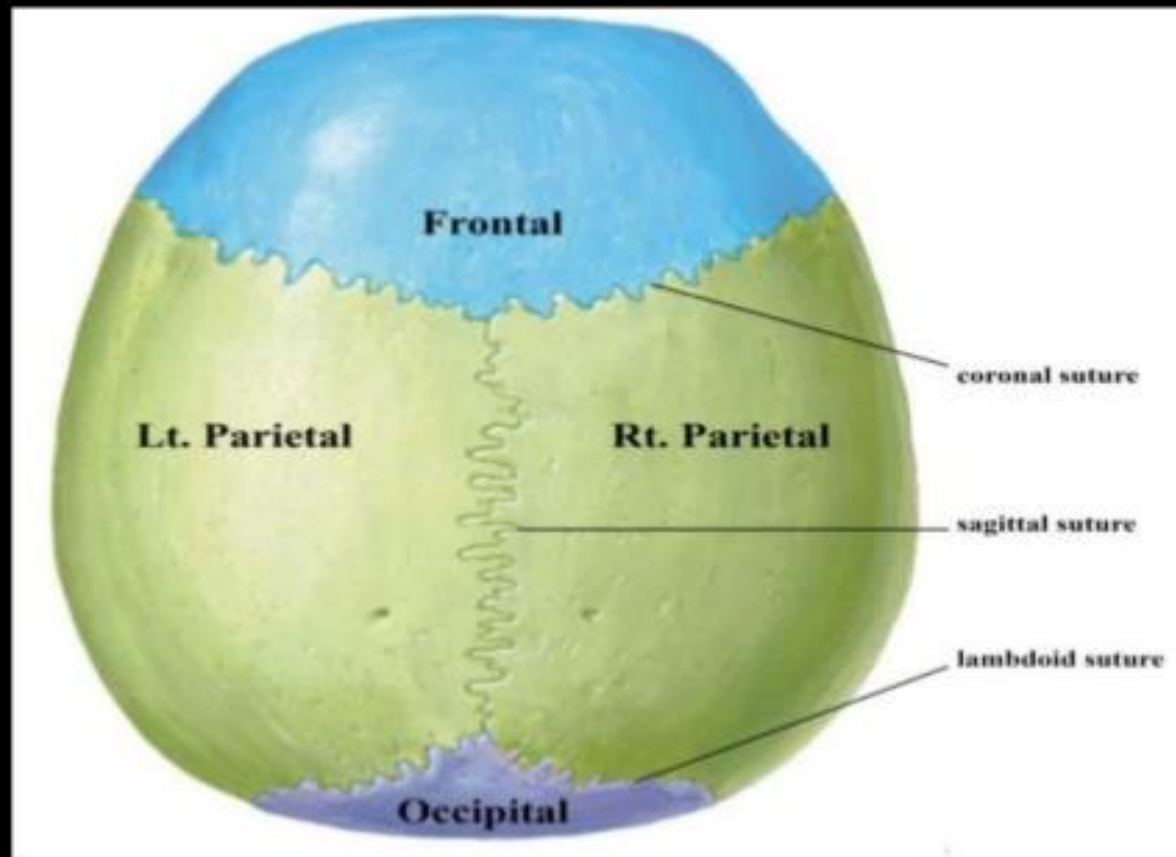
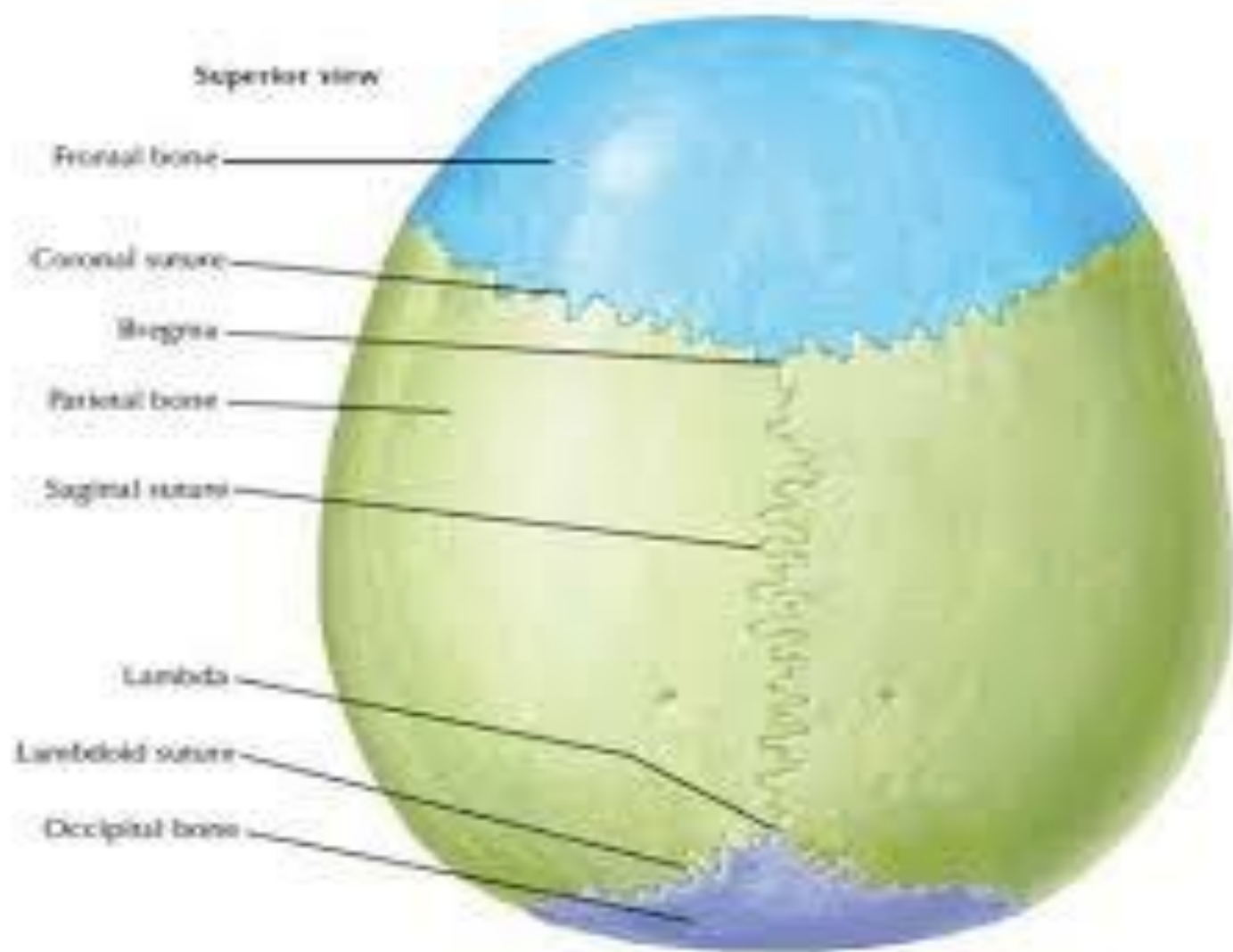


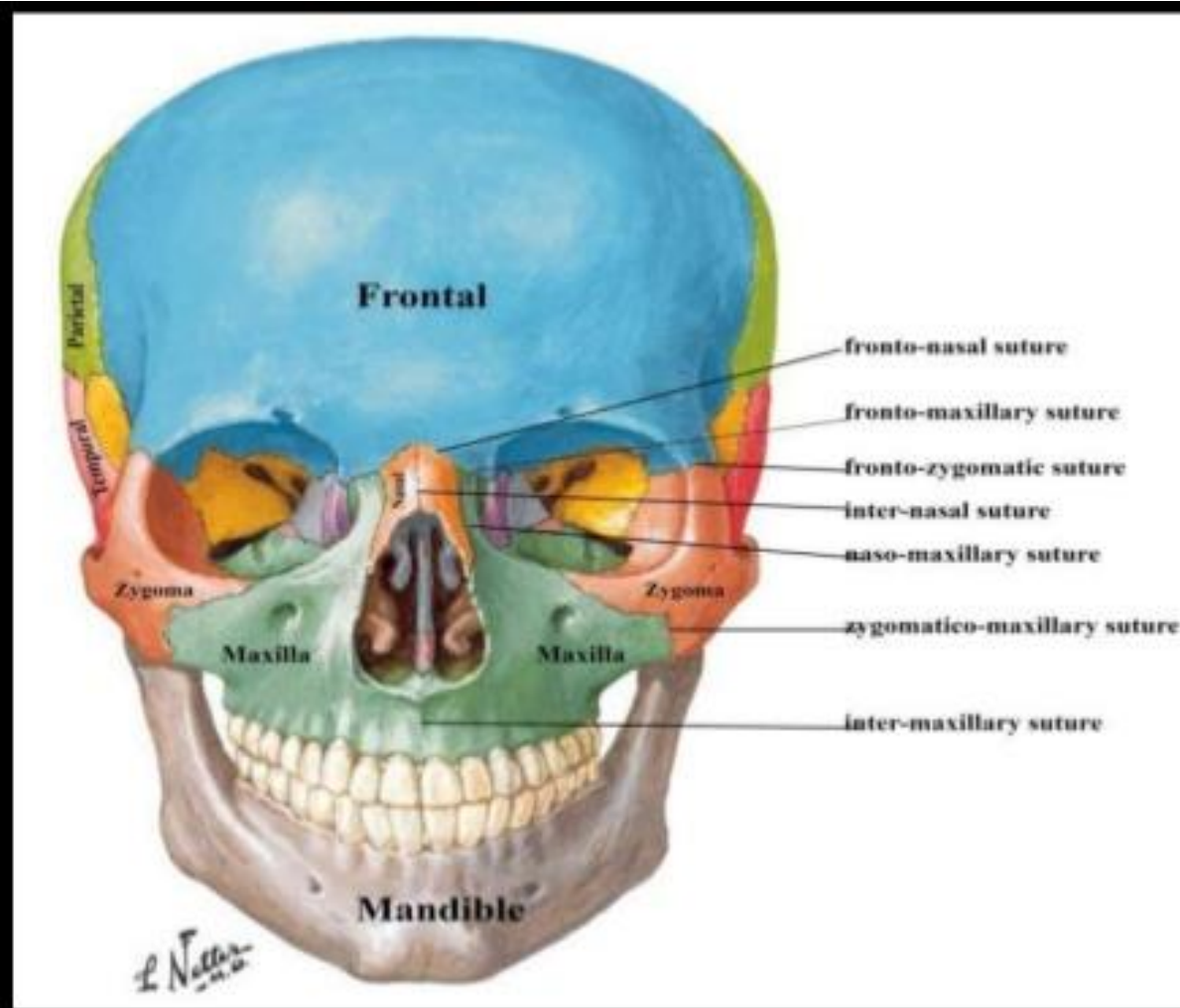
Norma verticalis



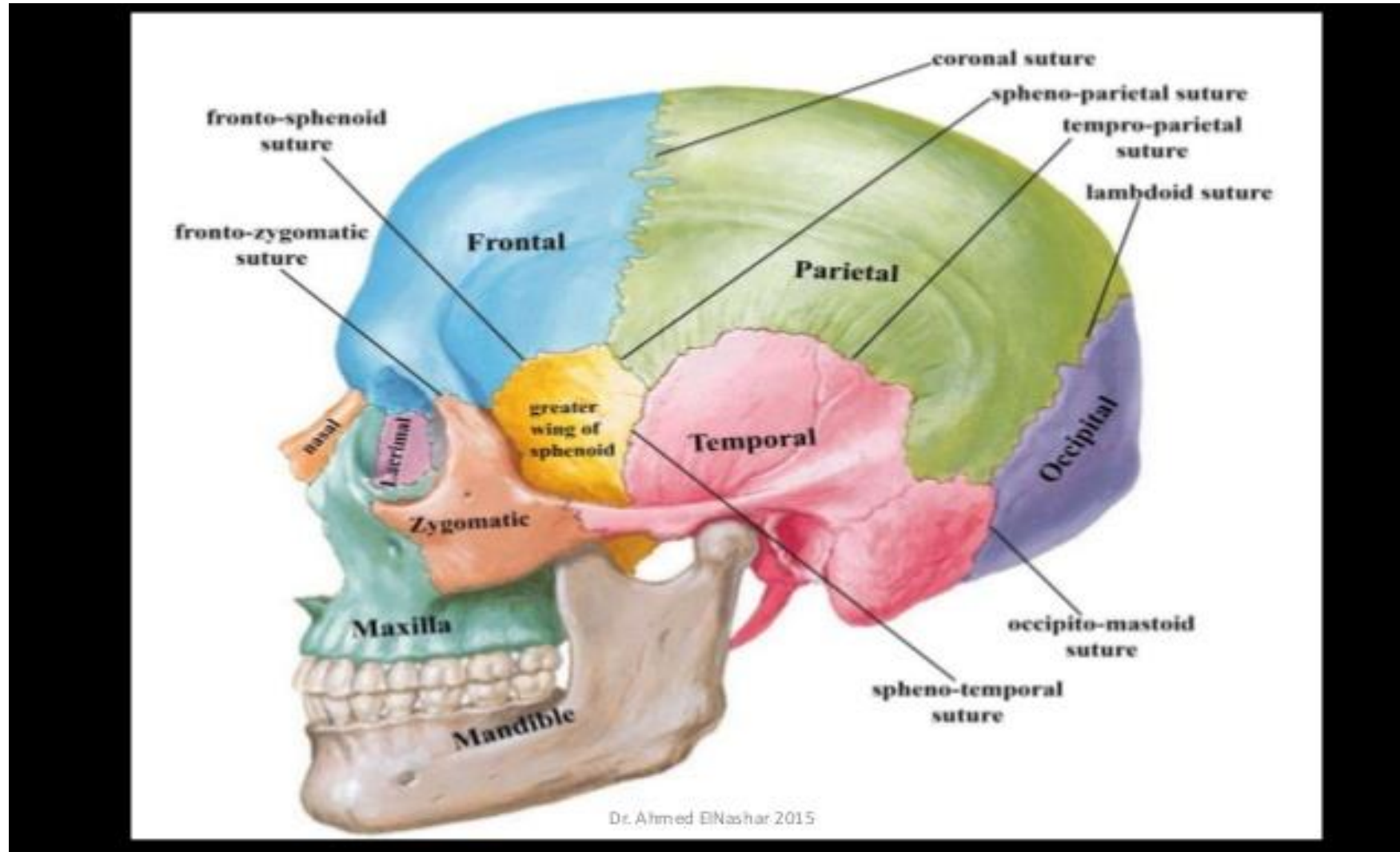
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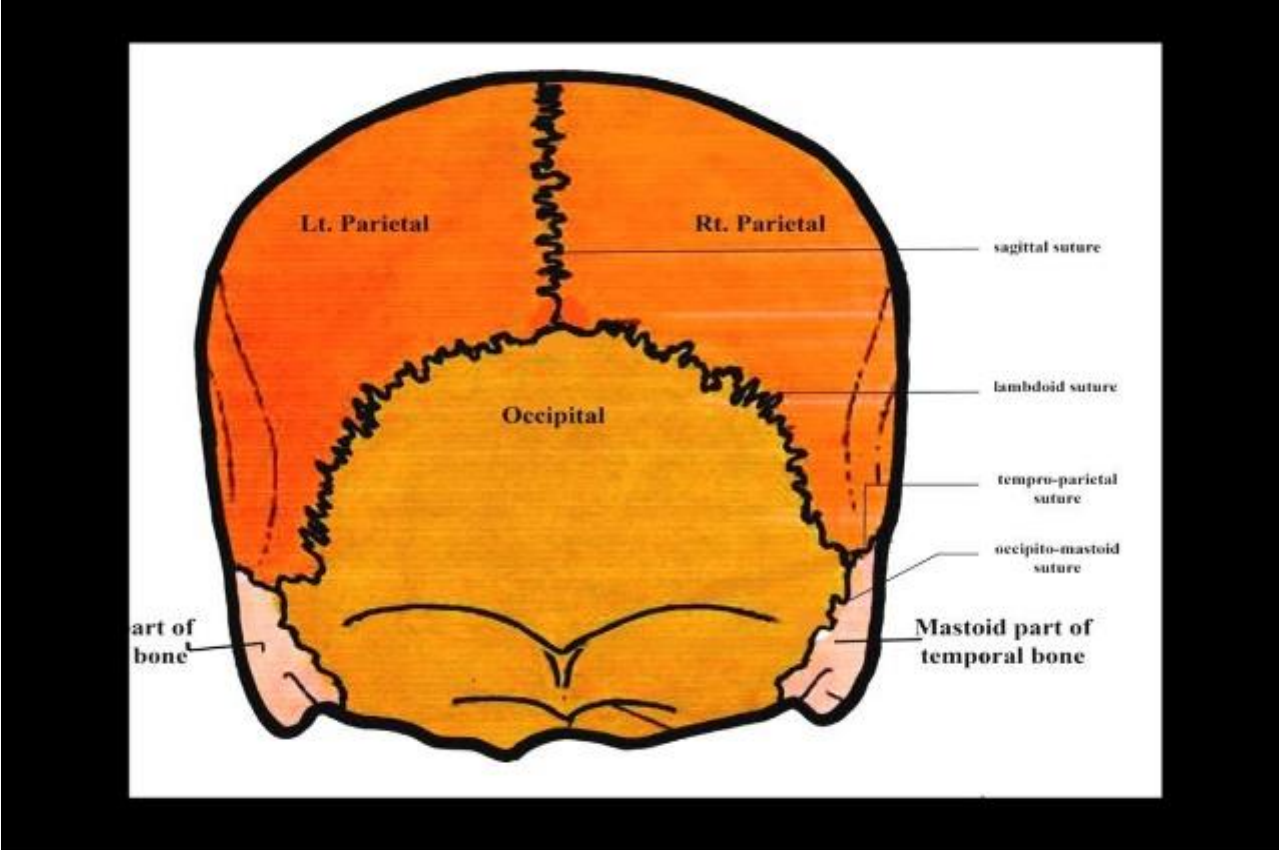
Norma frontalis



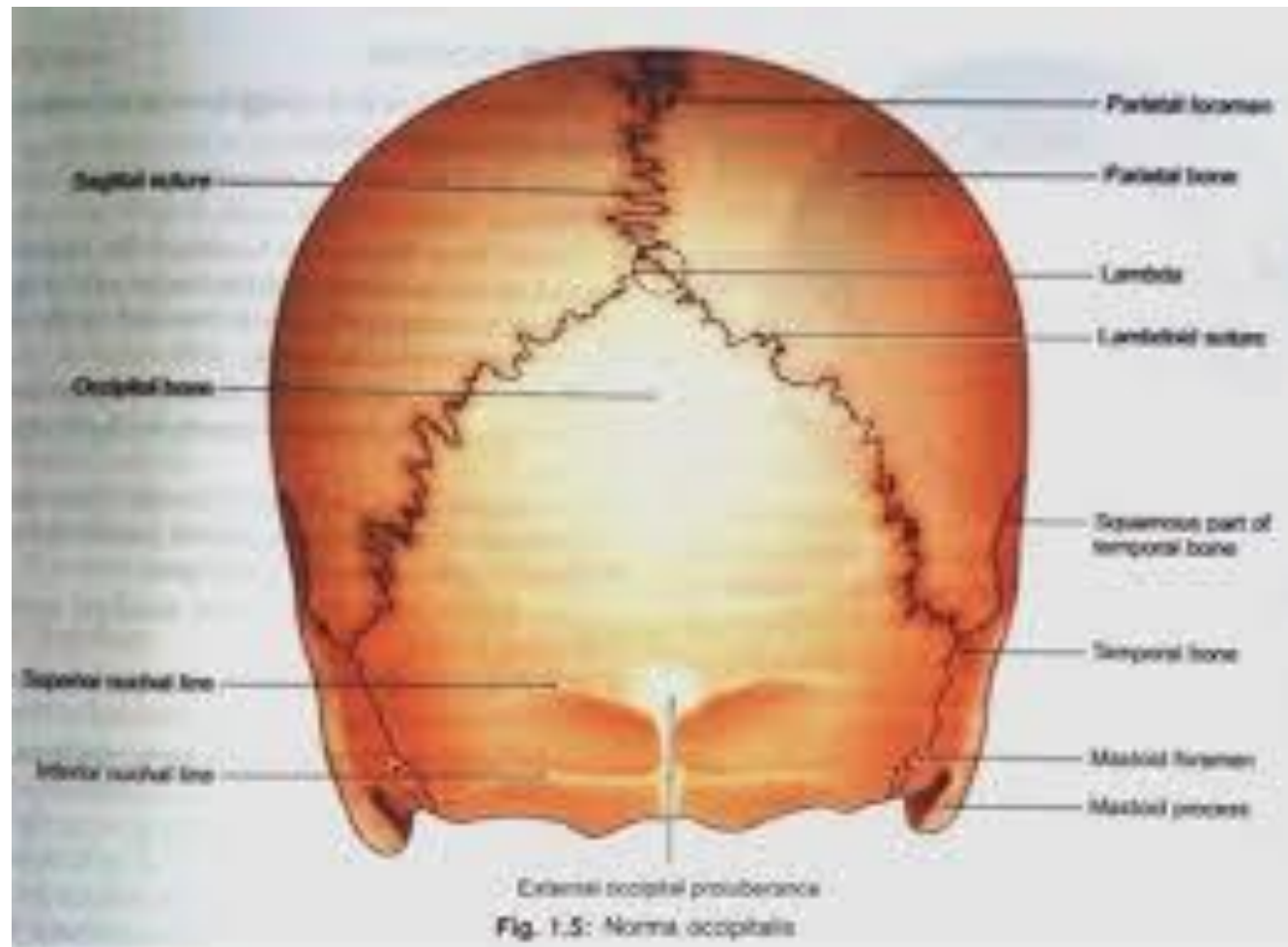
Norma lateralis



Norma occipitalis

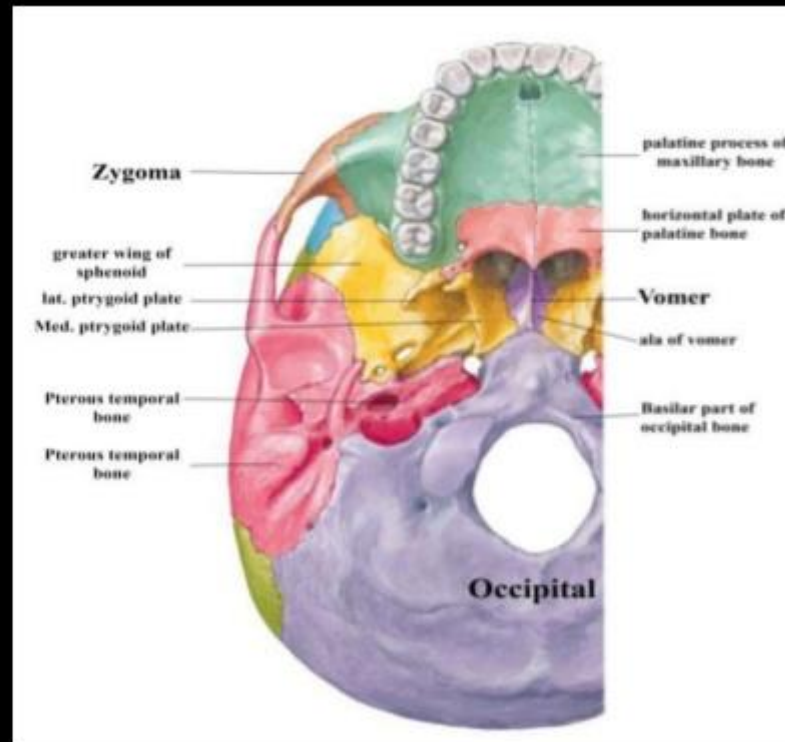


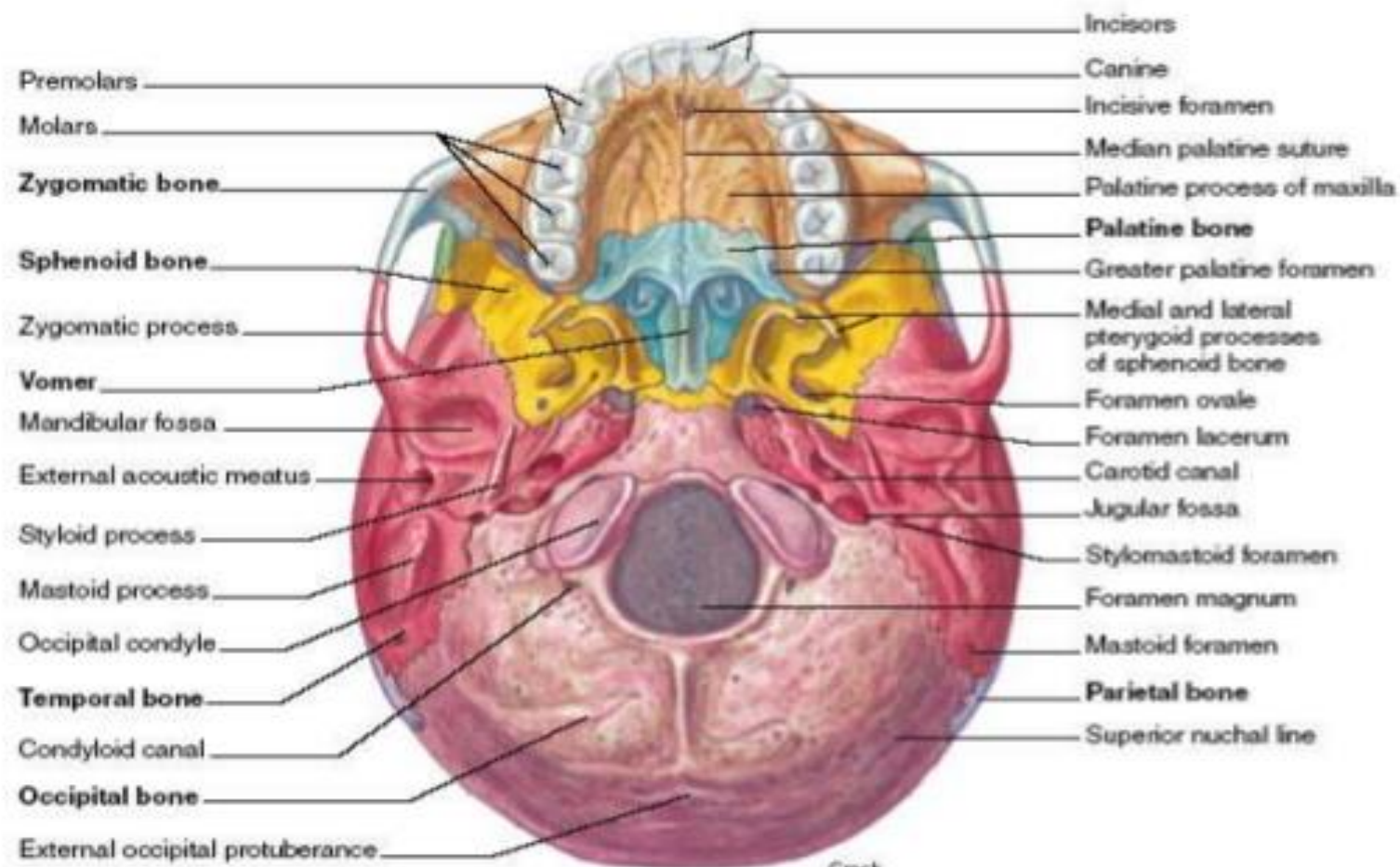
no



Norma basalis externa

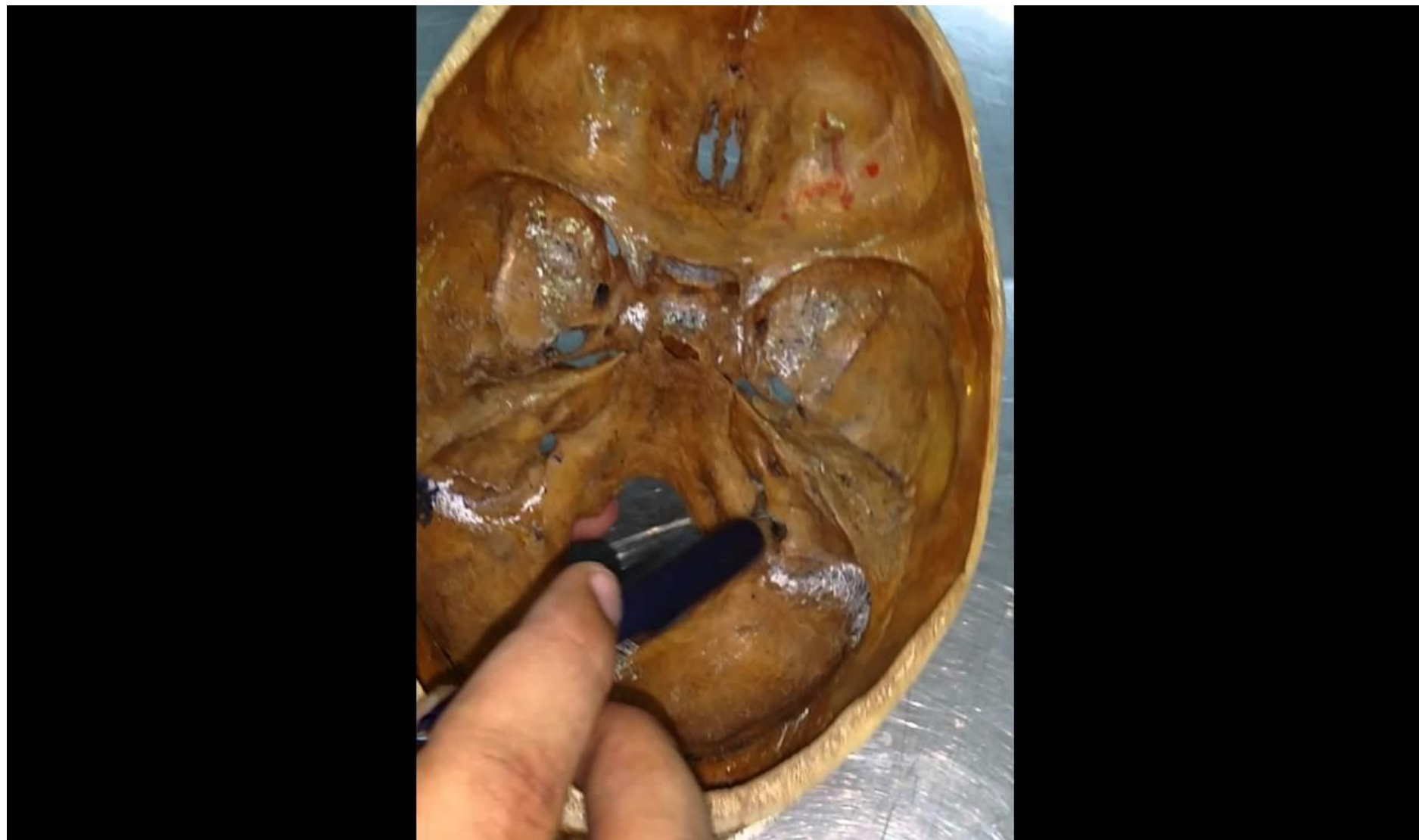
Bone

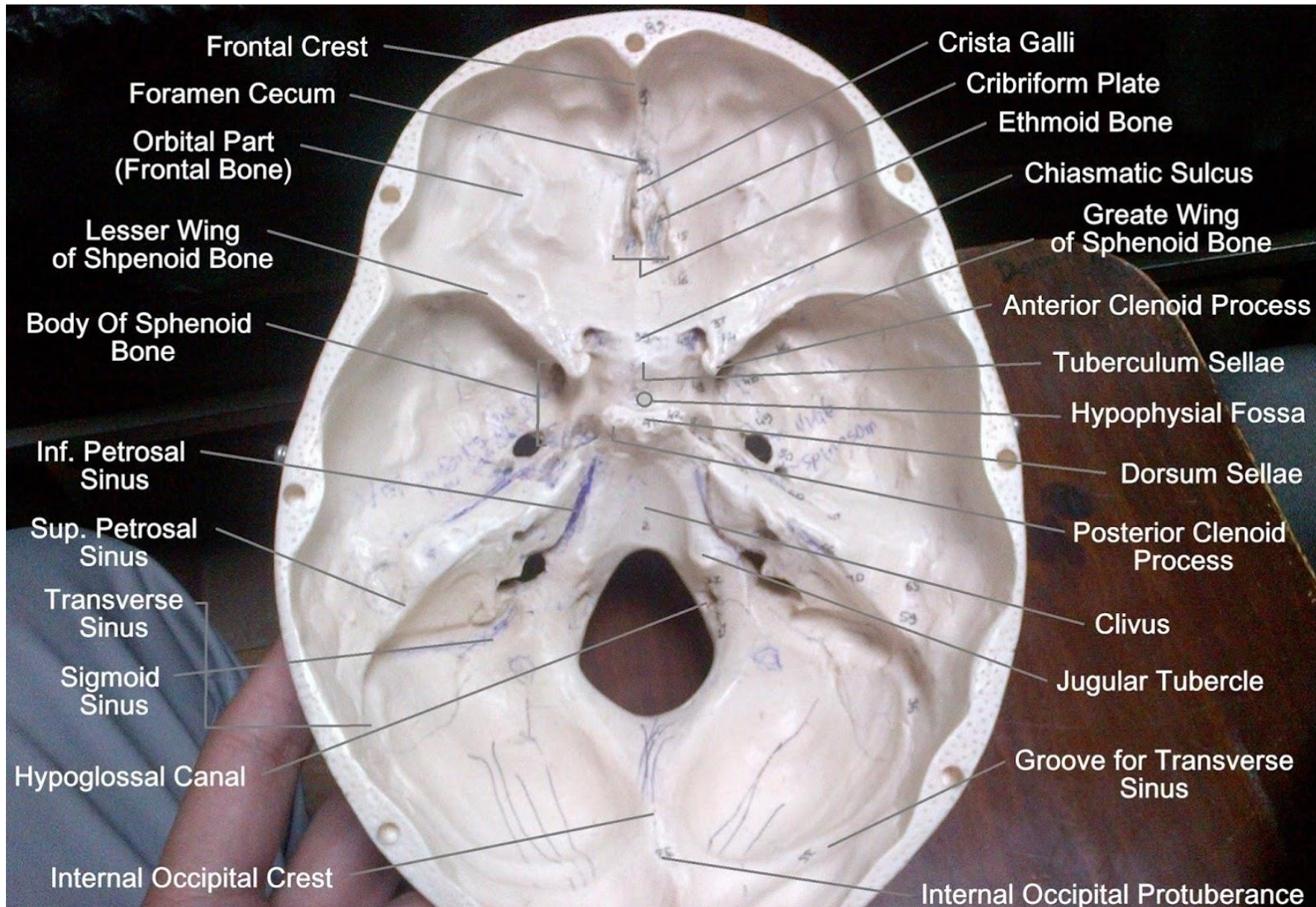




Creek

Norma basalis interna





Cranial fossa

- The floor of the cranial cavity is divided into **three distinct depressions**. They are known as the anterior cranial fossa, middle cranial fossa and posterior cranial fossa.
- Each fossa accommodates a different part of the brain.

Anterior cranial fossa



- **CONTENTS**

1. Features

2. Structures Going Through Different Foramina in the Anterior Cranial Fossa

1. Foramen Cecum

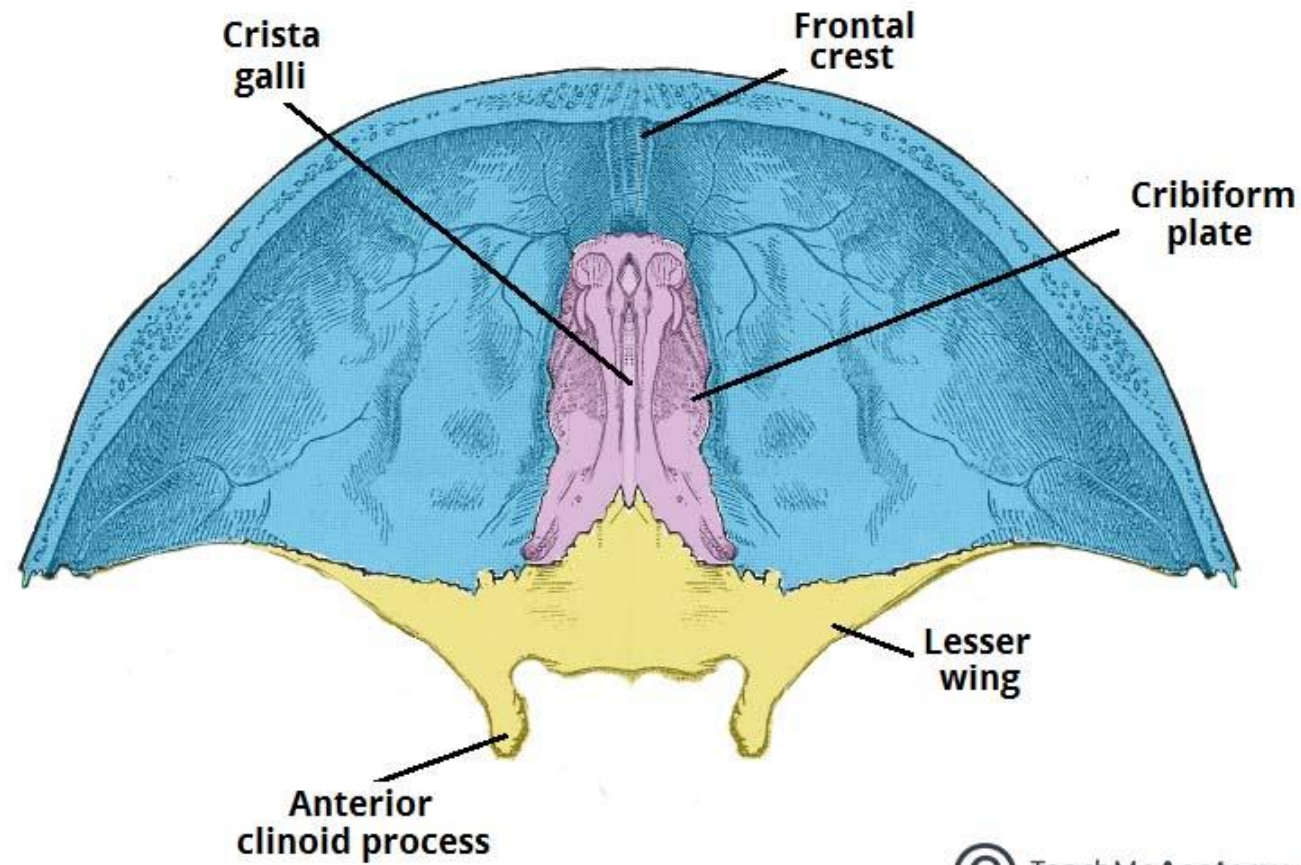
- Cribriform Foramina

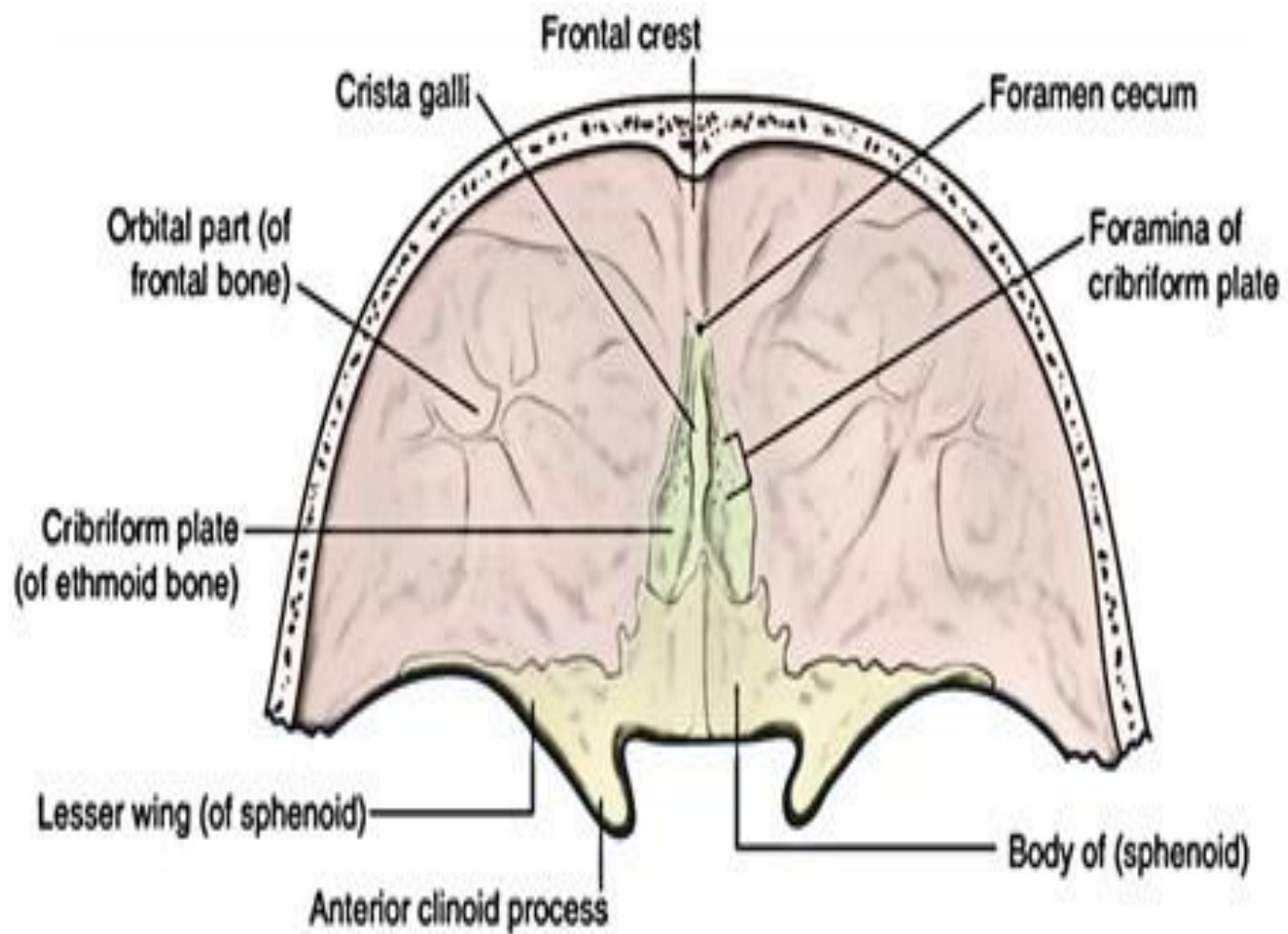
3. Anterior Ethmoidal Foramen

4. Posterior Ethmoidal Foramen

Anterior cranial fossa

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- The anterior cranial fossa lodges the **frontal lobes of the cerebral hemispheres.**
- Its floor consists of the portions of the subsequent **3 bones: ethmoid, frontal and sphenoid.**

-

ACF

- It's demarcated from the middle cranial fossa by the:
- Posterior free border of the lesser wing of sphenoid on every side
- &

Anterior border of the sulcus chiasmaticus (optic groove) in the median region

- The junction between these 2 is marked by the anterior clinoid process.

- The anterior cranial fossa presents these features:
- In the median region, from before backwards these are:
- **Frontal crest**, a vertical crest on the inner aspect of the **frontal bone**.

- **Foramen cecum** (in between the **frontal crest** and **crista galli**).
- **Crista galli**, bony crest, created by the **perpendicular plate of the ethmoid**.
- **Jugum sphenoidale** (the superior surface of the anterior part of the **body of the sphenoid**).

- on every side of crista galli is located the sieve-like cribriform plate of the ethmoid which separates the anterior cranial fossa from the nasal cavity. It
- Possesses a number of small foramina, to supply passage for 15-20 filaments of the olfactory nerve,
- possesses:

- Nasal slits 1 on either side of crista galli to supply passage to the anterior ethmoidal nerve and
- **An anterior ethmoid canal** along the lateral border anteriorly and a **posterior ethmoidal canal** along the lateral border posteriorly to supply passage to the anterior and **posterior ethmoidal nerve** and boats.

- In the lateral region on each side, the orbital plate of the frontal bone separates the anterior cranial fossa from the orbit and supports the frontal lobe of the brain with consequent impressions of sulci and gyri.

STRUCTURES GOING THROUGH DIFFERENT FORAMINA IN THE ANTERIOR CRANIAL FOSSA

- **FORAMEN CECUM**
- **Emissary vein** from the **nasal mucosa** to the anterior end of the **superior sagittal sinus**.

- **CRIBRIFORM FORAMINA**

- Olfactory nerves from the **olfactory epithelium** of the nasal cavity to the **olfactory bulb** in the anterior cranial fossa.

- **ANTERIOR ETHMOIDAL FORAMEN**

- Anterior ethmoidal nerve: a branch of the nasociliary nerve.
- Anterior ethmoidal artery: a branch of the ophthalmic artery.
- Anterior ethmoidal vein: a tributary of the ophthalmic vein.

- **POSTERIOR ETHMOIDAL FORAMEN**

- **Posterior ethmoidal nerve:** a branch of the nasociliary nerve.
- **Posterior ethmoidal artery:** a branch of the ophthalmic artery.
- **Posterior ethmoidal vein:** a tributary of the ophthalmic vein.

CLINICAL SIGNIFICANCE

- **Foramen cecum** may conduct an **emissary vein** from the **nasal cavity** to the **superior sagittal sinus** and after that function as a potential route for nasal diseases to spread to the **meninges** of the **cranial cavity**.