

Al-Shannan

Cranial fossa

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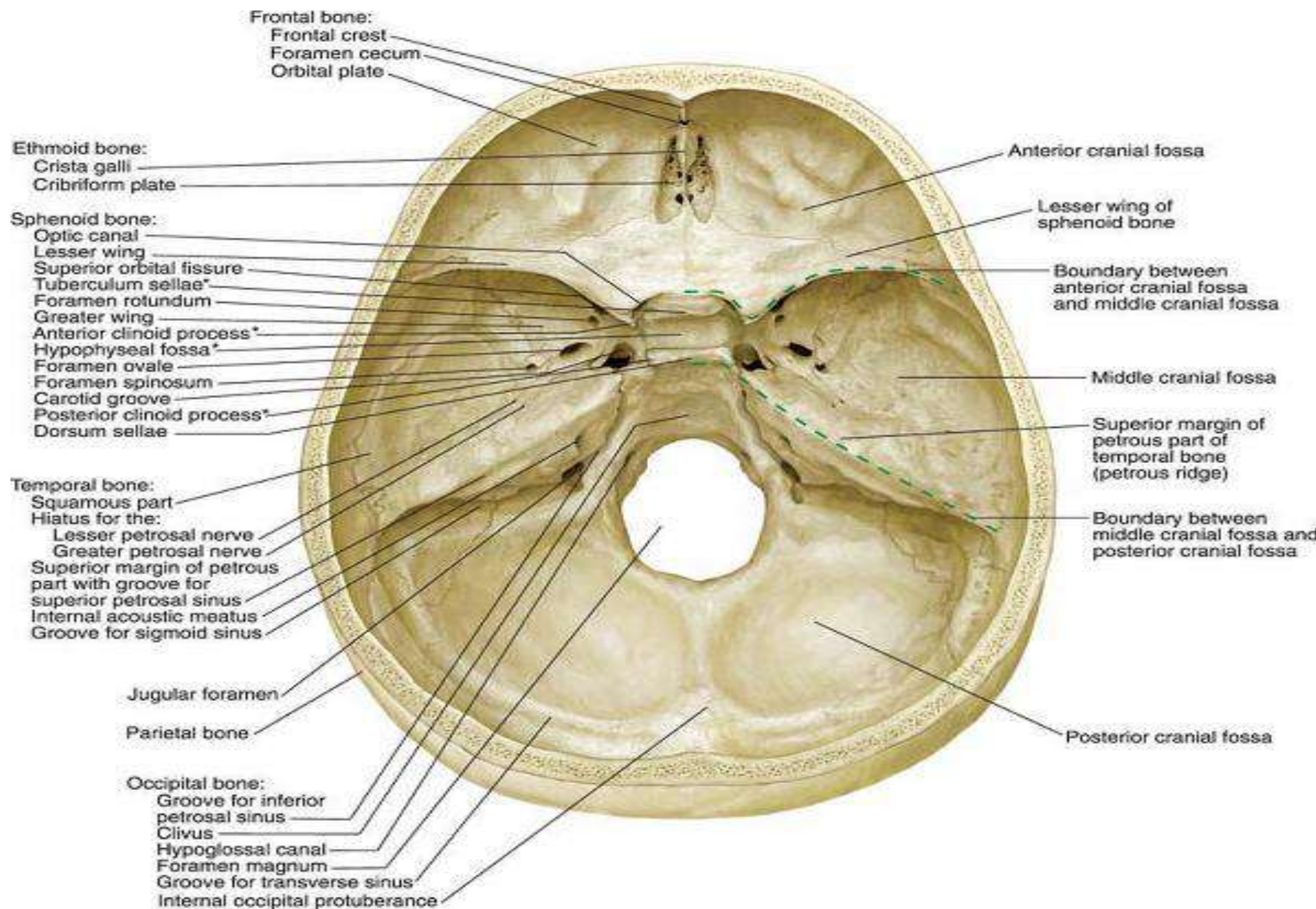
Cranial fossa

divided into 3 parts

Anterior ,Middle ,Posterior

1 - anterior cranial fossa

- **Boundaries and contents :**
- **Front and the side walls:**
- **Frontal bone – orbital plate, cribriform plate** of ethmoidal bone .anterior part of the body of the **sphenoid** .
- **-Crista galli**
- **F-cecum**
- **Frontal crest**
- Anterior and posterior **ethmoidal canals** (n and V)
- **Anterior clinoid processes** (medial end of posterior border of lesser wing of sphenoid bone
- **Optic foramen** for optic n and ophthalmic artery



*These four structures make up the sella turcica

Middle cranial fossa

Boundaries and contents :

Anterior posterior border of lesser wing of sphenoid bone

anterior clinoid process

optic groove

Posterior **dorsum sellae** of sphenoid bone ,
upper border of **petrous part** of temporal bone

Lateral **greater wing** of sphenoid ,squamous part of temporal bone **Features;**

butterfly shape with median and lateral part

Middle cranial fossa

Median part :

Optic groove and canal

Tuberculum sellae

Middle clinoid process

Dorsum sellae

lateral part:

Greater wing of sphenoid bone

Petrous part of temporal bone

Squamous part of temporal bone

Greater part of **sphenoid bone**

grooves for m m artery

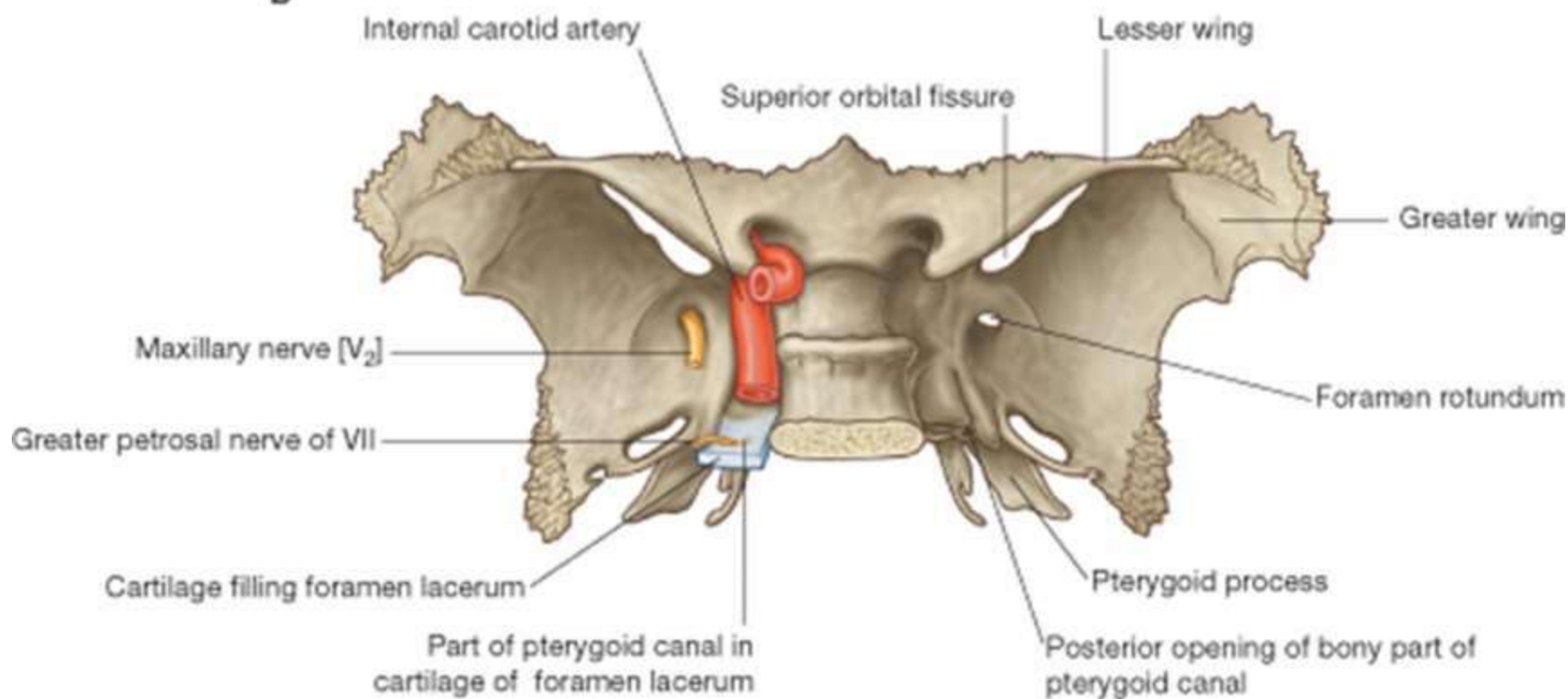
Petrous part of temporal bone

F –lacerum:

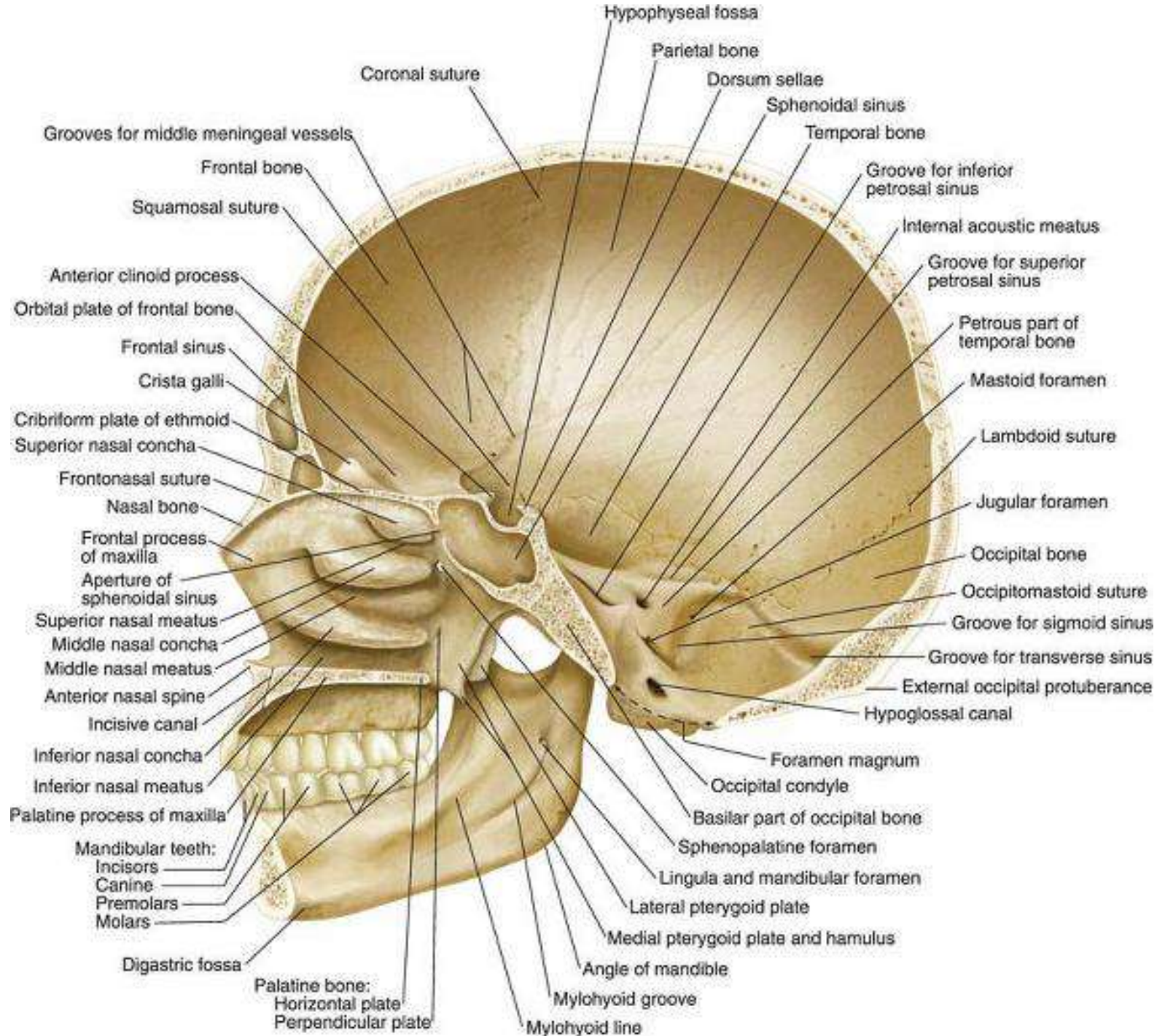
F- Rotundum

F- spinosum

B

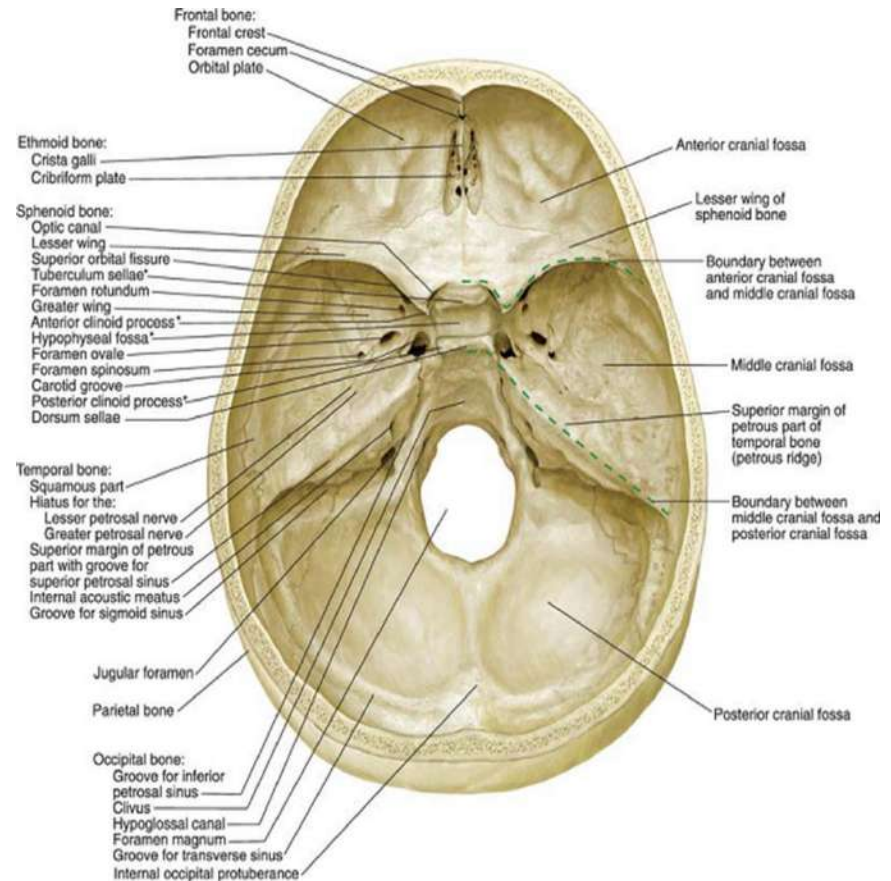


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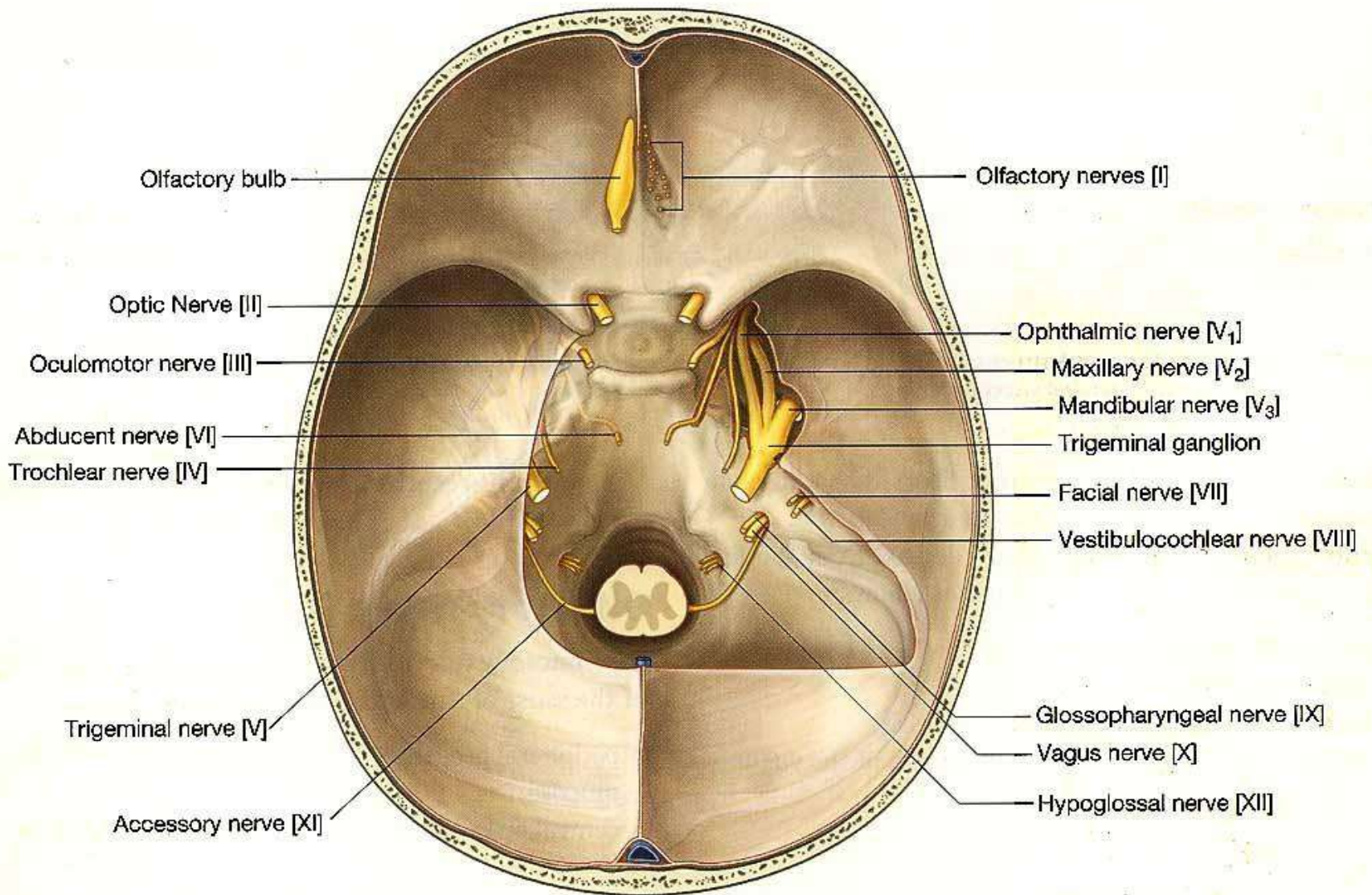


Posterior cranial fossa

- Largest and deepest
- **Boundaries and contents :**
- Anterior base of occipit ,
- dorsum sellae
- posterior part of body of sphenoid bone
- Posterior squamous part of occipital bone
- lateral petromastoid part of temporal bone
- condylar part of occipital bone
- F-magnum
- Jugular foramen
- Internal auditory meatus
- Internal surface of squamous part of occipital bone



*These four structures make up the sella turcica



Clinical points

- **Surface marking:**
- Central point of **pterion** is situated 1 and half inch behind frontozygomatic suture and 1 and half inch the upper border of zygoma correspond to anterior division of middle meningeal artery
- **Reids base line:** imaginary line from floor of the orbit to external auditory meatus to inion where transverse sinus lies half inch above this line

Differentiating features of male and female skull

- **Female skull**

- Thinner and higher
- Less capacity
- Poorly marked muscular markings
- not prominent supraciliary arch
- Mastoid process is not prominent
- Frontal and parietal eminences are prominent

- **Male skull**

- Thicker and heavier
- More capacity
- Well marked
- Prominent
- Prominent
- Less prominent

Fetal skull

Some of the cranial sutures closes after birth of the fetus

☐ Anterior (18-24 months) ☐ Bregma

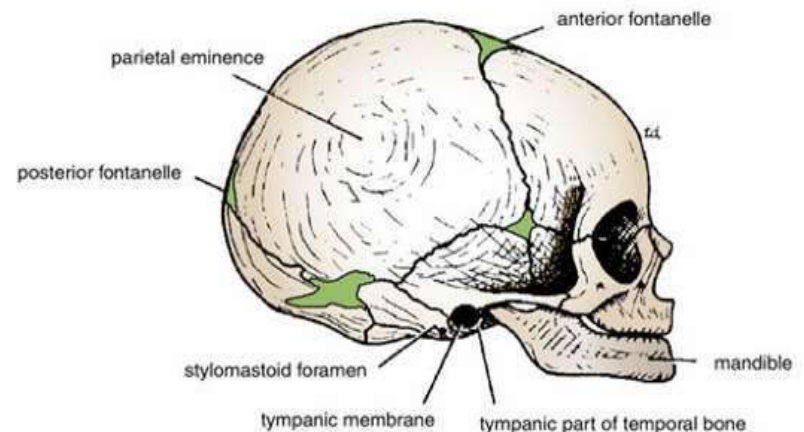
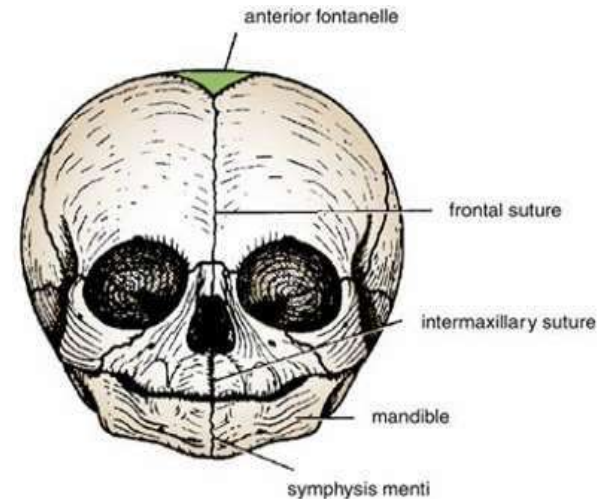
☐ Posterior (2-3 months) ☐ Lambda

☐ Sphenoid (2-3 months) ☐ Pterion

☐ Mastoid (end of 1st year) ☐ Asterion

If anterior fontanelle shows bulging
It depicts Increased Intracranial pressure.

If depressed- Decreased Intracranial pressure



Fetal skull

- Fontanells
- Size of the face to cranium 1: 8
- Adult skull 1:2
- Maxilla
- Mastoid process

-

Metopic suture

- **Def:**
- At birth the frontal bone consists of two halves, separated by the interfrontal or metopic suture.
- Toward the end of the first or the beginning of the second year, this suture begins to close from below upward.
- In cases of premature closure before birth, the suture closes both from above and below toward the middle, and a marked cranial deformity, known as **trigonocephaly**
- the skull is of a triangular shape, with the apex in front, so that the forehead runs out into a very sharp point.

