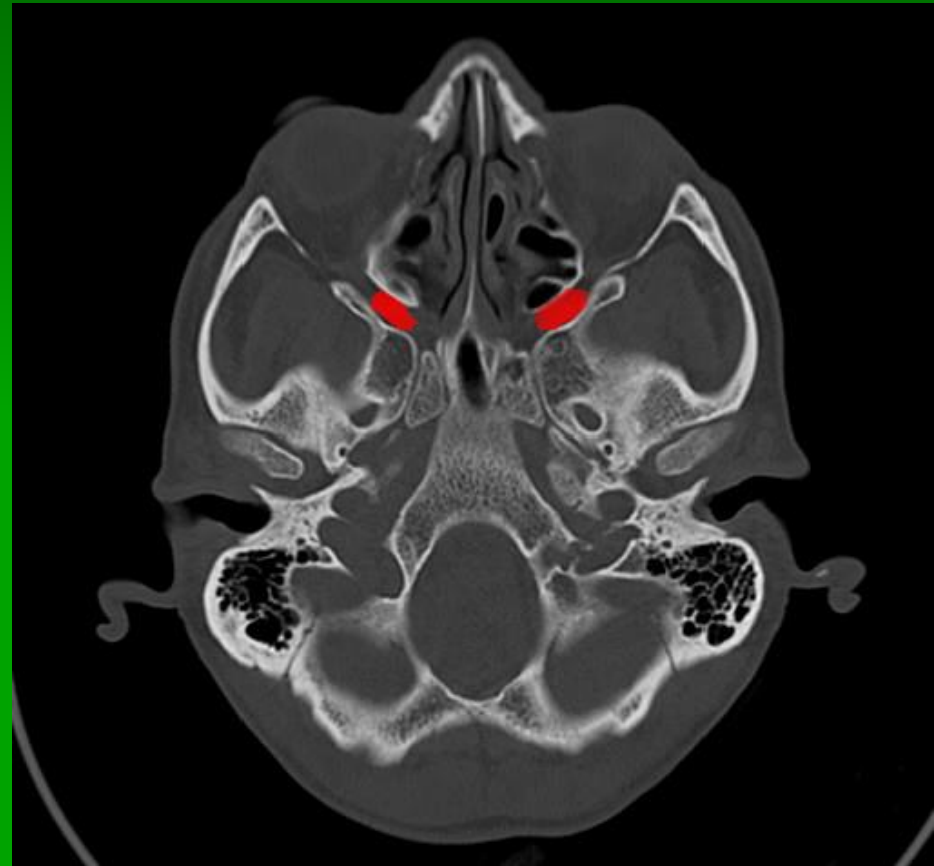


Foramen rotundum

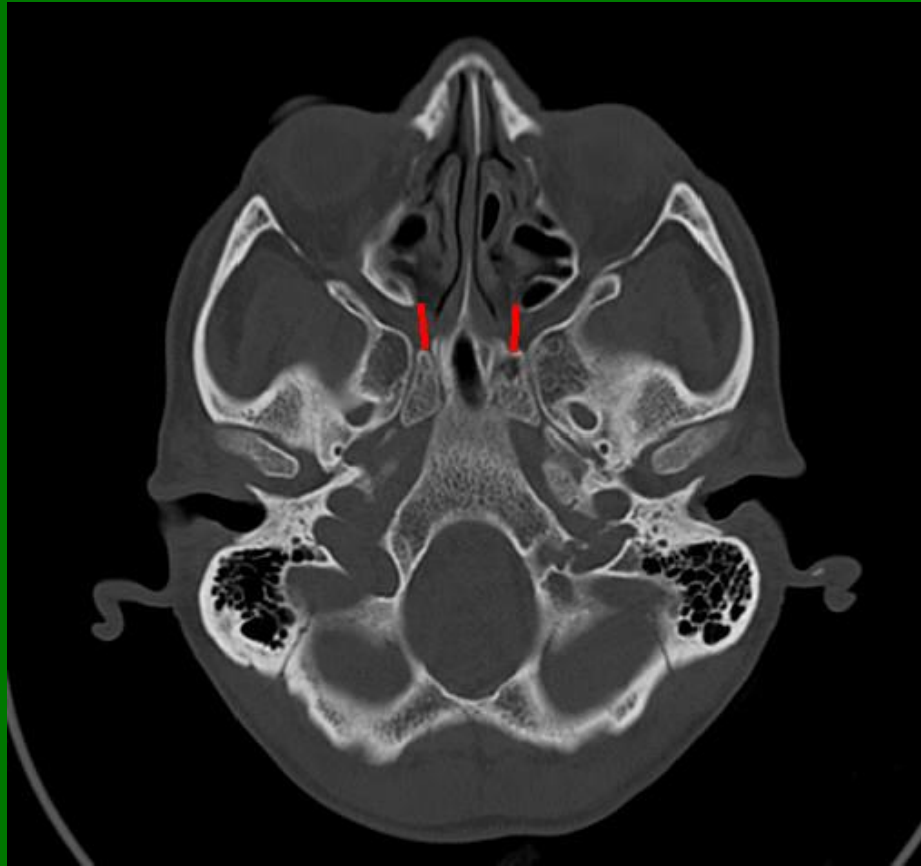


Pterygopalatine fossa

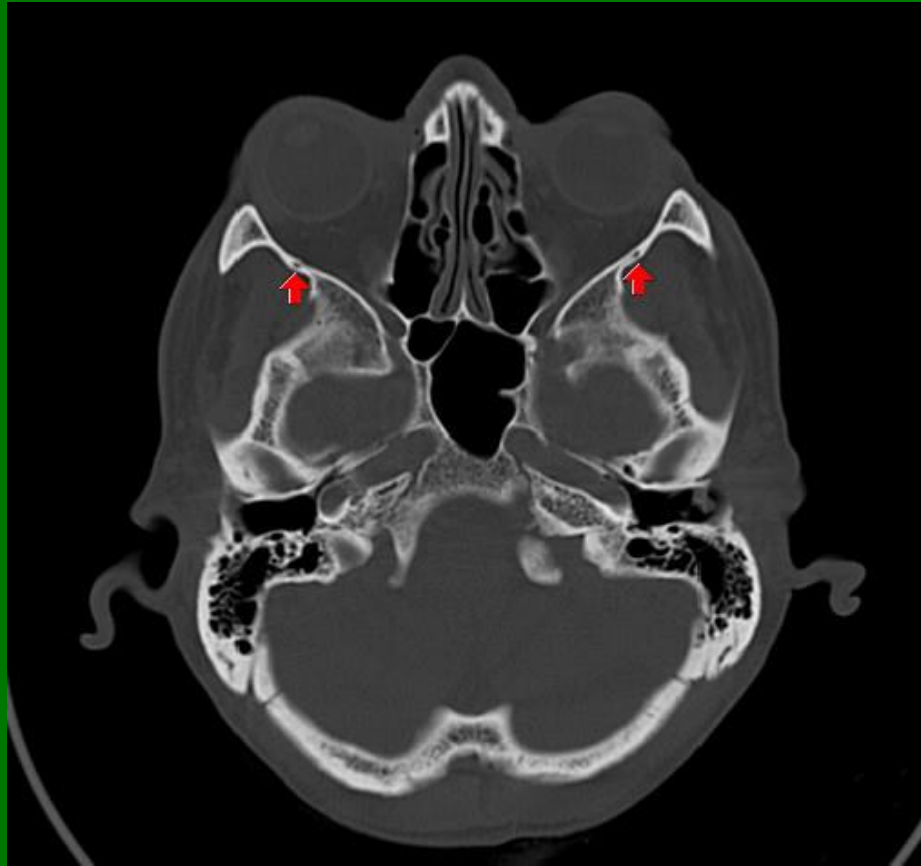
- All communicate with Pterygopalatine fossa
 - Foramen Rotundum
 - Vidian canal
 - Greater and lesser palatine foramen
 - Inferior orbital fissure



Sphenopalatine foramen



Sphenozygomatic suture



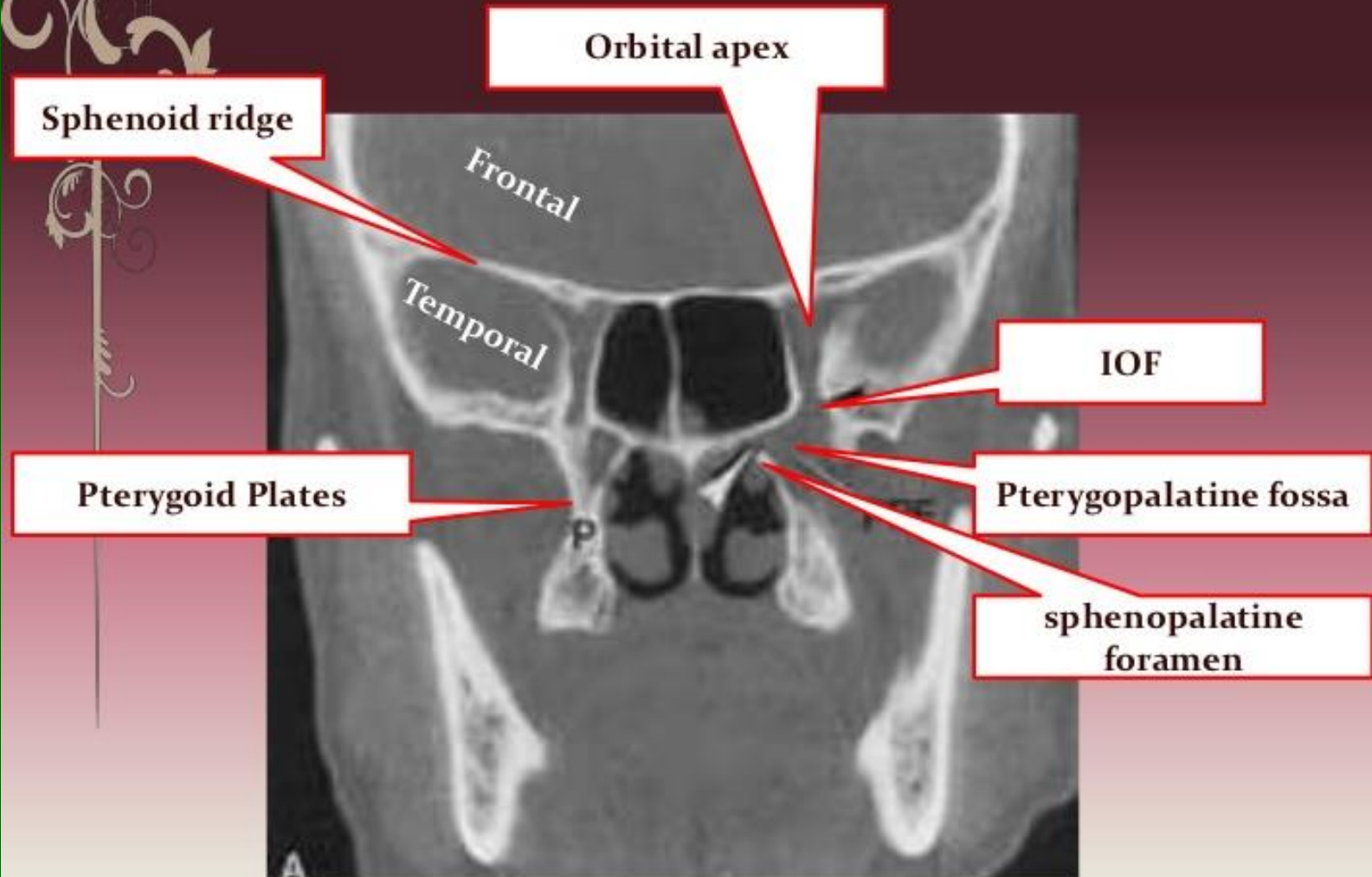
Space connecting superior and inferior orbital fissures



Superior orbital fissure



Pterygopalatine Fossa





Coronal Anatomy (posterior)



Foramen ovale

FIG. 72.

- 1. foramen ovale
- 2. sphenoid sinus
- 3. nasopharynx