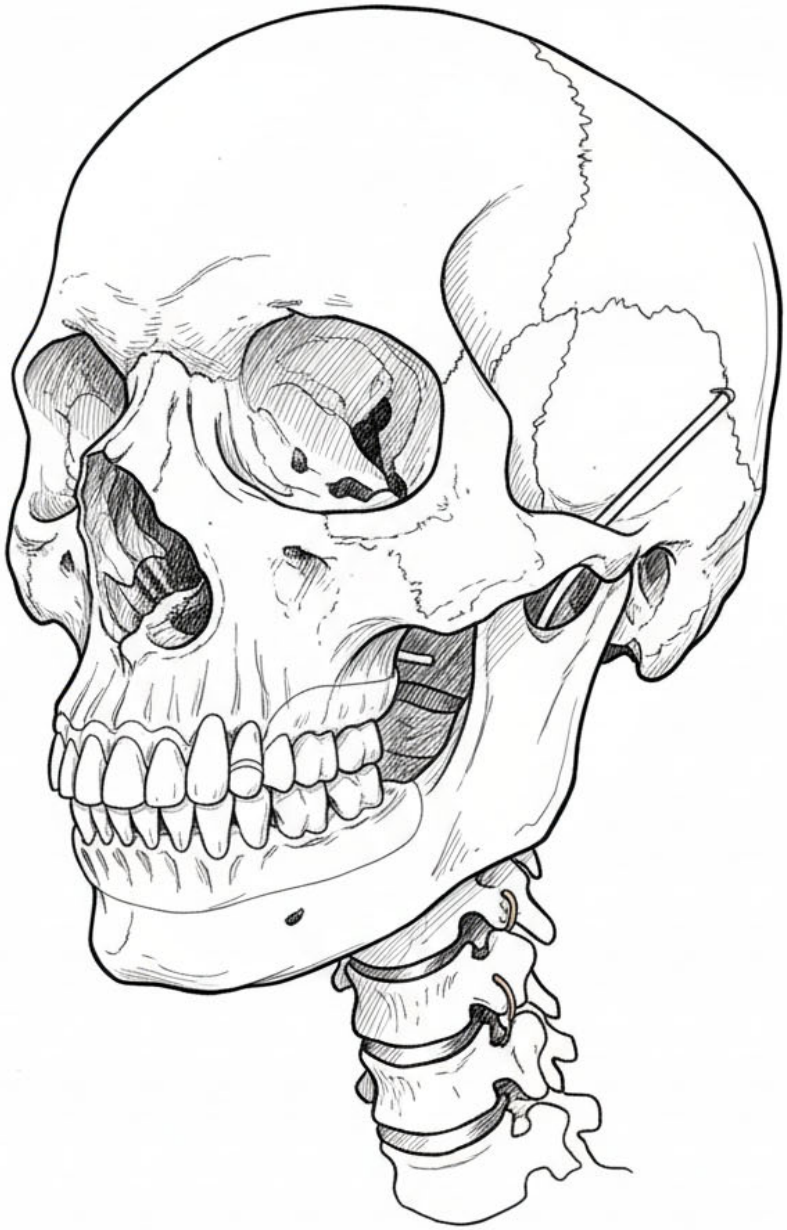
รูปภาพกะโหลกศีรษะ



คู่มือศึกษาวิชากายวิภาคศาสตร์

สำหรับนักศึกษาทันตแพทย์ ปีที่ ๒

ภาควิชากายวิภาคศาสตร์, คณะทันตแพทยศาสตร์, มหาวิทยาลัยมหิดล

คำนำ

"รูปภาพกะโหลกศีรษะ" เล่มนี้ ได้จัดทำขึ้นด้วยการสร้างภาพกะโหลกสำหรับแสดงสิ่งต่างๆ โดยเรียงตามลำดับกับคำอธิบายในคู่มือศึกษากะโหลก เพื่อนักศึกษาได้ศึกษากะโหลกสะดวกยิ่งขึ้น โดยการดูภาพจากเล่มนี้ประกอบคำอธิบายของคู่มือศึกษาเล่มดังกล่าว

สิทธิ ส. ศรีโสภาค
ภาควิชากายวิภาคศาสตร์
คณะทันตแพทยศาสตร์
มหาวิทยาลัยมหิดล
พฤษภาคม ๒๕๒๑

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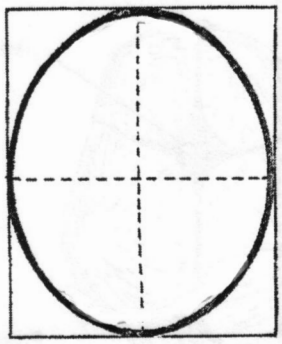
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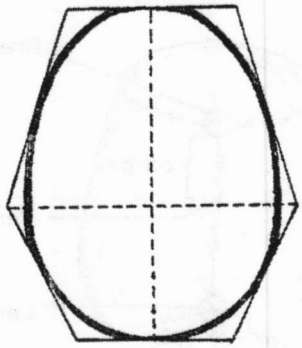
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NORMA VERTICALIS

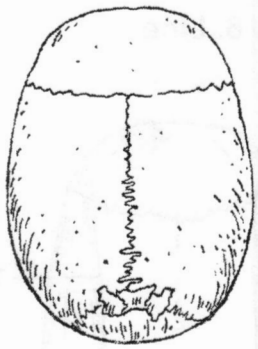
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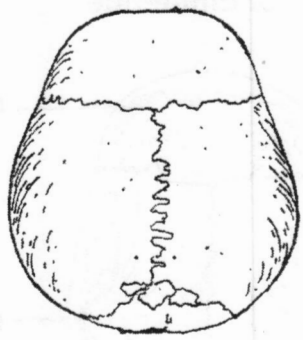
Spheroid



Ovoid

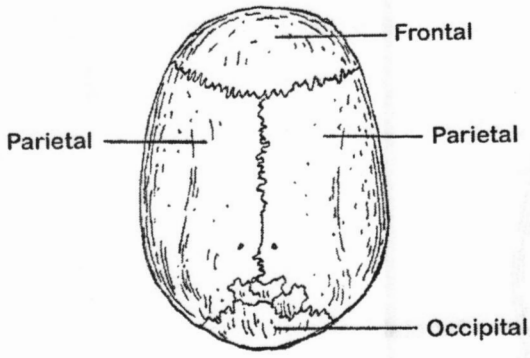


European : Ovoid

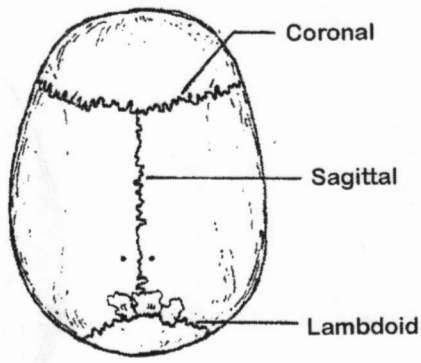


Thai : Spheroid

2. Bone

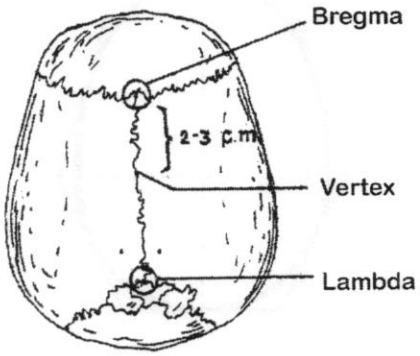


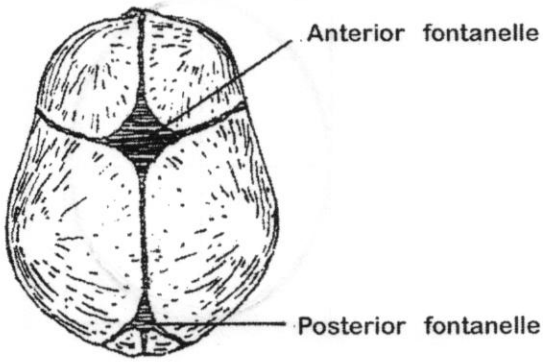
3. Suture



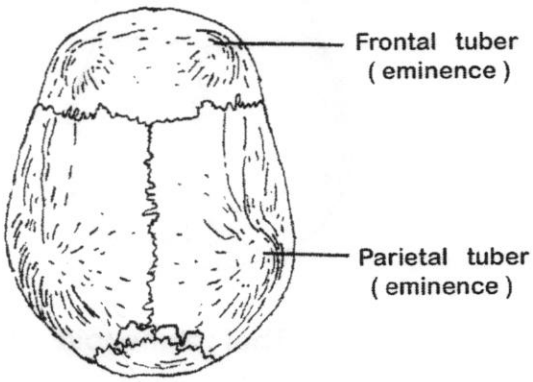
NORMA VERTICALIS

4. Point

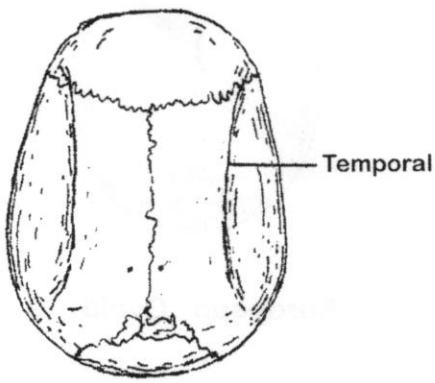




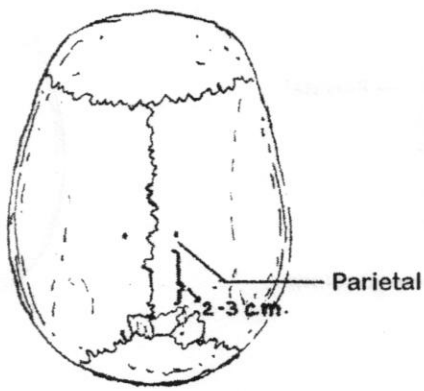
5. Eminence



6. Line

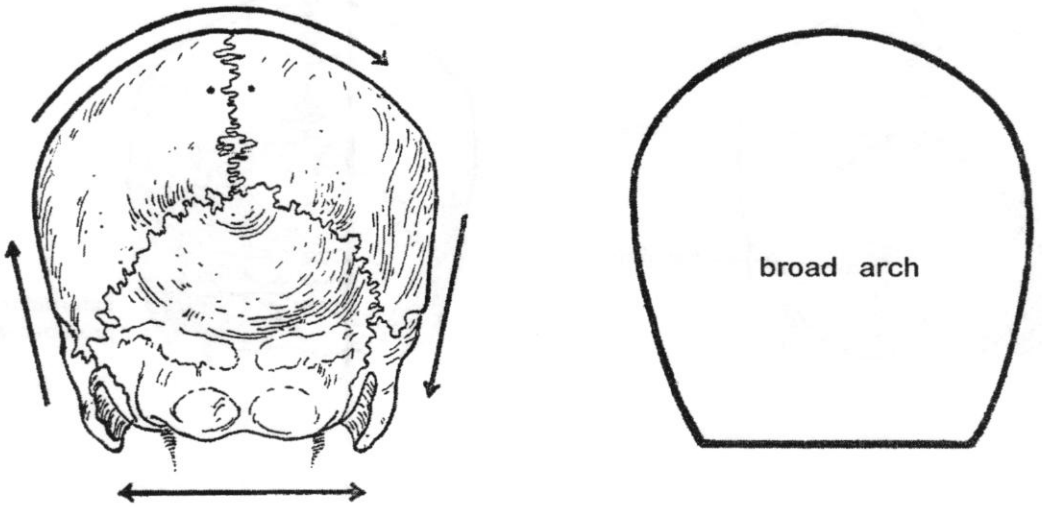


7. Foramen

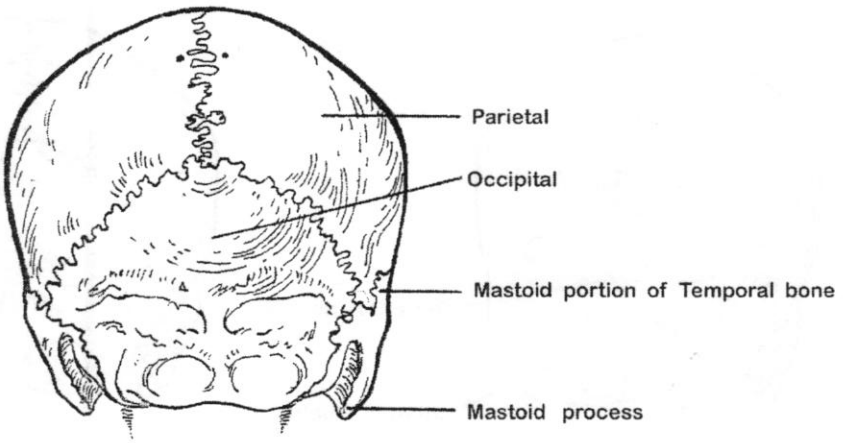


NORMA OCCIPITALIS

1. Outline



2. Bone

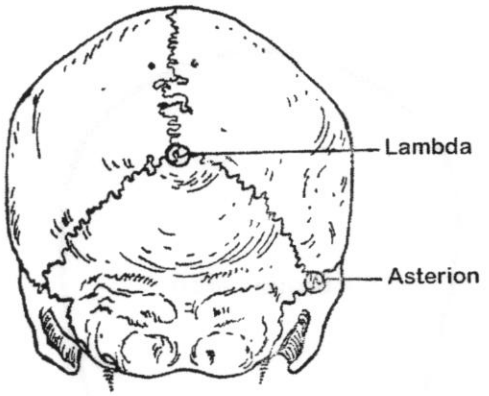


3. Suture

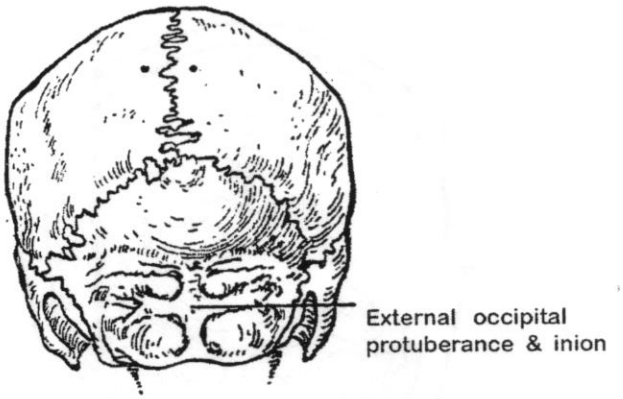


NORMA OCCIPITALIS

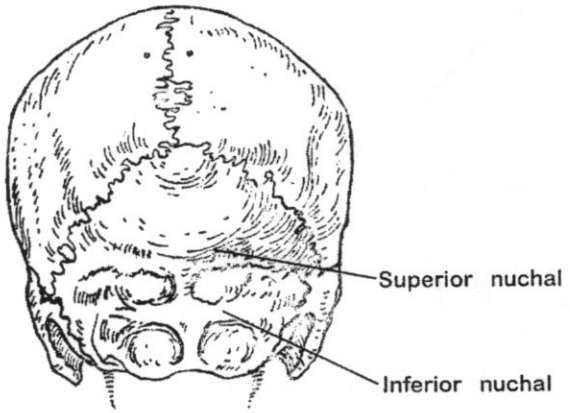
4. Point



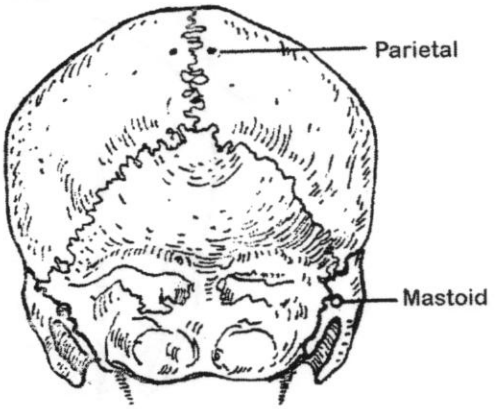
5. Eminence



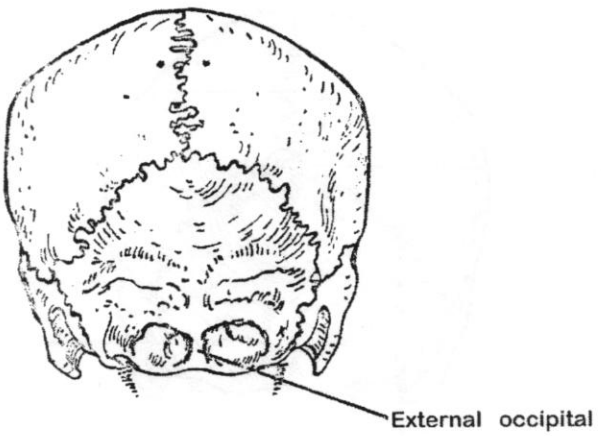
6. Line



7. Foramen



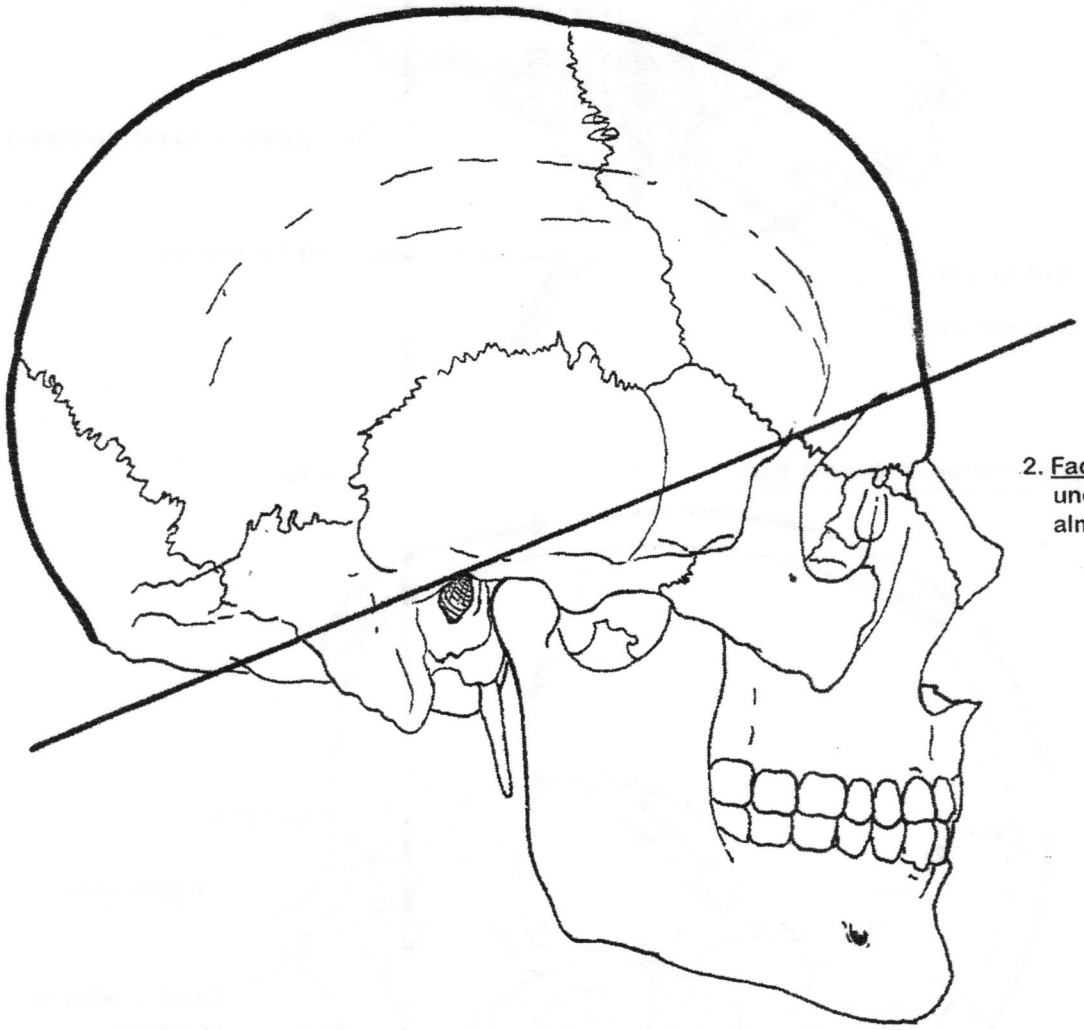
8. Crest



NORMA LATERALIS

1. Outline

1. Cranial part : Ovoid



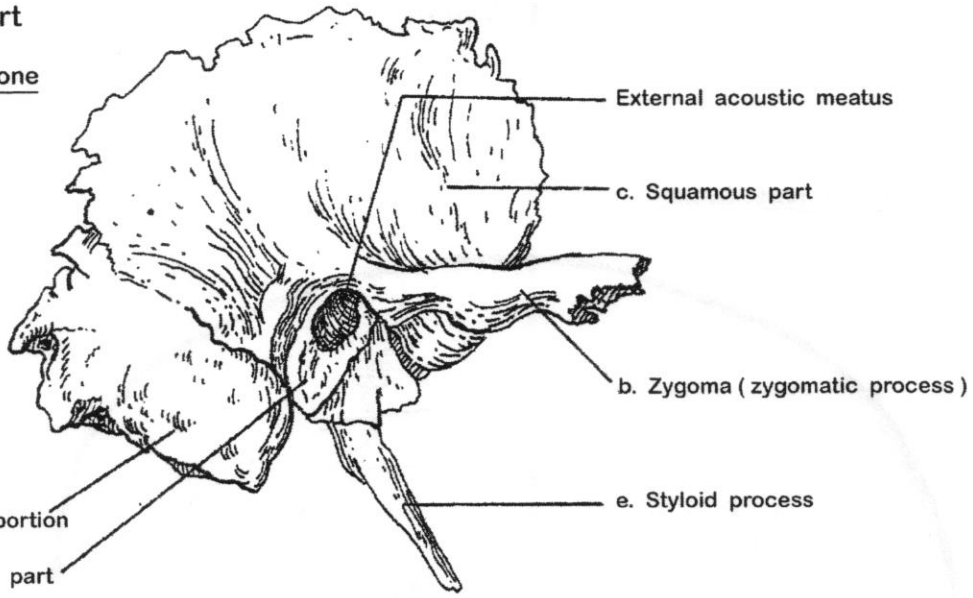
2. Facial Part :
uneven,
almost triangular

NORMA LATERALIS

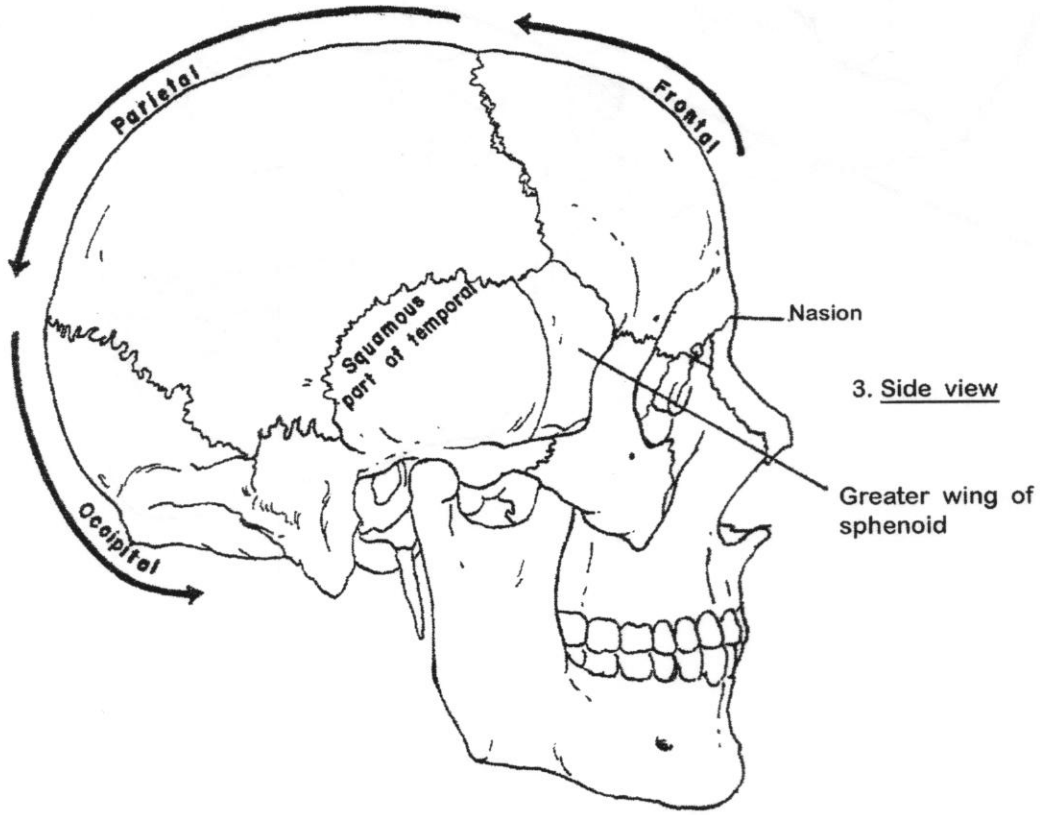
2. Bone

A. Cranial Part

1. Temporal bone



2. Upper border of Cranial Part

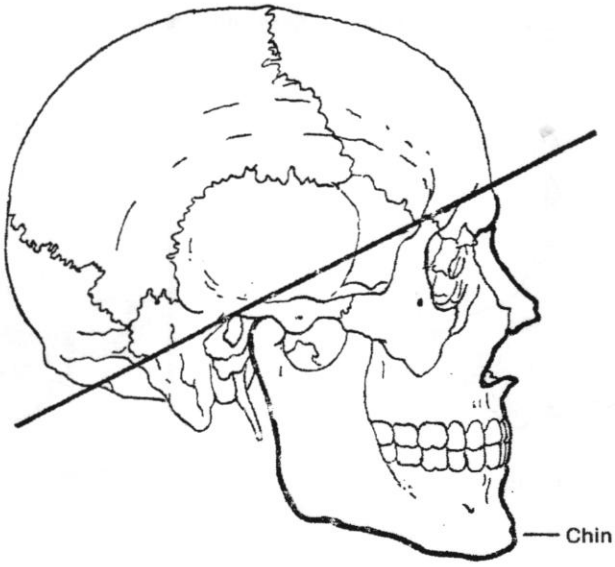


3. Side view

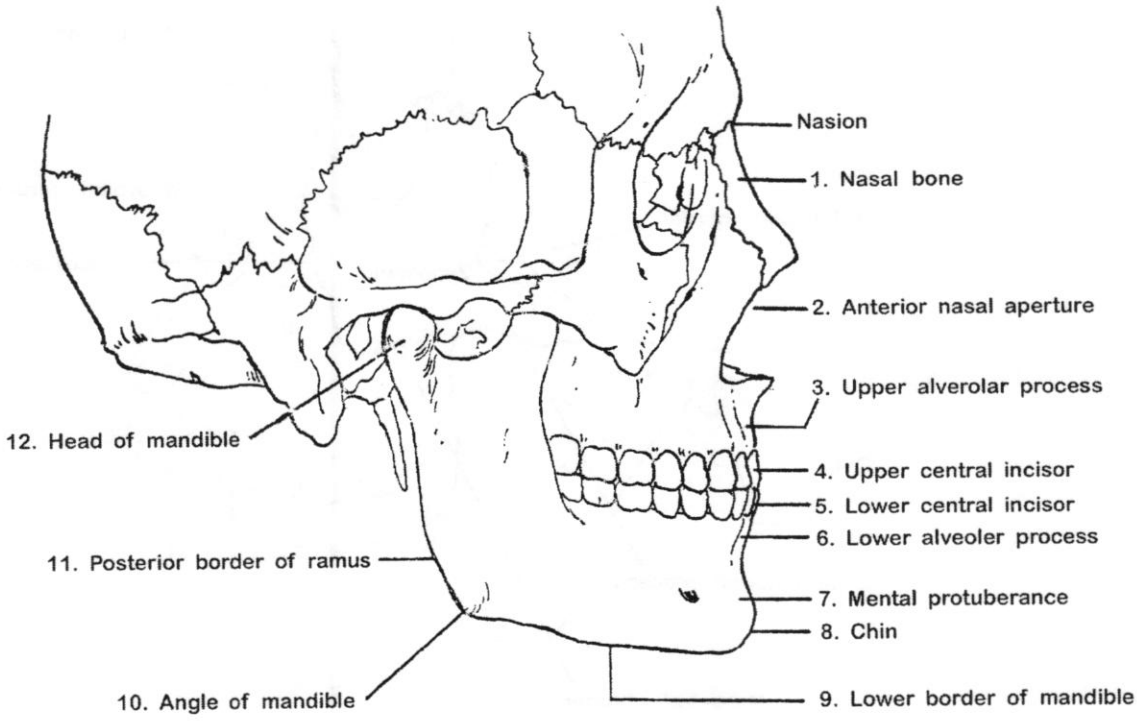
NORMA LATERALIS

B. Facial Part

1. Outline : angular



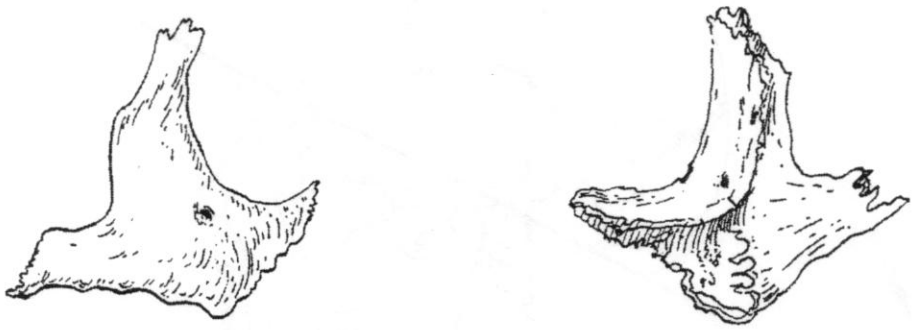
2. Bone along the angular outline



NORMA LATERALIS

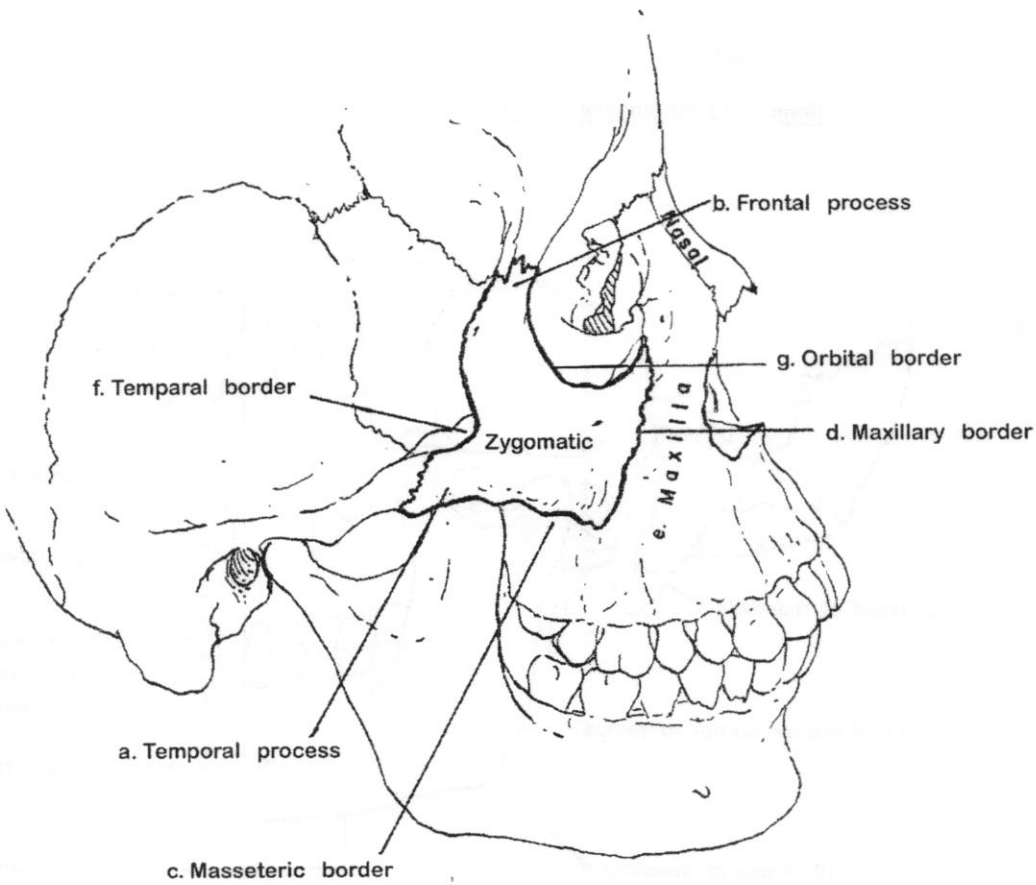
Facial Part

3. Zygomatic bone : Lateral surface : Diamond - shaped

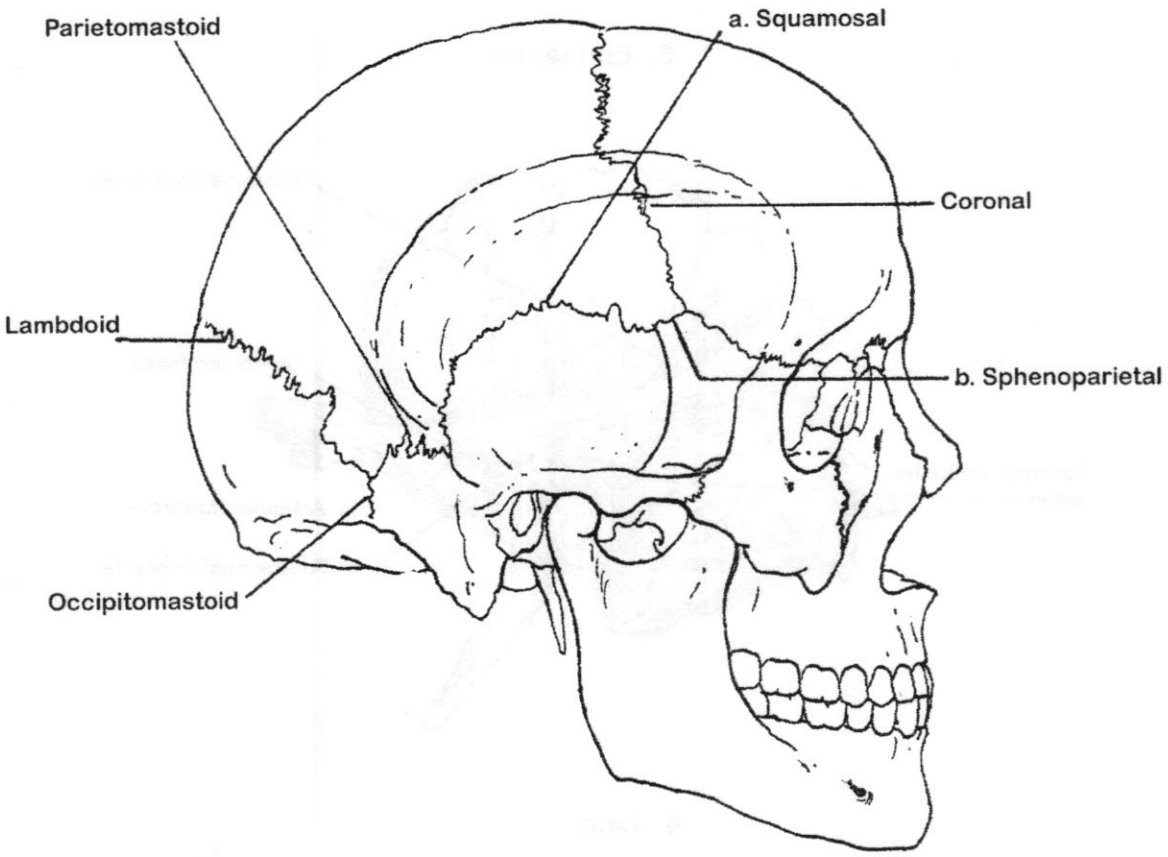


A. Lateral side

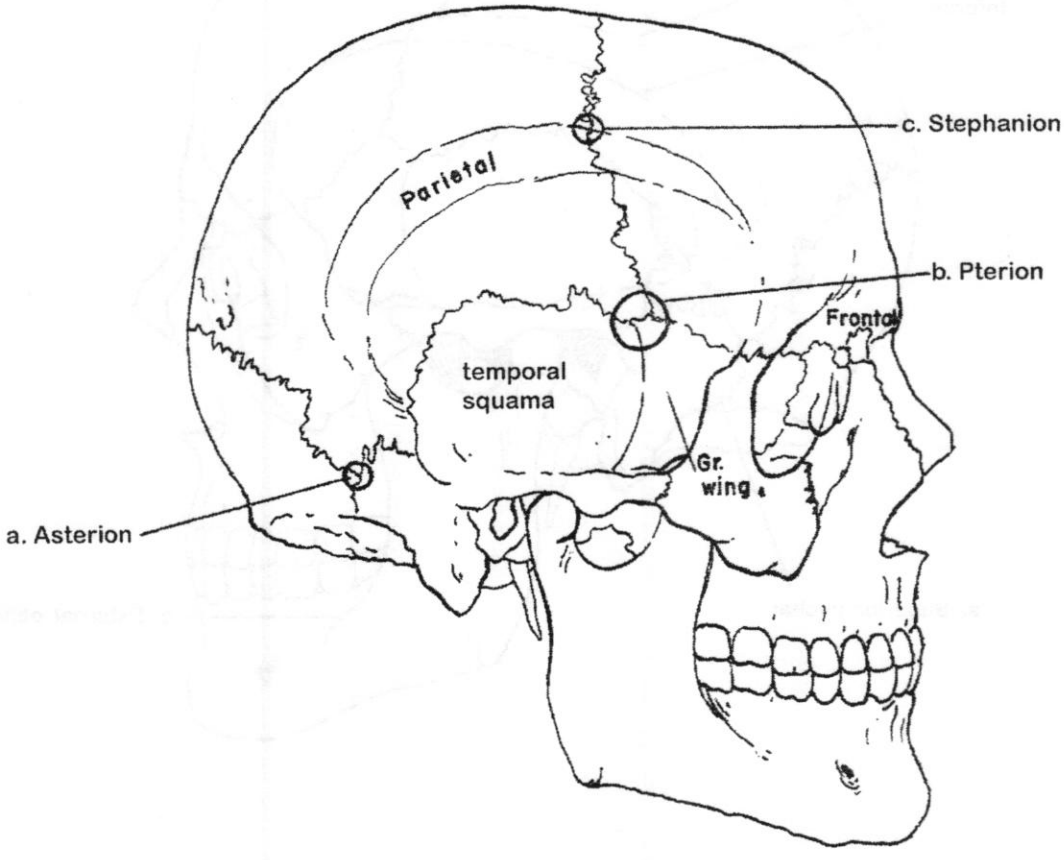
B. Medial side



3. Suture

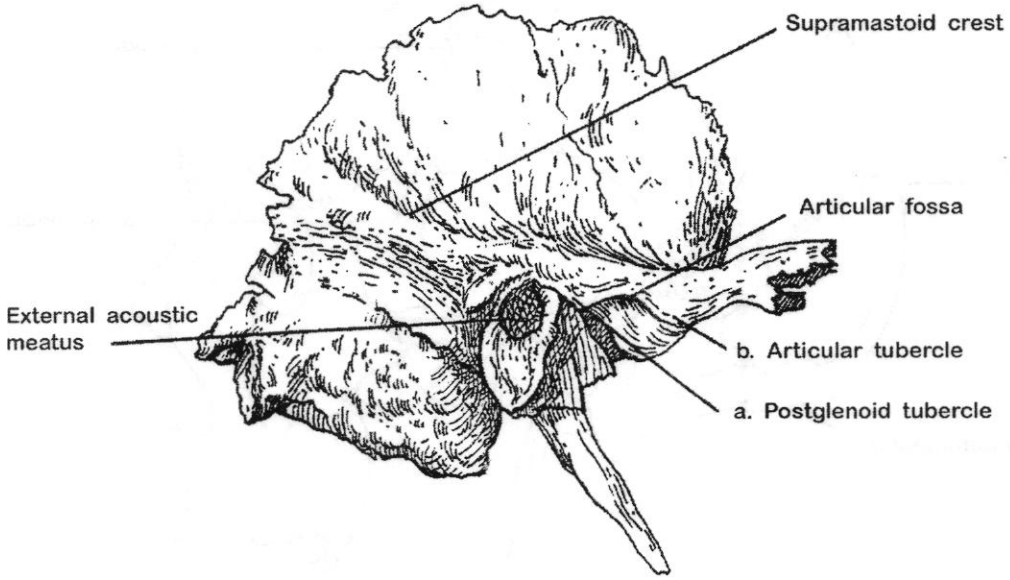


4. Point

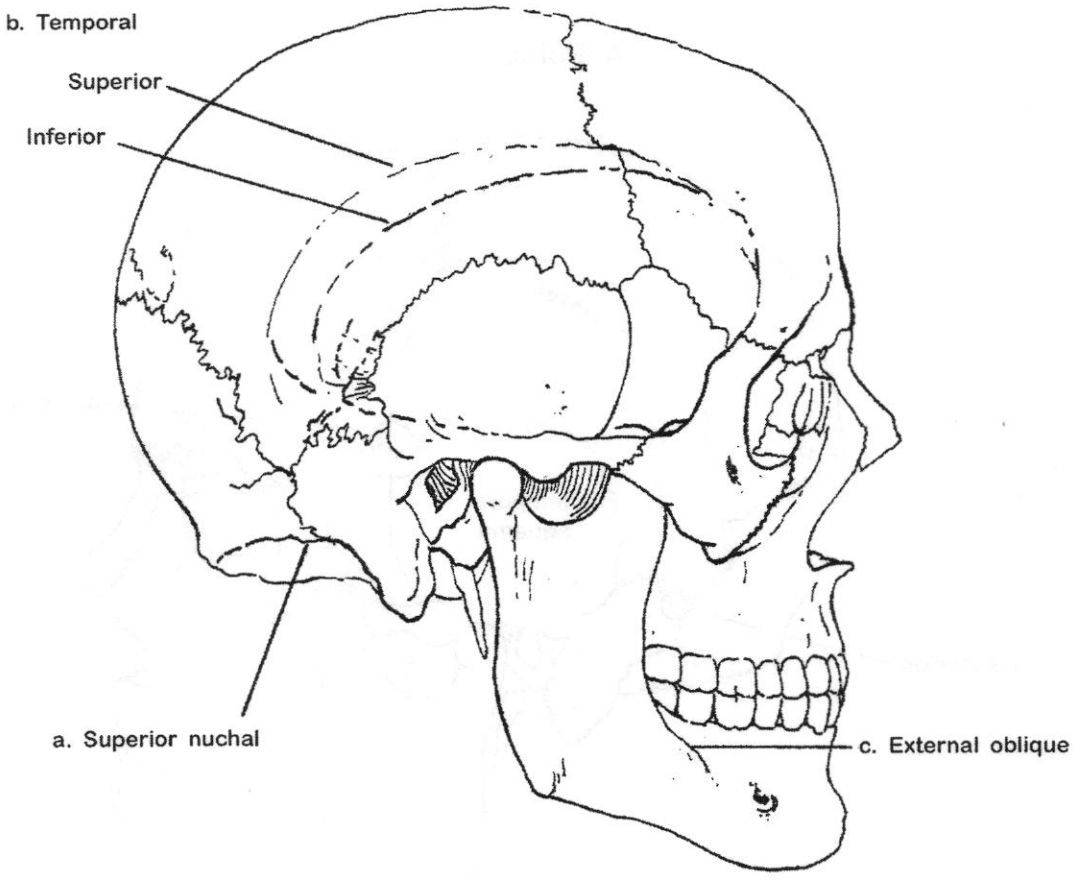


NORMA LATREALIS

5. Eminence

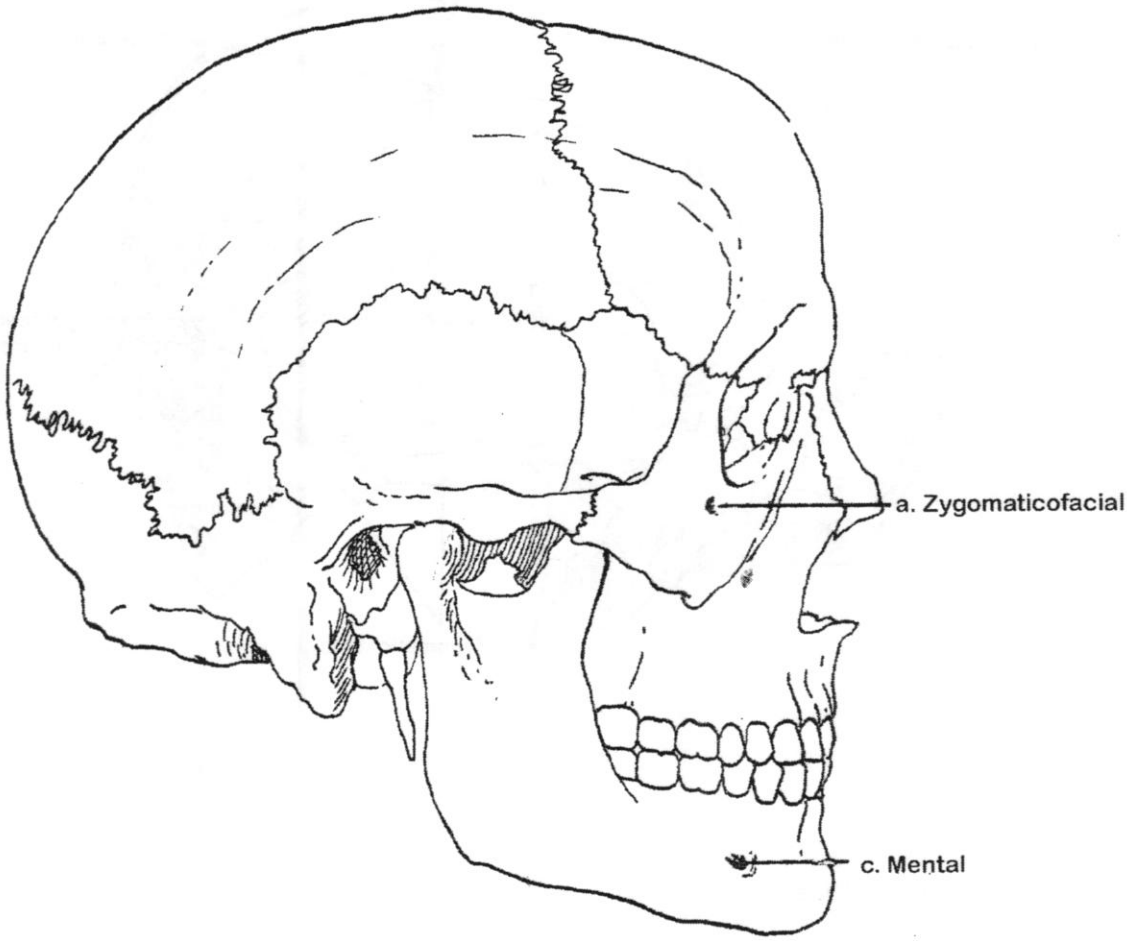


6. Line

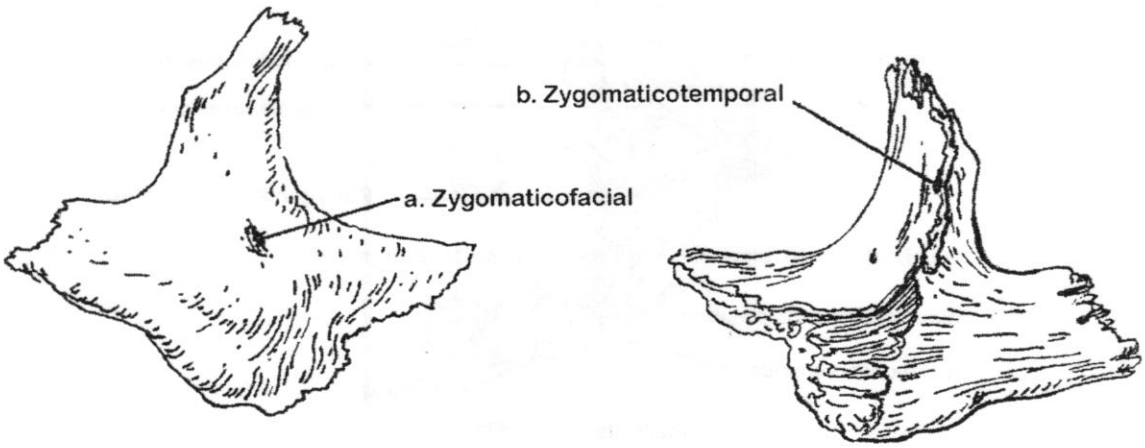


NORMA LATERALIS

7. Foramen



Zygomatic bone



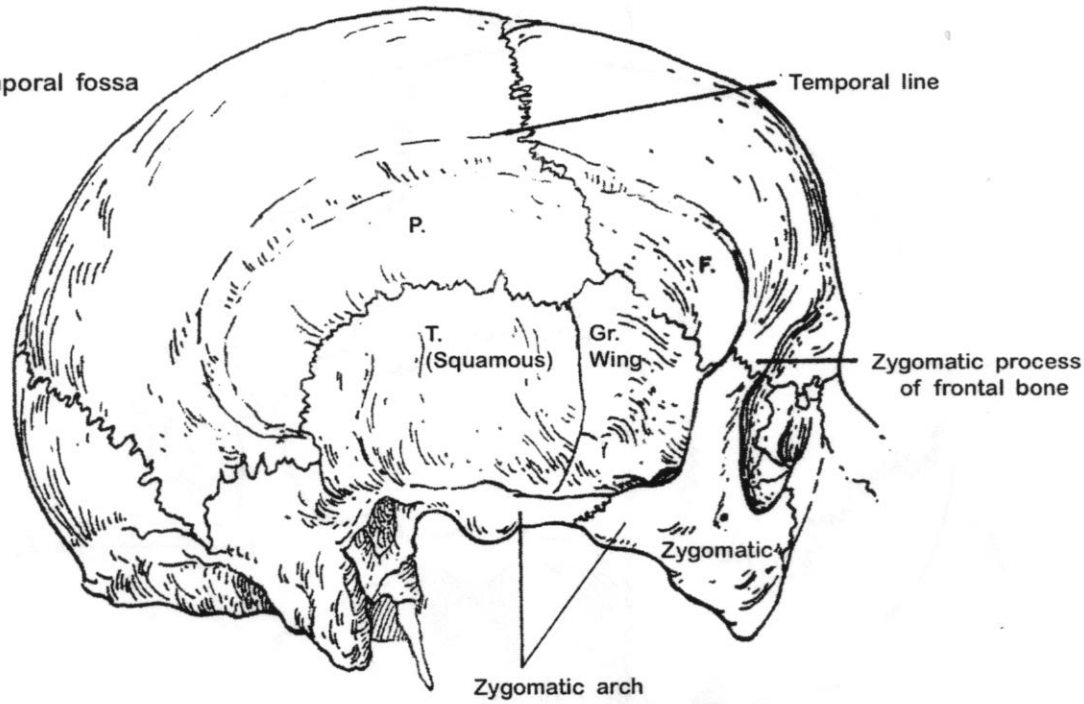
A. Lateral side

B. Medial side

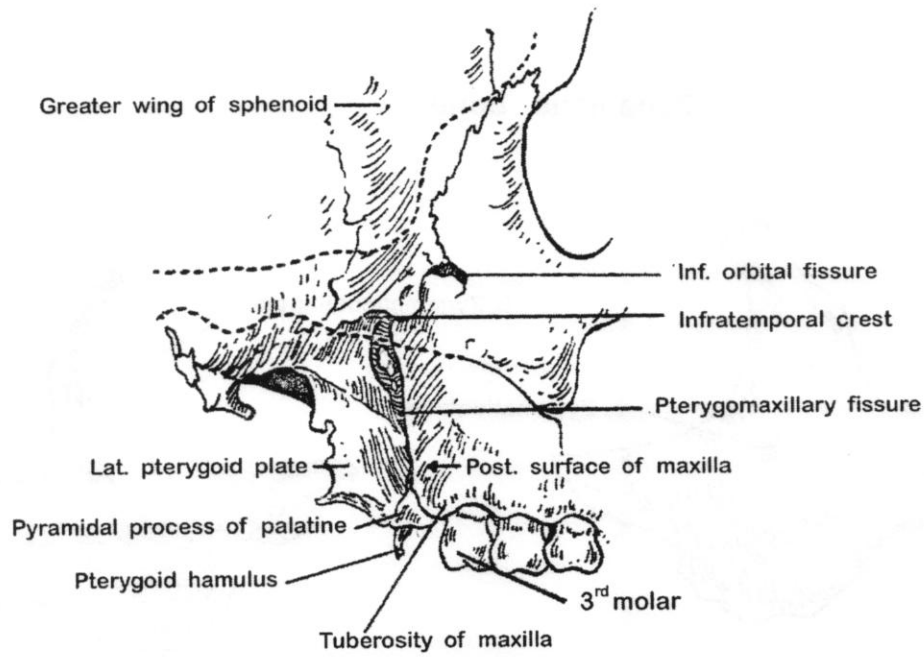
NORMA LATERALIS

8. Fossa

a. Temporal fossa



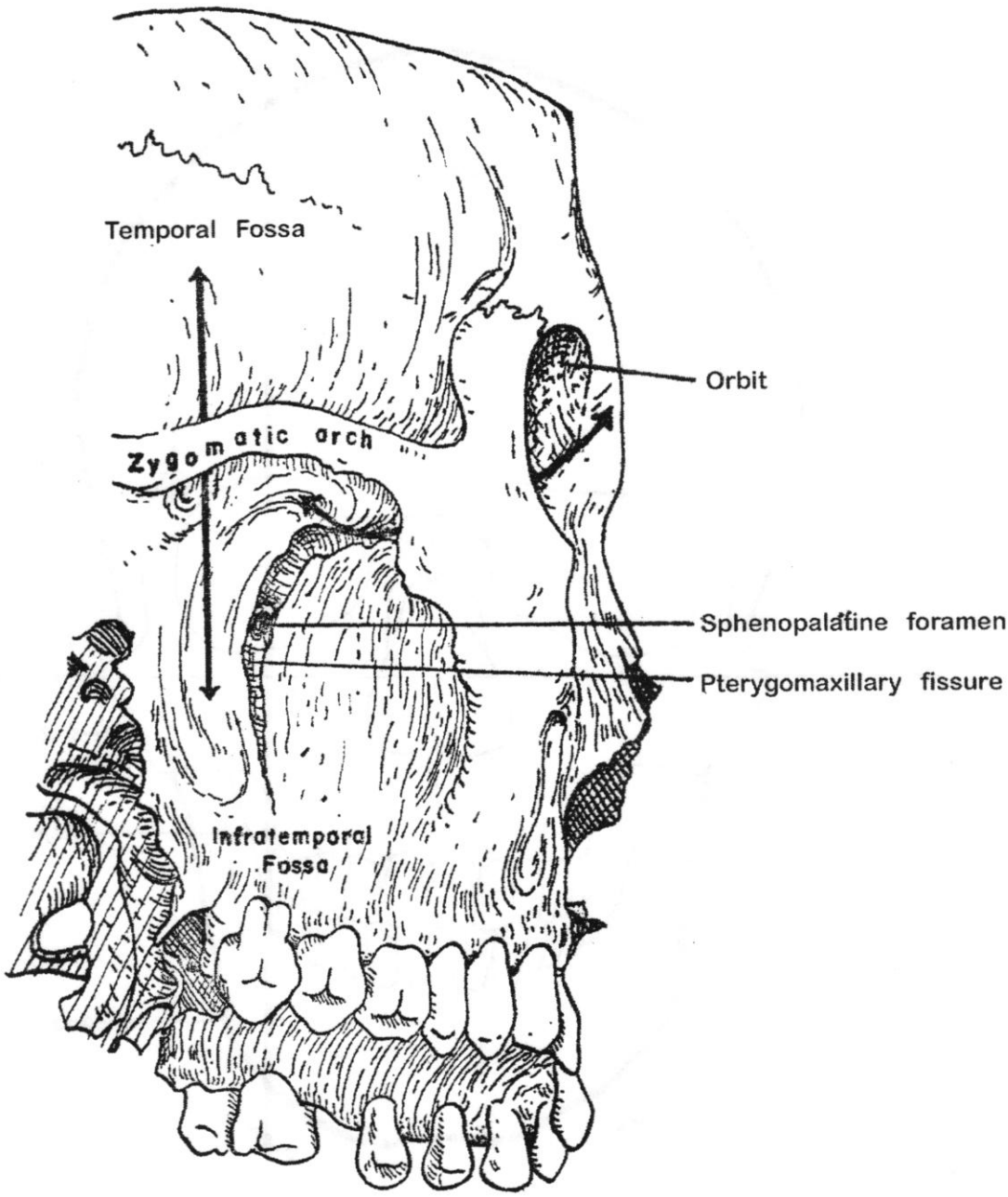
b. Infratemporal fossa



The medial wall of the right infratemporal fossa

NORMA LATERALIS

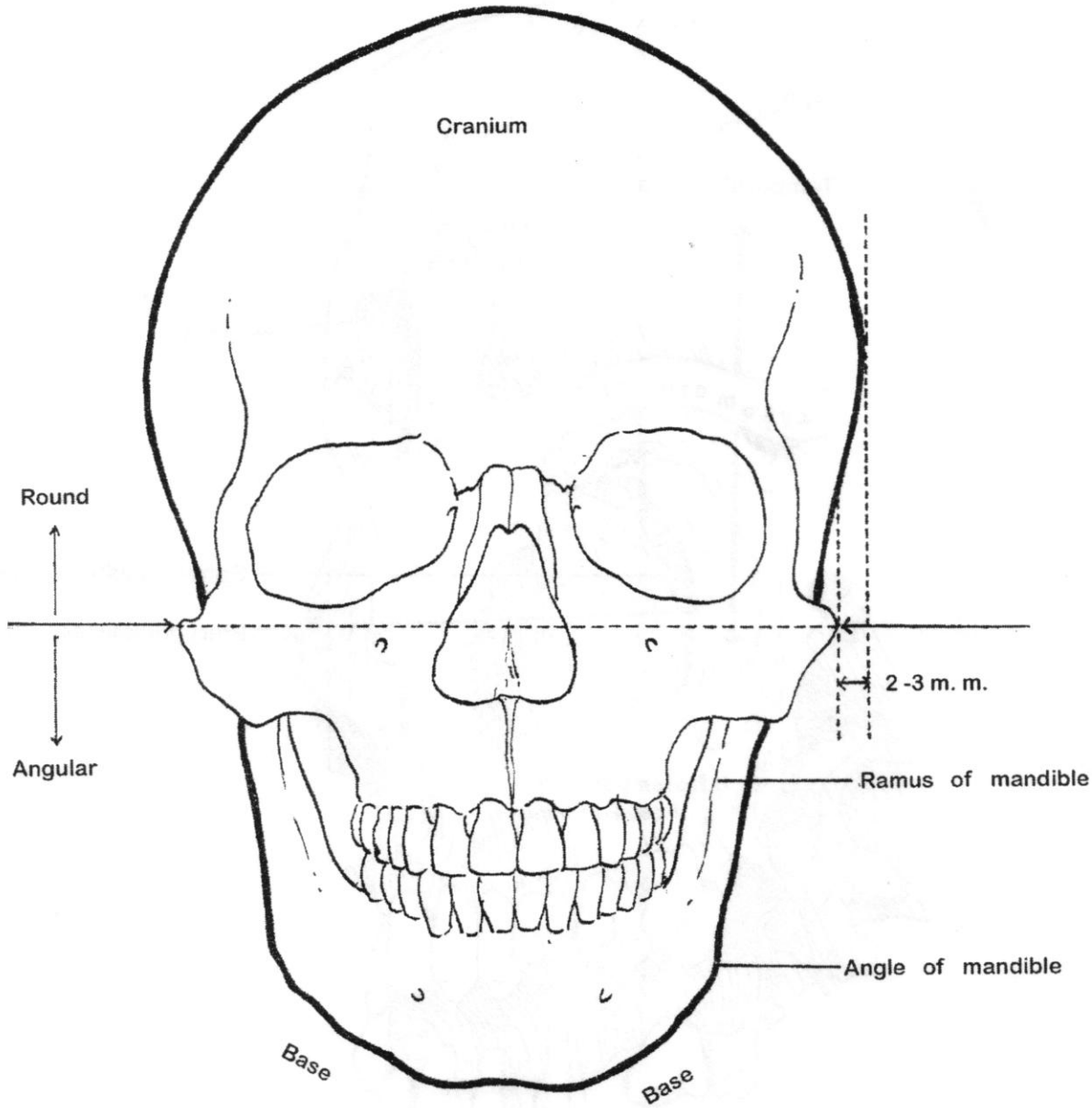
Communication between Fossae



Lateral view of the pterygoid region.

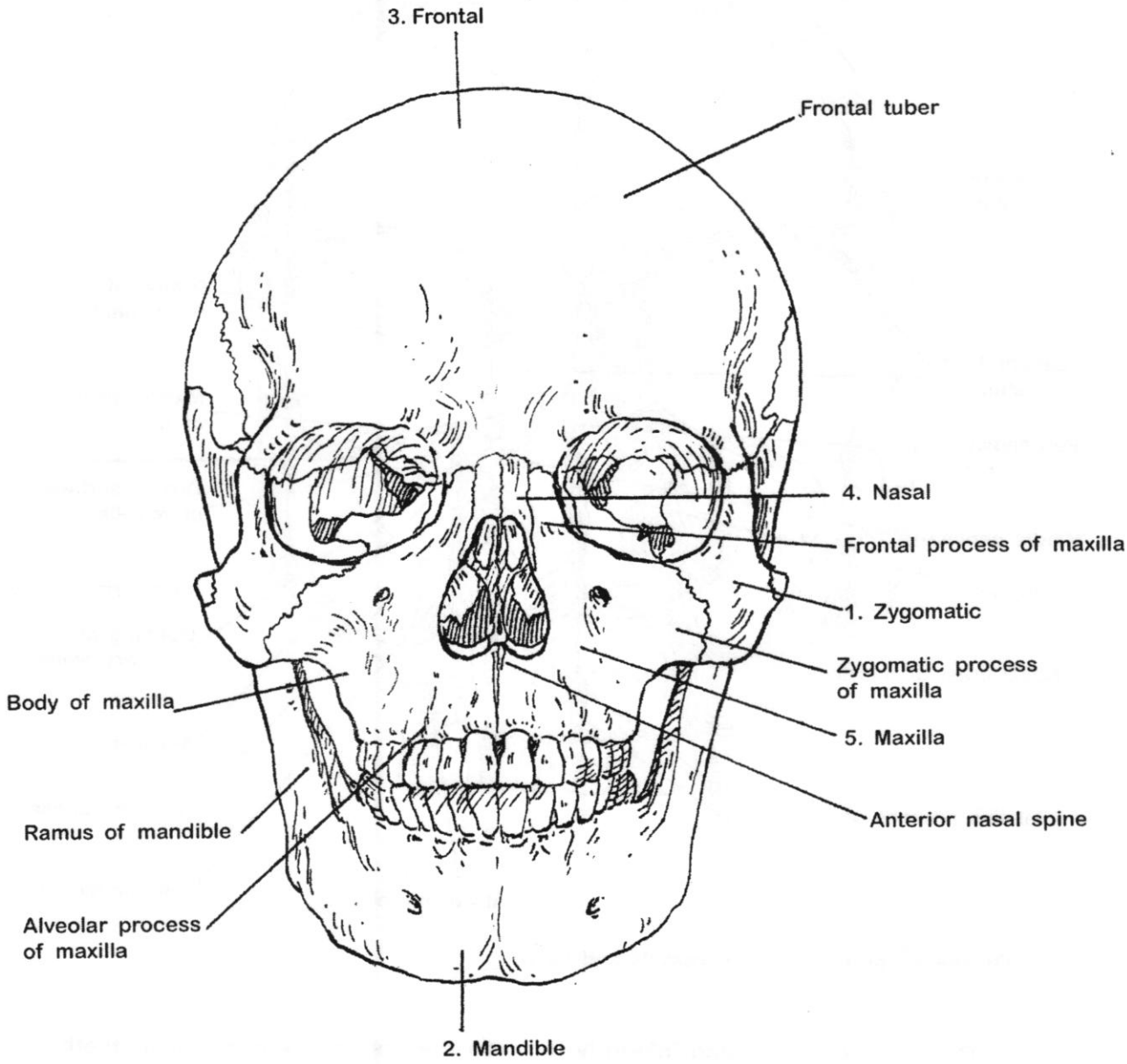
NORMA FRONTALIS

1. Outline

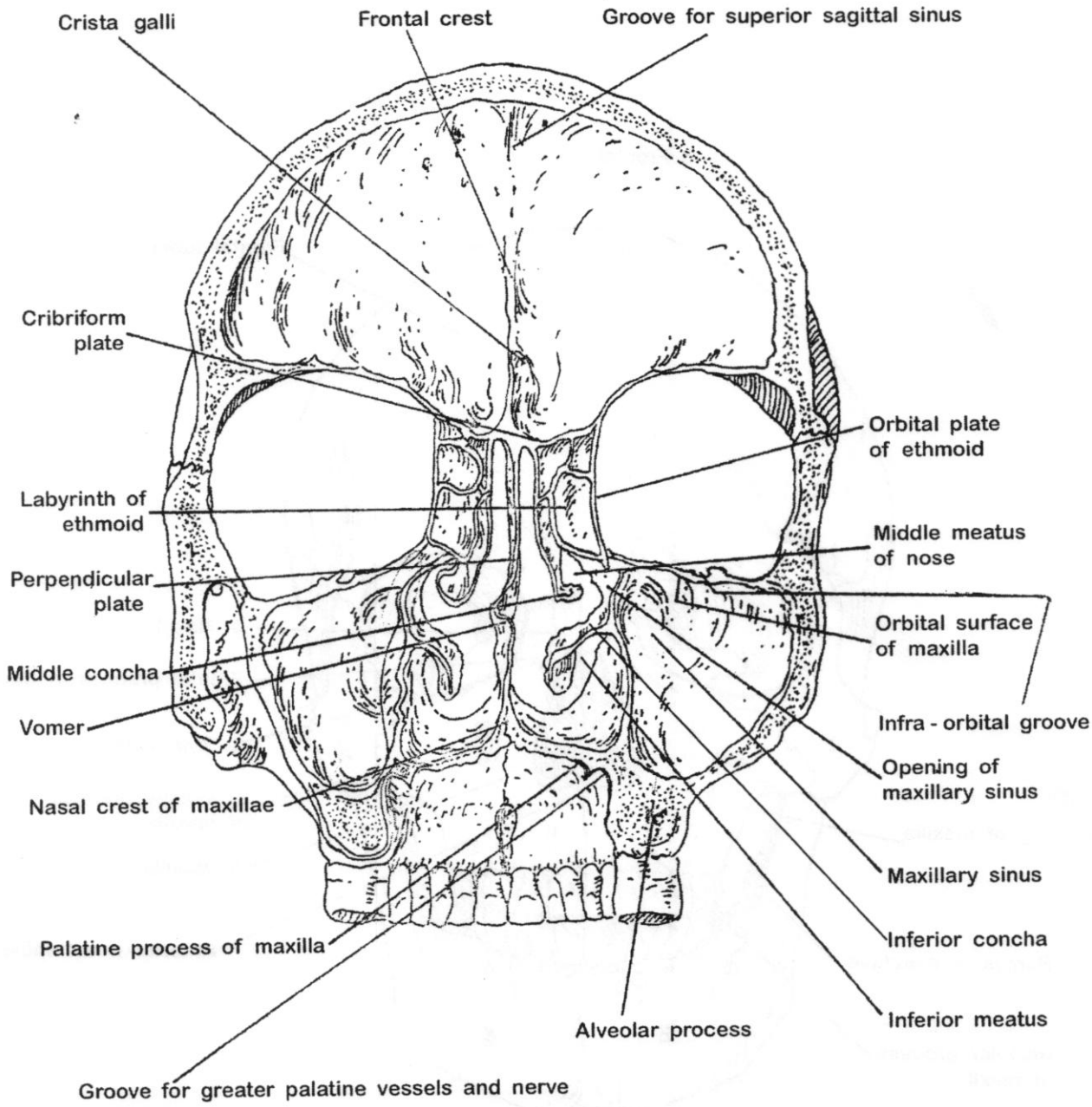


NORMA FRONTALIS

2. Bone



MAXILLARY SINUS

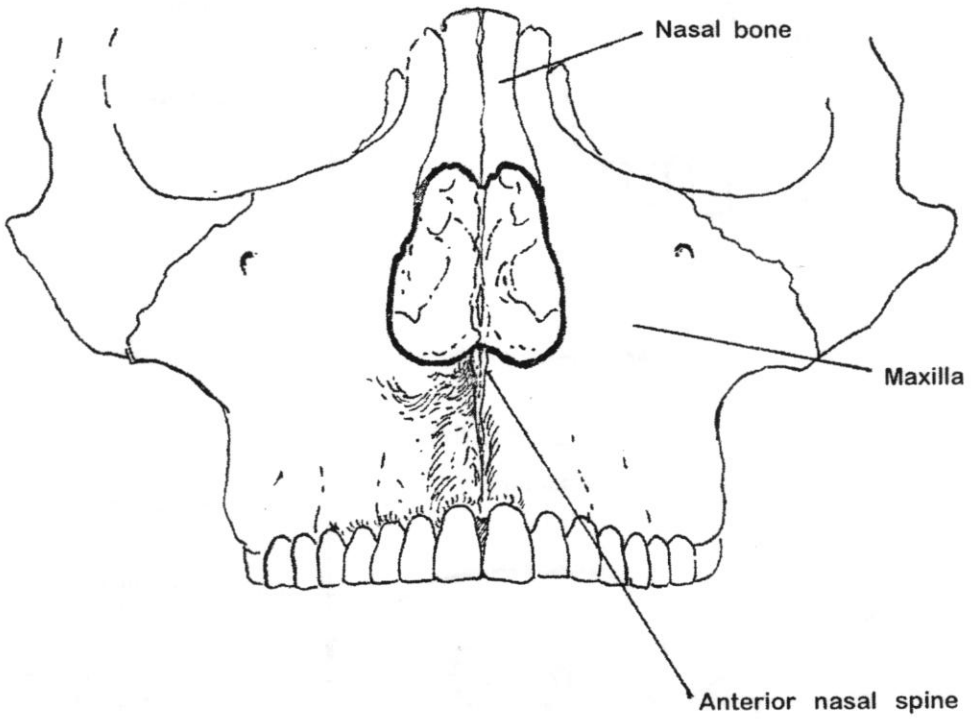


Coronal section passing inferiorly between the first and second molar teeth.

NORMA FRONTALIS

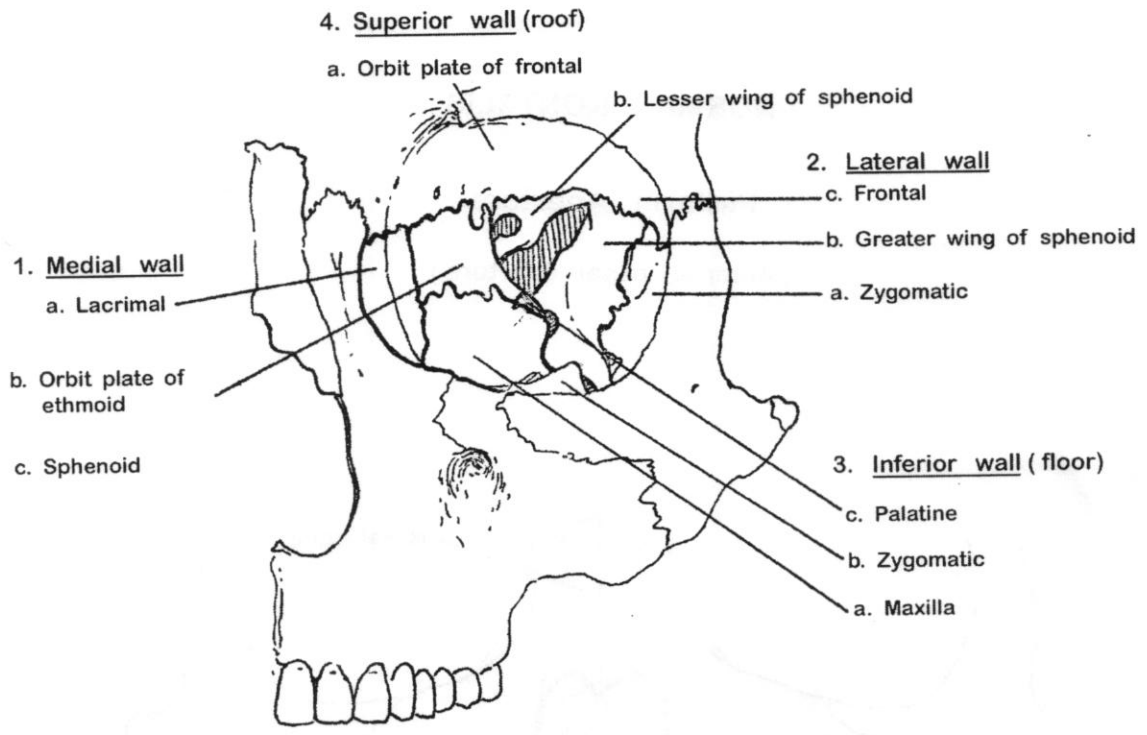
Piriform Aperture

(Anterior nasal aperture)

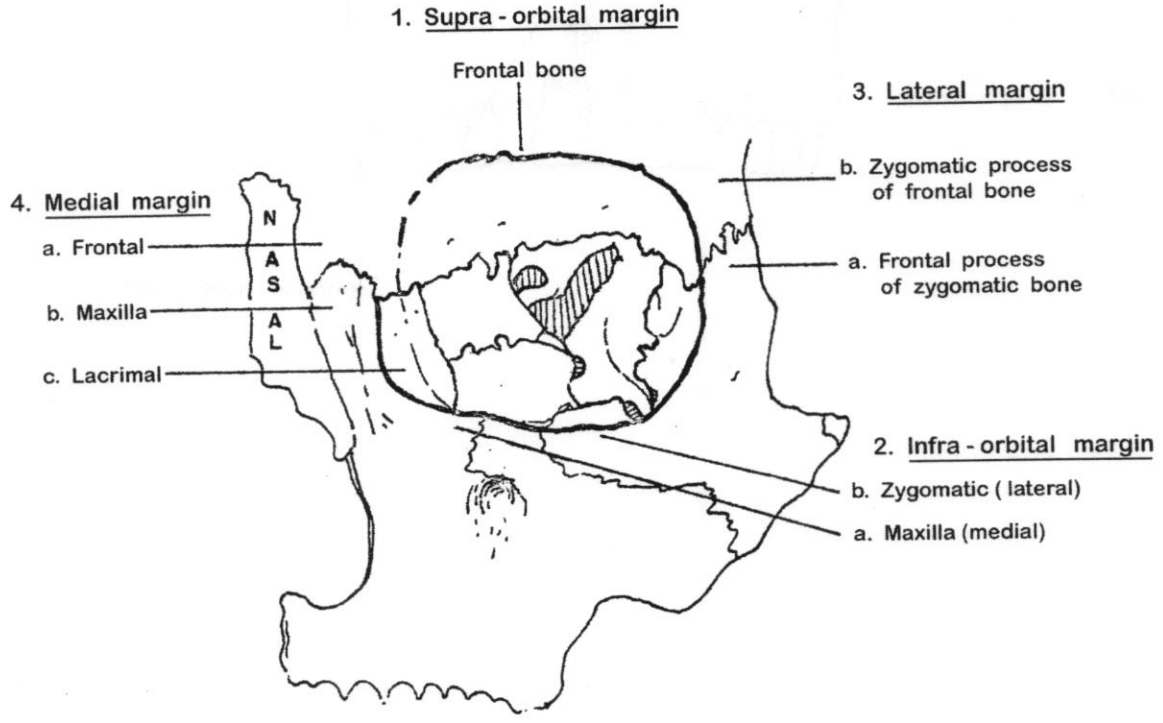


NORMA FRONTALIS

Bones in Orbit

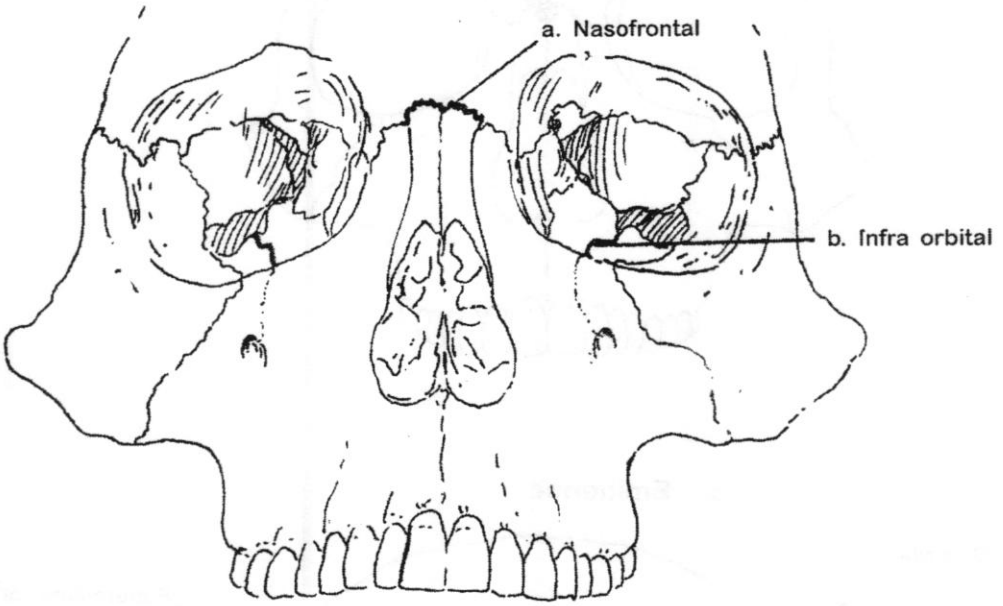


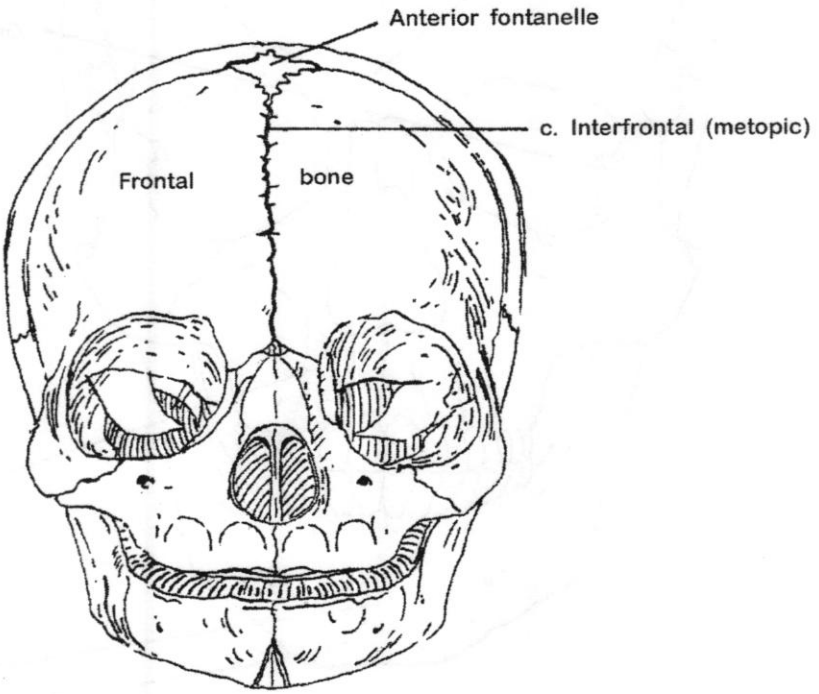
Margins



NORMA FRONTALIS

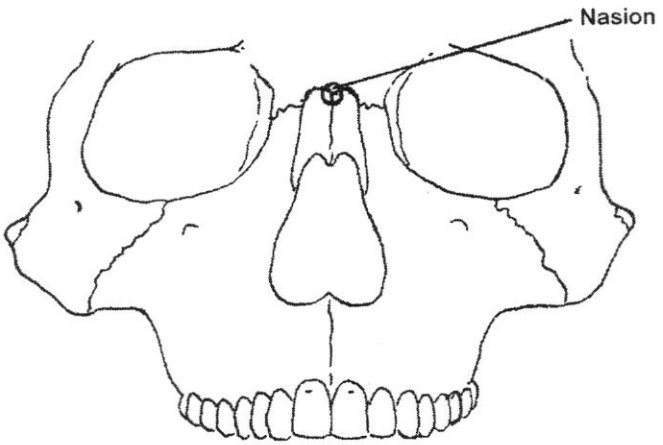
3. Suture



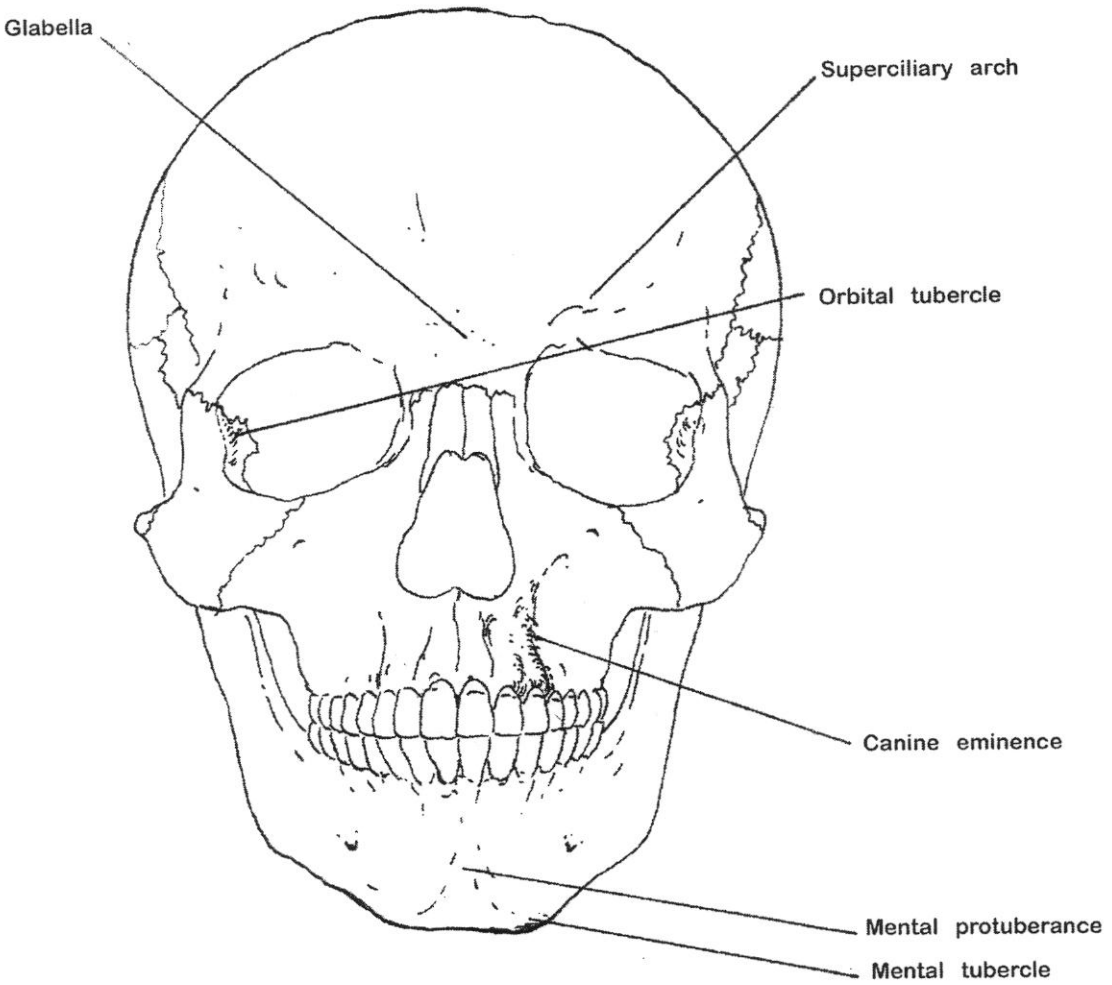


NORMA FRONTALIS

4. Point

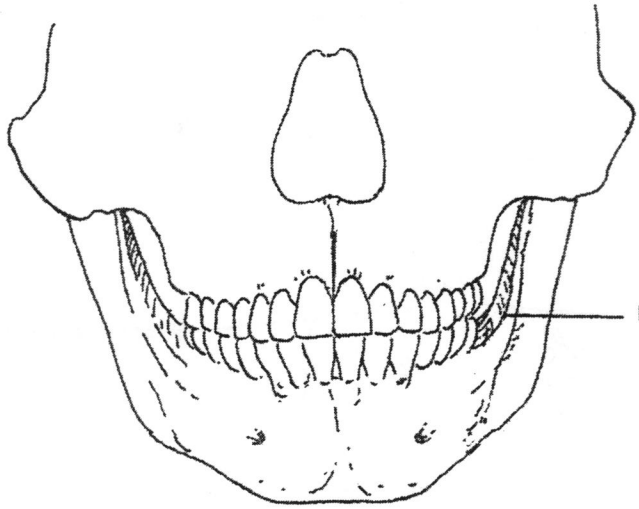


5. Eminence

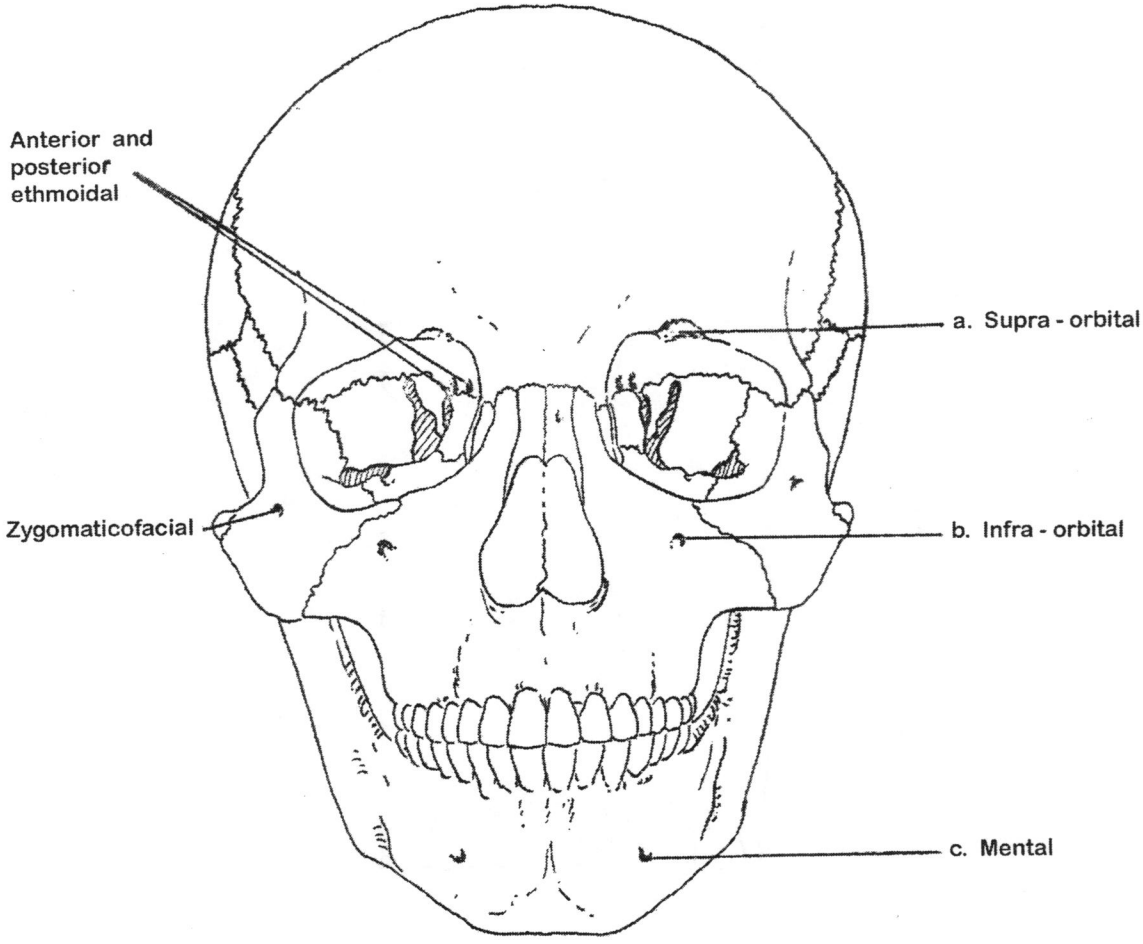


NORMA FRONTALIS

6. Line

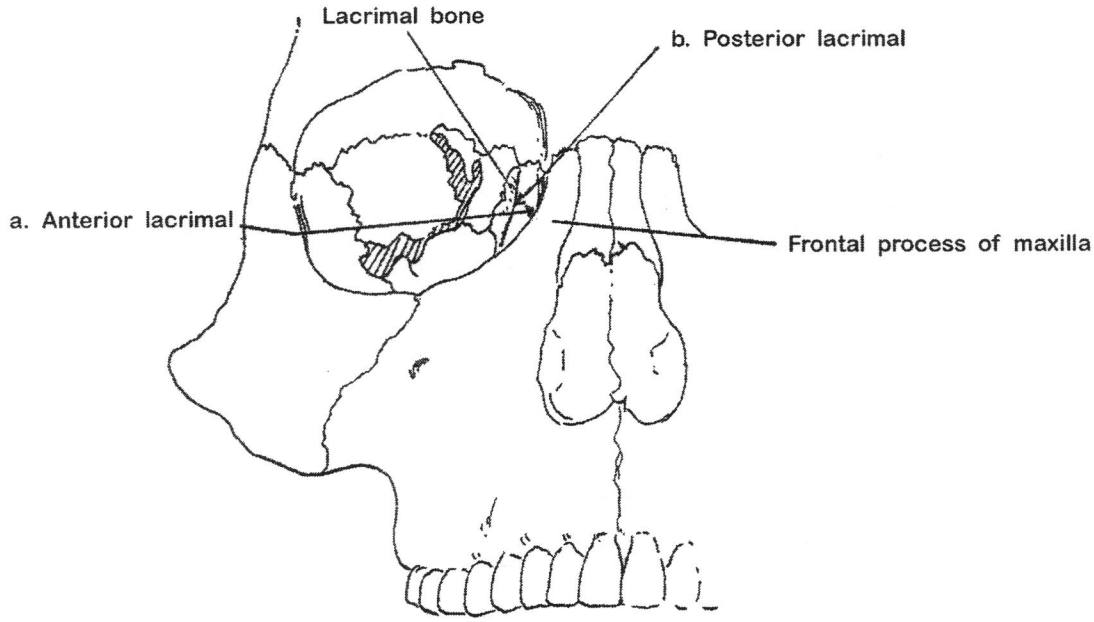


7. Foramen

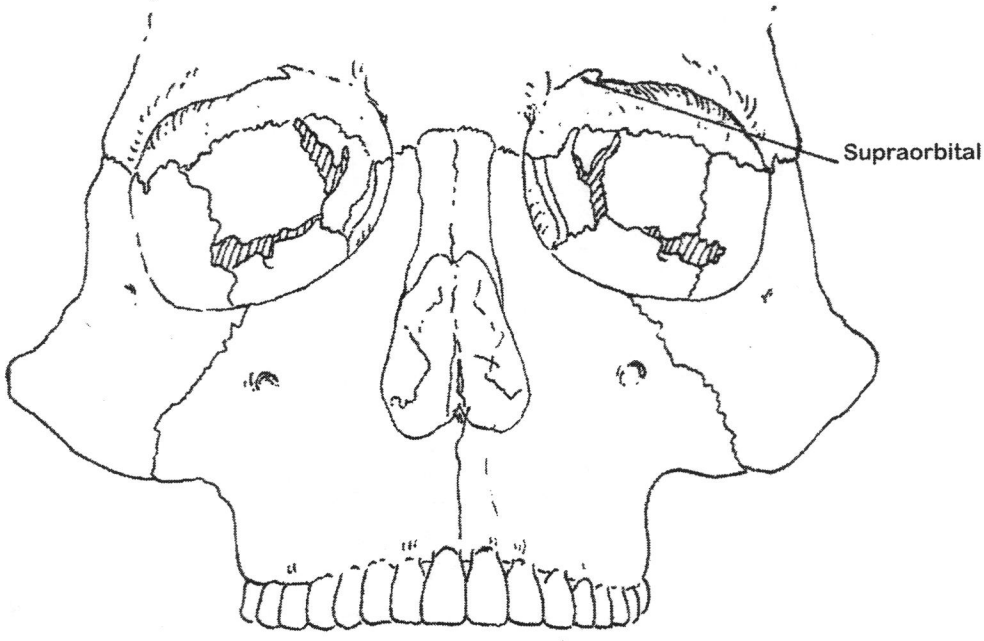


NORMA FRONTALIS

8. Crest

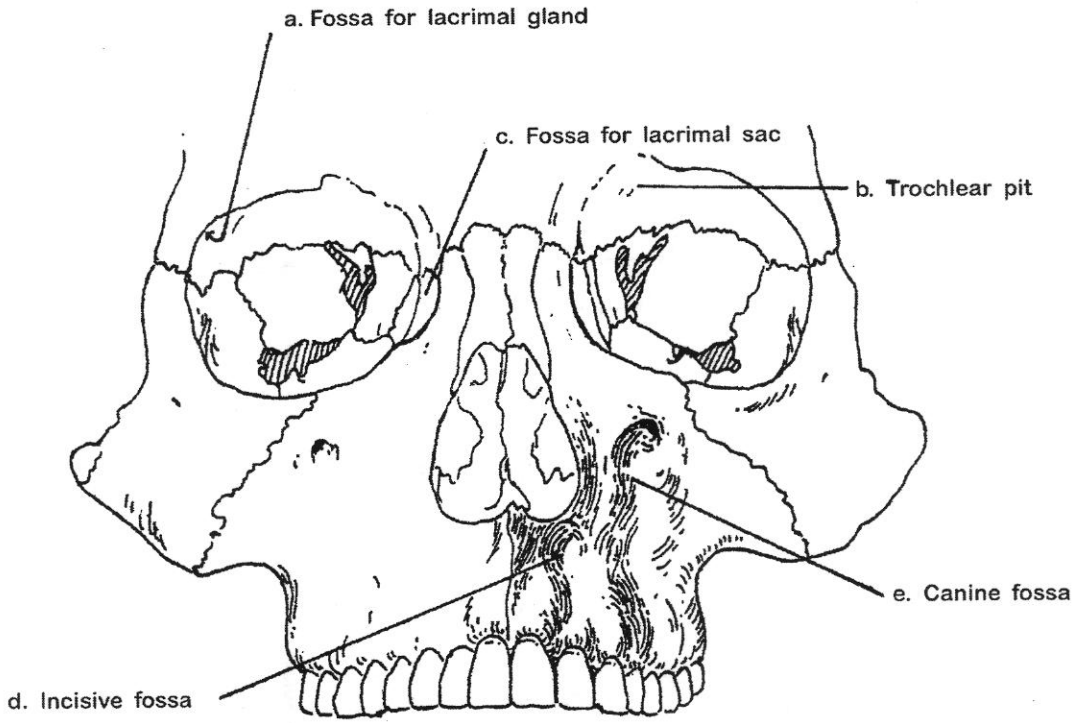


9. Notch



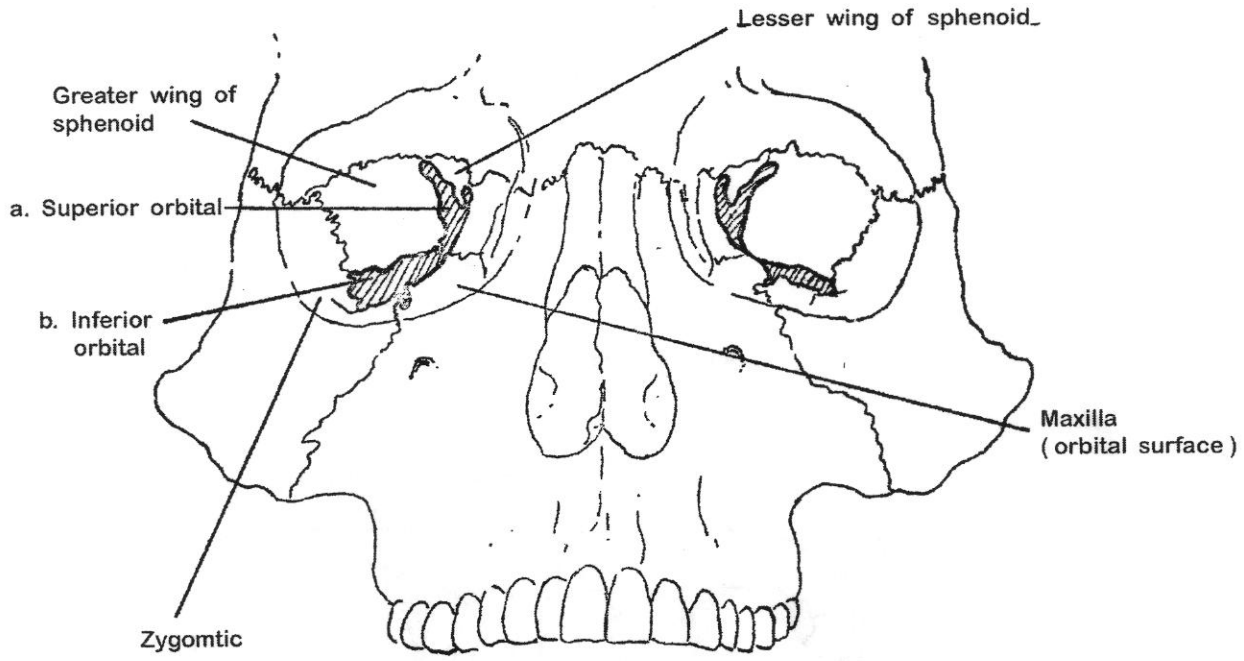
NORMA FRONTALIS

10 Fossa

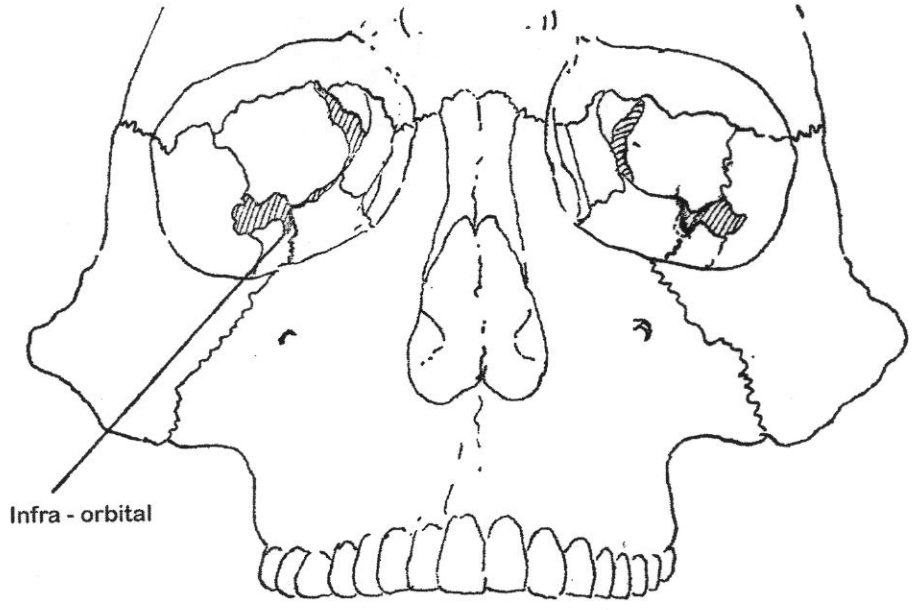


NORMA FRONTALIS

11. Fissure

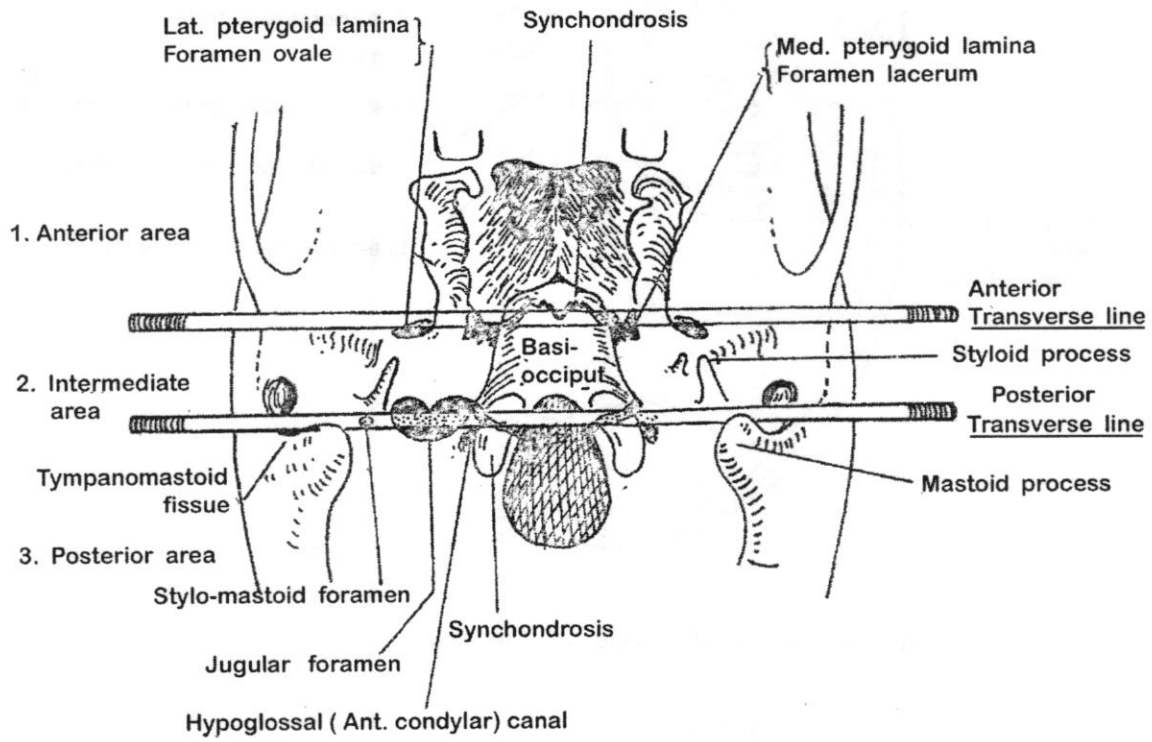


12. Groove



NORMA BASALIS

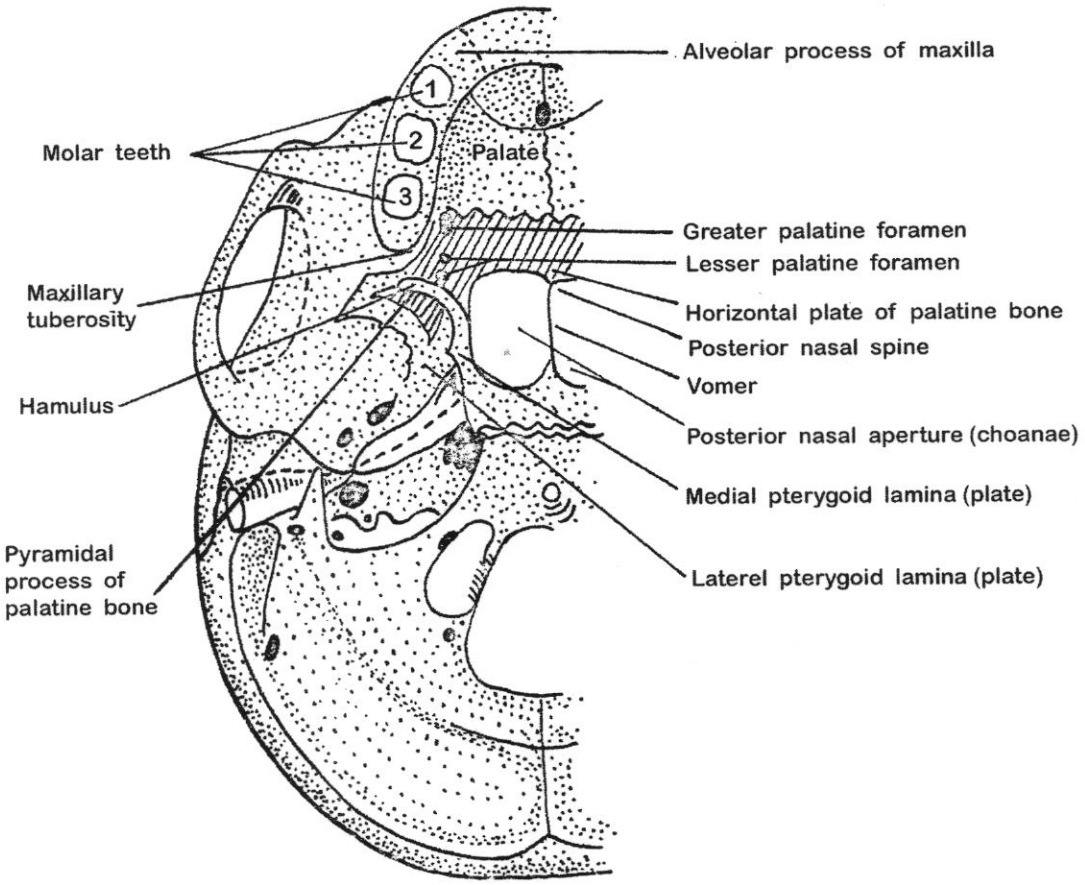
Areas



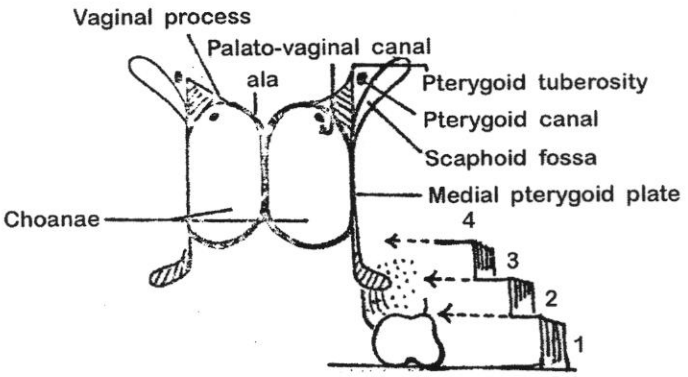
" Anterior transverse line" and "posterior transverse line" on exterior of base of skull

NORMA BASALIS

Anterior Area



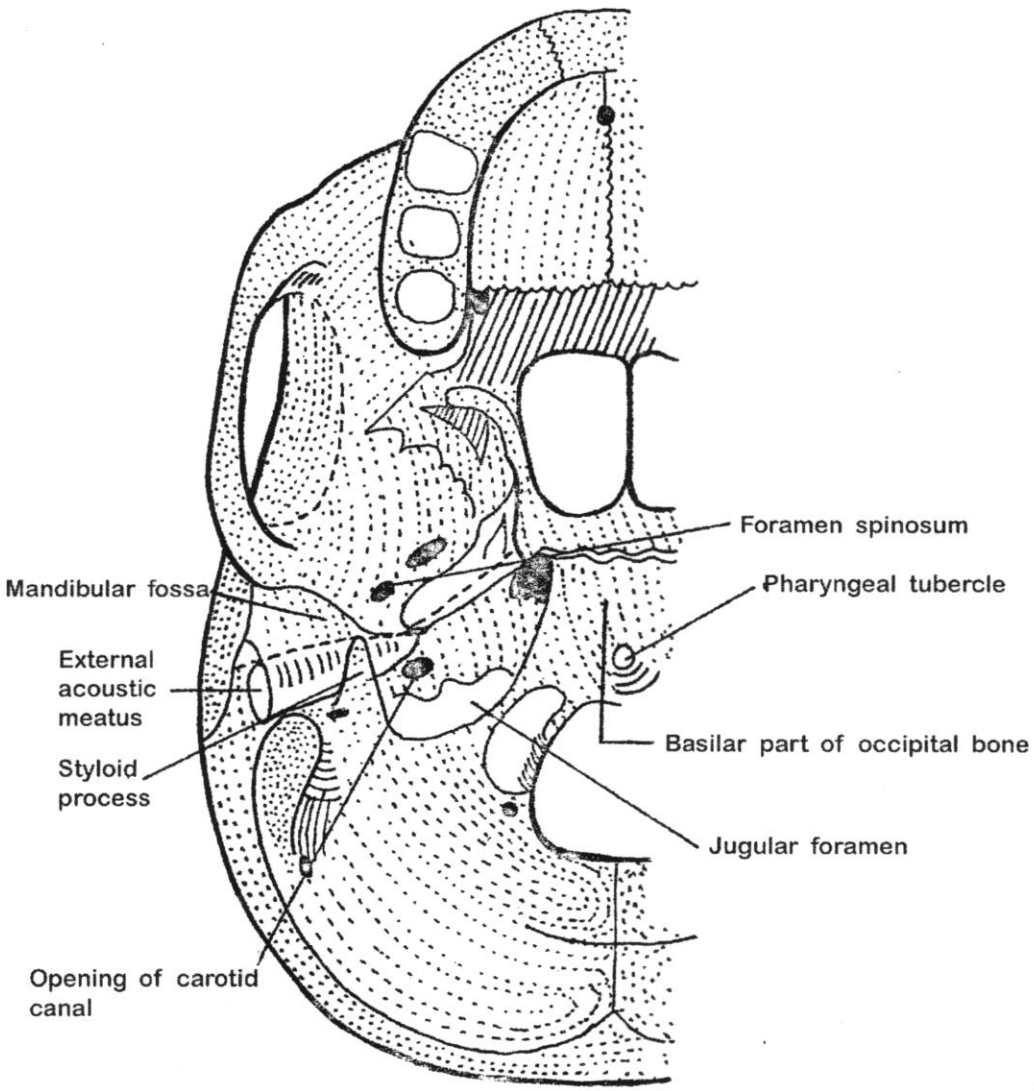
The exterior of the base of the skull.



(1) 3rd molar tooth, (2) tuber maxillae, (3) humulus, and (4) bony palate in echelon

NORMA BASALIS

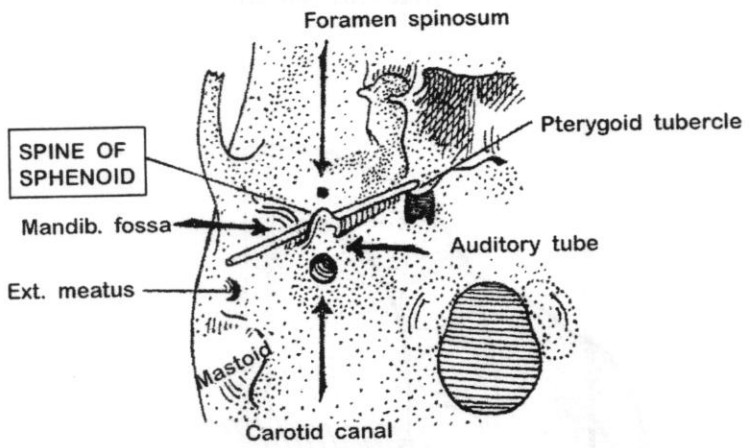
Interior Area



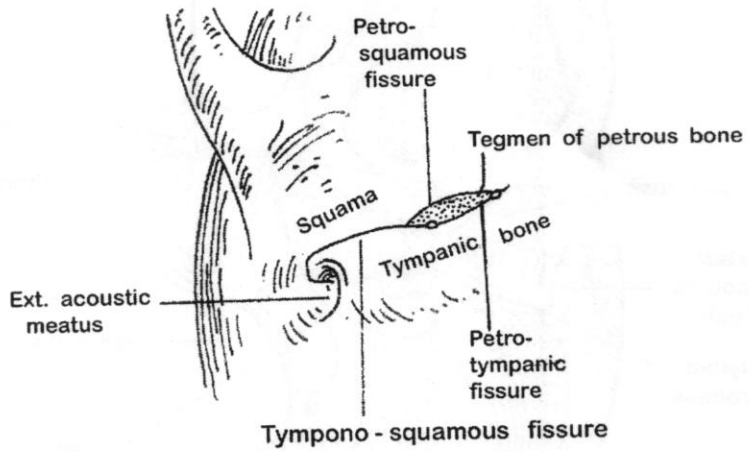
The exterior of the base of the skull

NORMA BASALIS

Intermediate Area

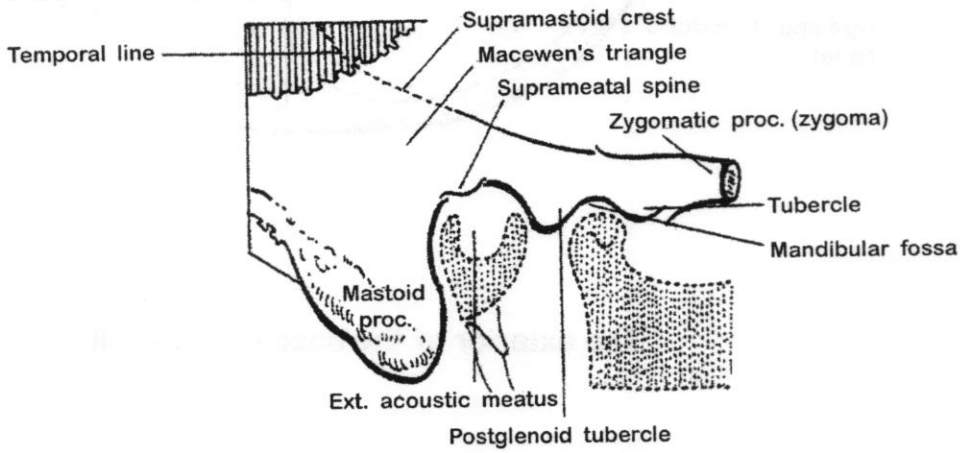


Oblique line on exterior of base of skull.



Tympono - squamous fissure

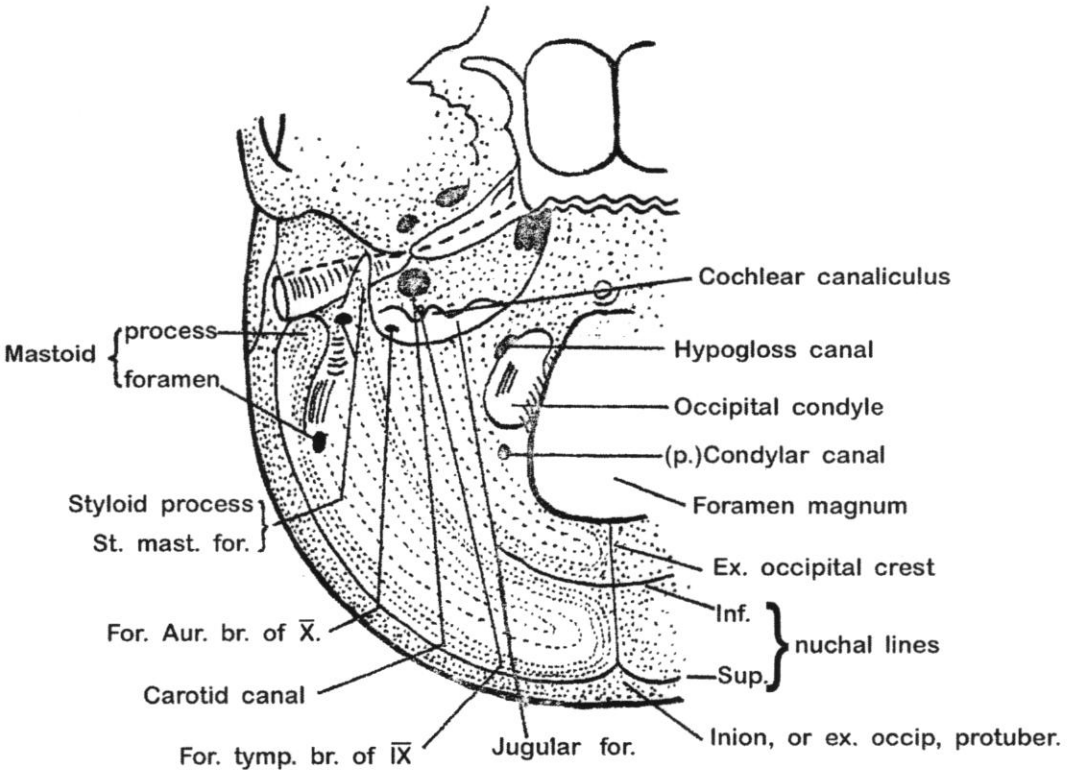
Explanation of terms. The tympanosquamous fissure is bifurcated by the tegmen tympani reaching the surface here from the roof (tegmen) of the middle ear. This is a detail of interest to ear surgeons.



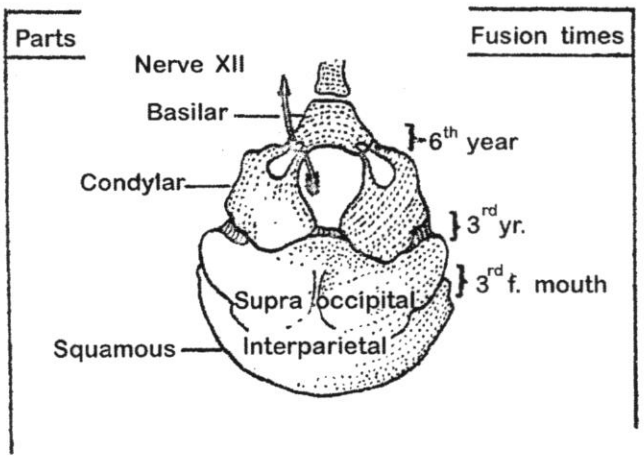
Twin depessions (external acoustic meatus and mandibular fossa) and postglenoid tubercle between. The suprameatal spine is the surgeon's guide to the mastoid antrum deep to the triangle behind.

NORMA BASALIS

Posterior Area



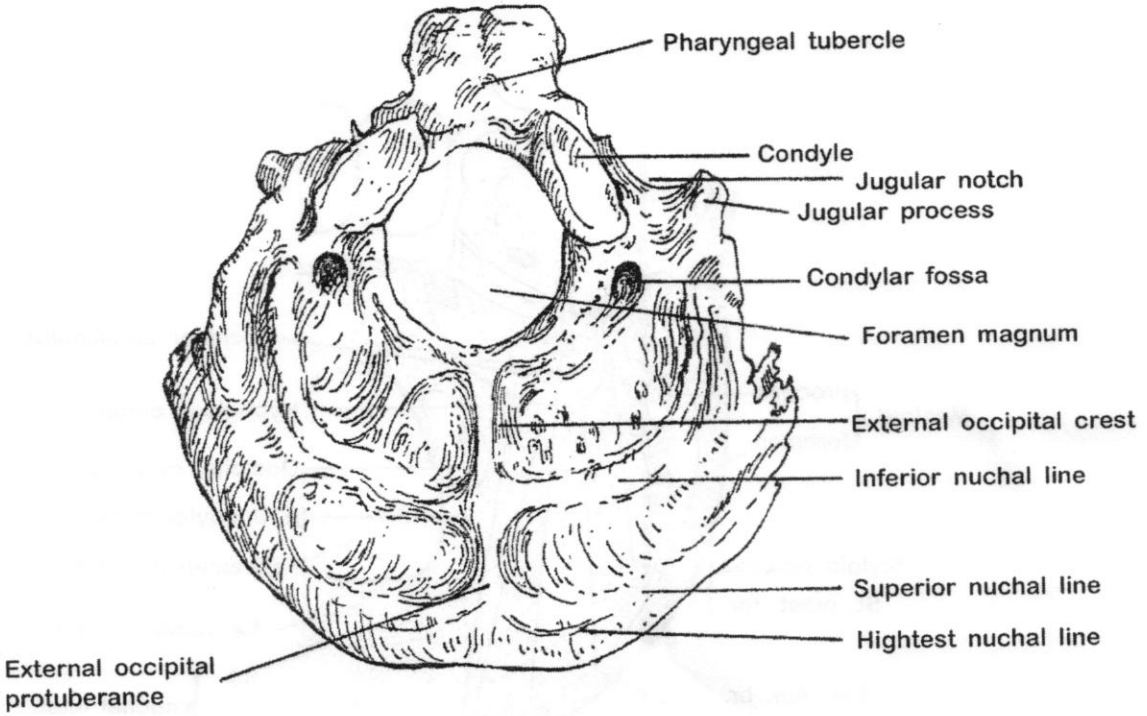
The exterior of the base of the skull.



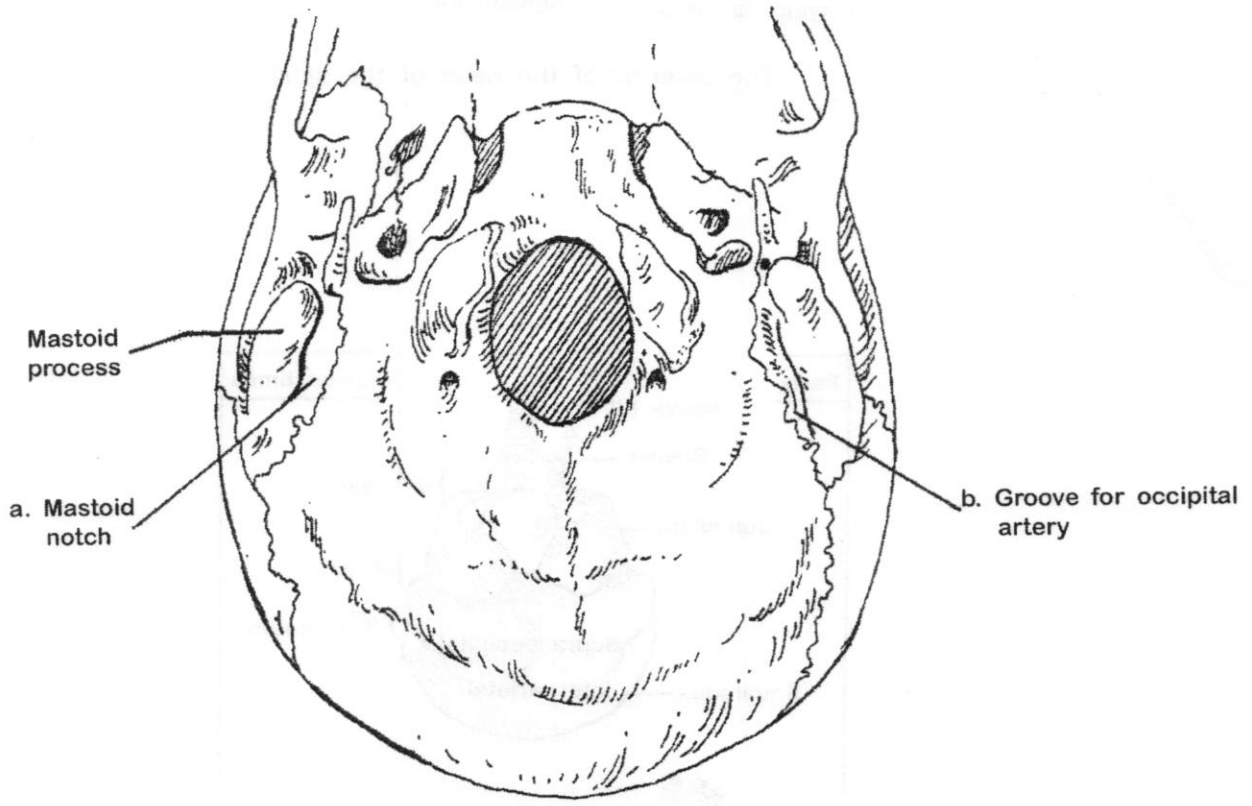
Occipital bone at birth, exterior views. (Condylar part = lateral part)

NORMA BASALIS

Posterior Area



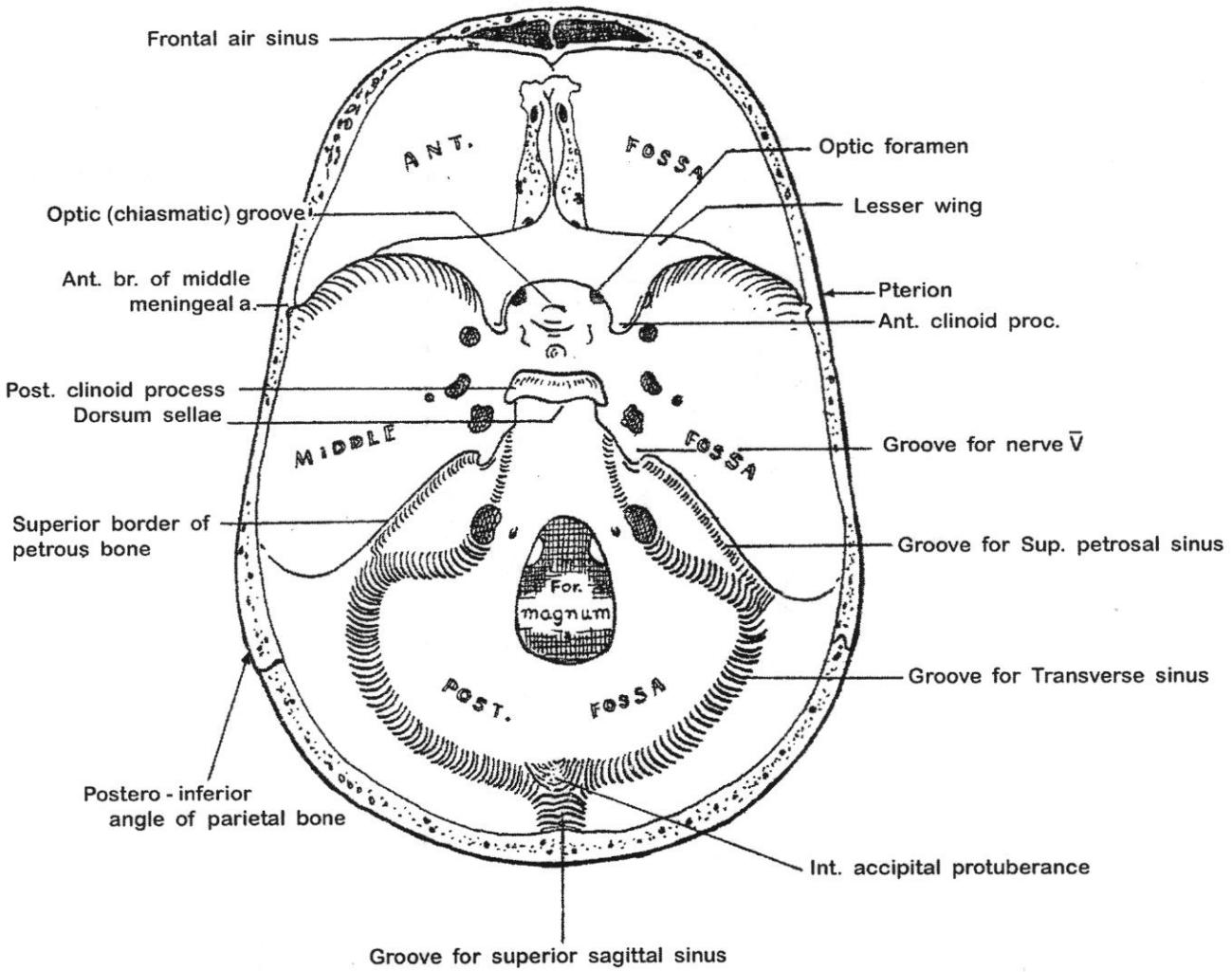
Occipital bone (inferior aspect).



External surface of base of skull.

INTERIOR OF SKULL

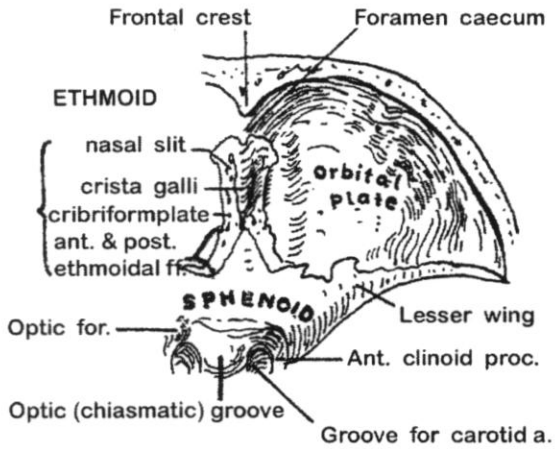
Floor (Base)



The interior of the base of the skull - the three cranial fossae

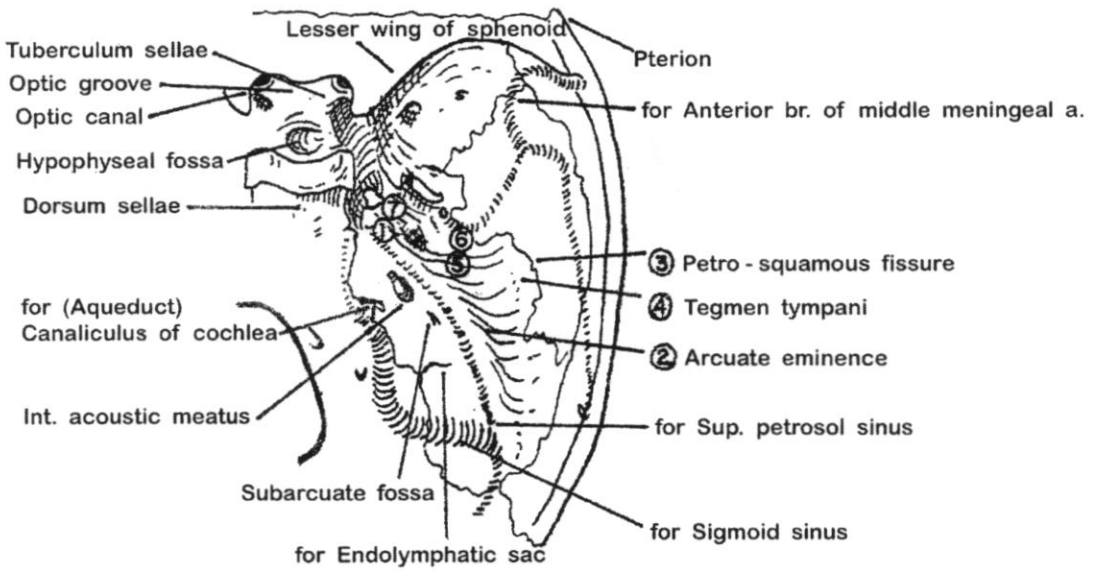
INTERIOR OF SKULL

1. Anterior Cranial Fossa

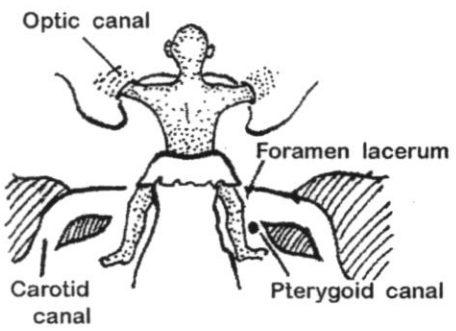


The anterior cranial fossa. (Optic foramen and optic groove = optic canal and chiasmatic sulcus.)

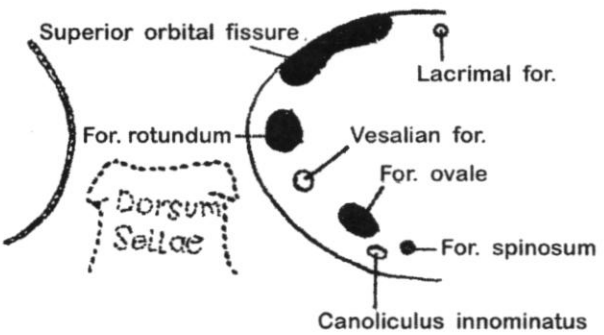
2. Middle Cranial Fossa



Middle cranial fossa. Seven details of petrous bone : (1) depression for trigeminal ganglion, (2) elevation for anterior semicircular canal, (3) remains of petrosquamous fissure, (4) tegmen tympani, (5) hiatus for greater petrosal nerve, (6) hiatus for lesser petrosal nerve, (7) roof of carotid canal, commonly membranous.



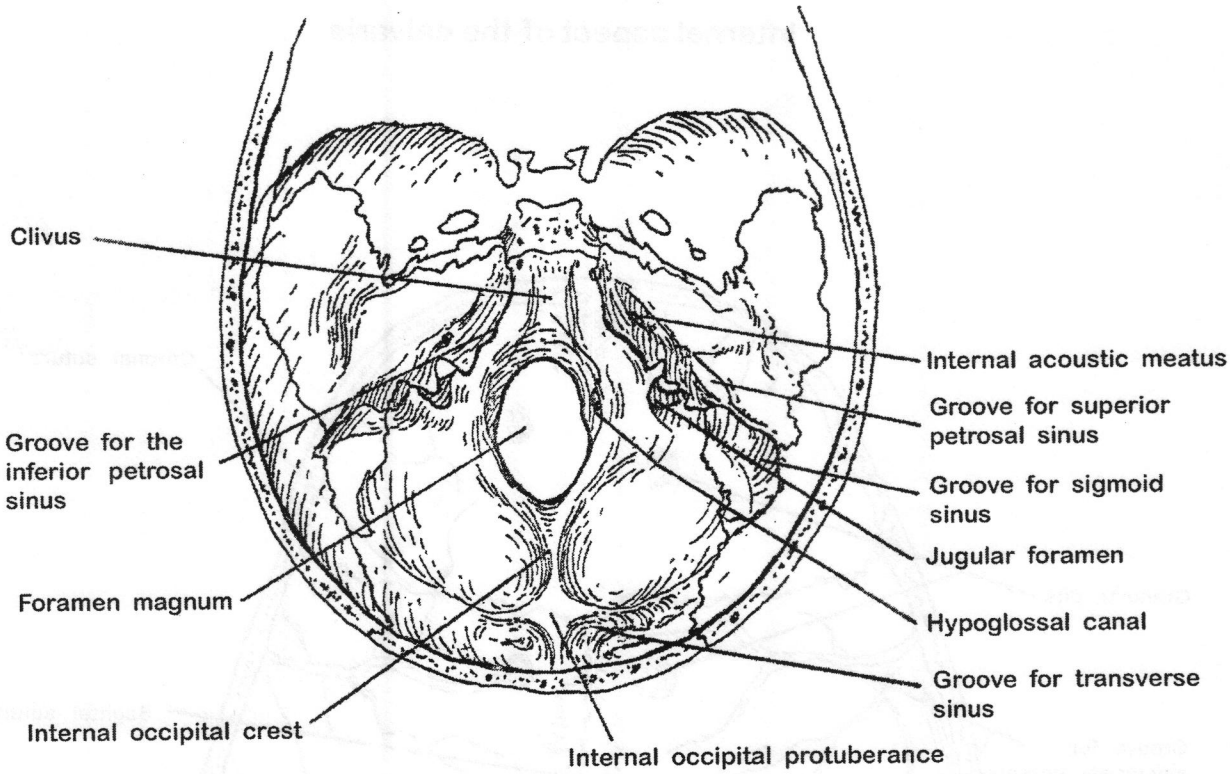
The foramen lacerum. The rider site in the saddle, his arms stretched forward through the optic canals, and his legs dangling through the lacerate foramina.



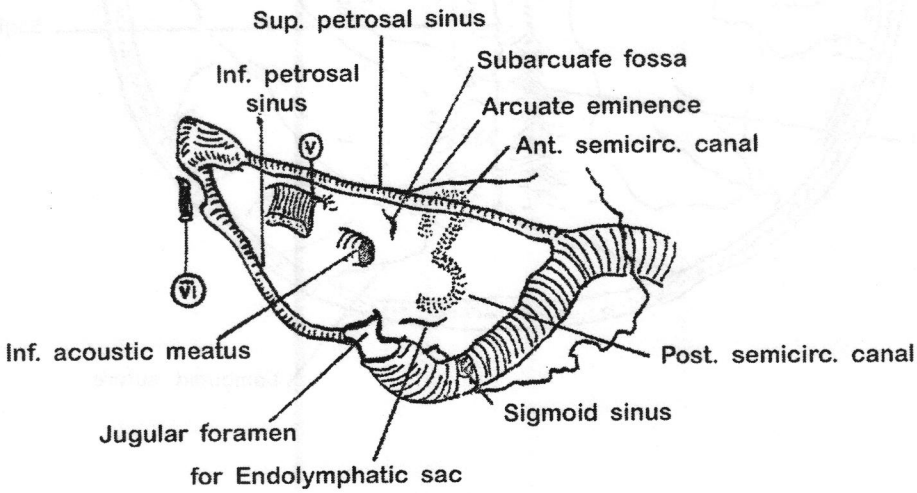
The crescent of foramina within the greater wing. of these foramina, 4 are constant and 3 (Lacrimal, Vesalion, for an emissary v.; and innominatus, for a small nerve) are not.

INTERIOR OF SKULL

3. Posterior Cranial Fossa



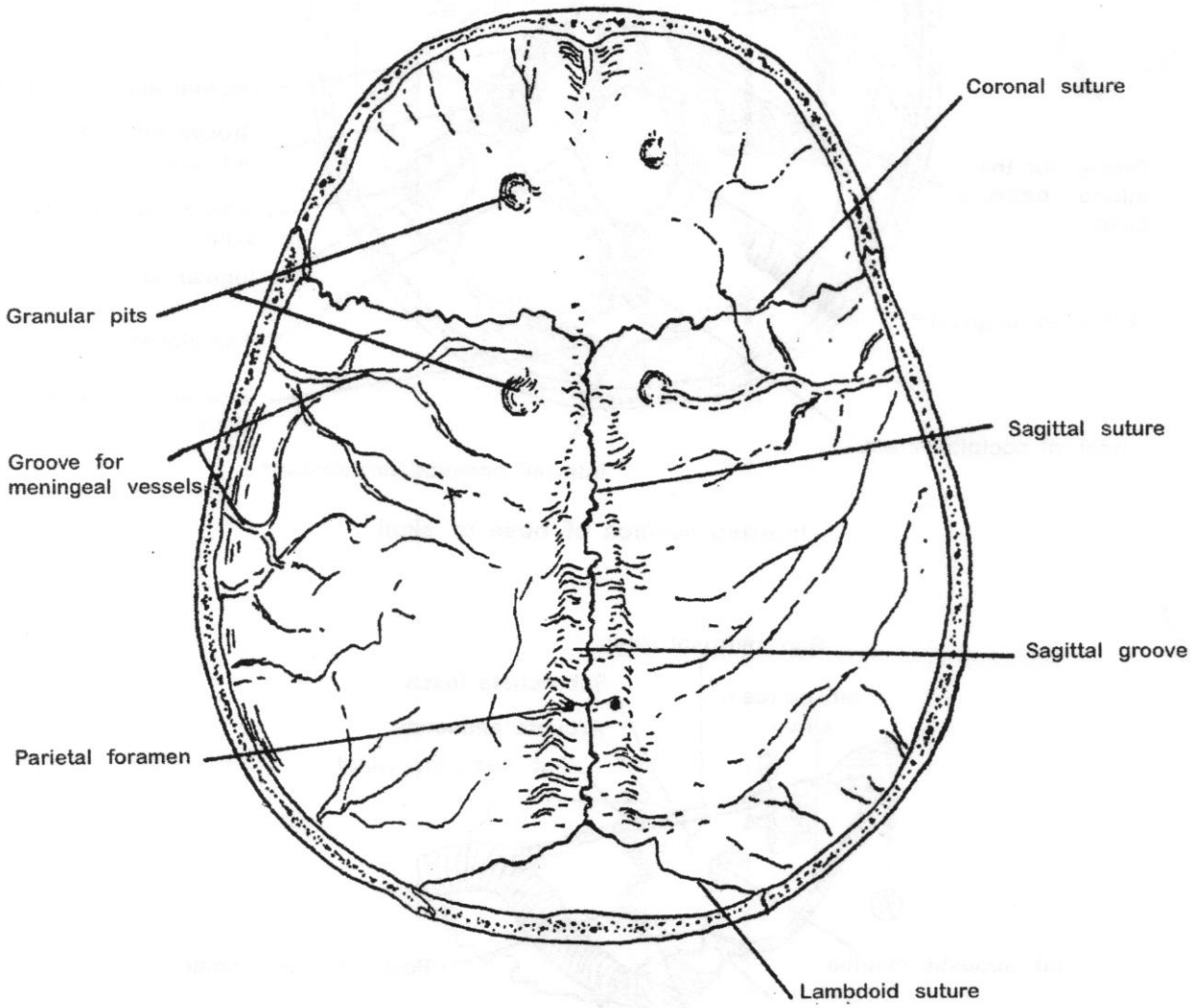
Internal surface of base of skull



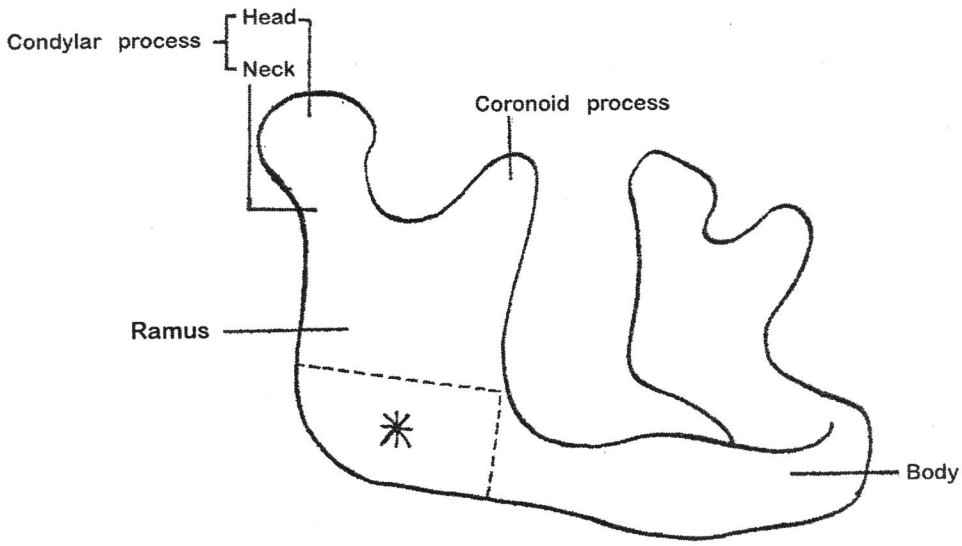
The posterior surface of the petrous bone is bounded by venous sinuses.

INTERIOR OF SKULL

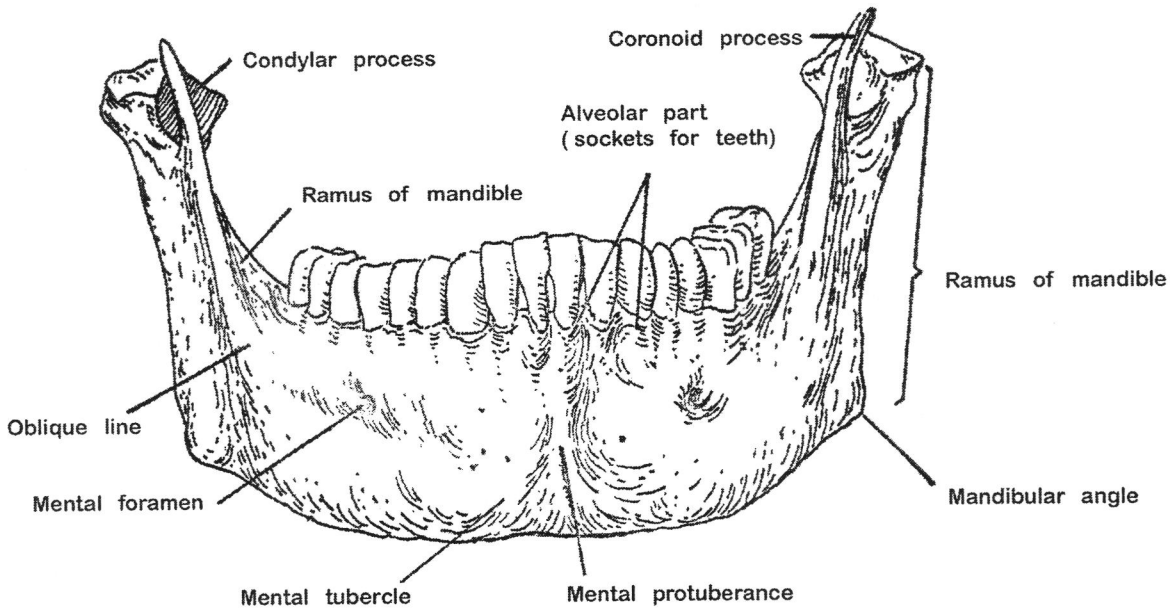
Internal aspect of the calvaria



MANDIBLE

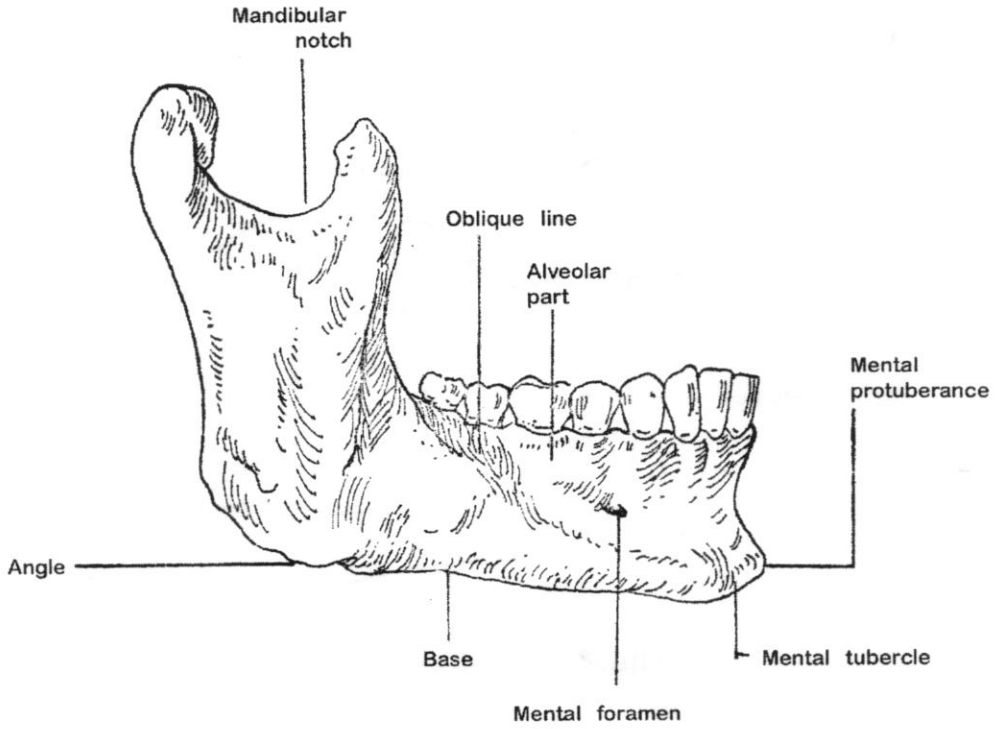


The main structural portions

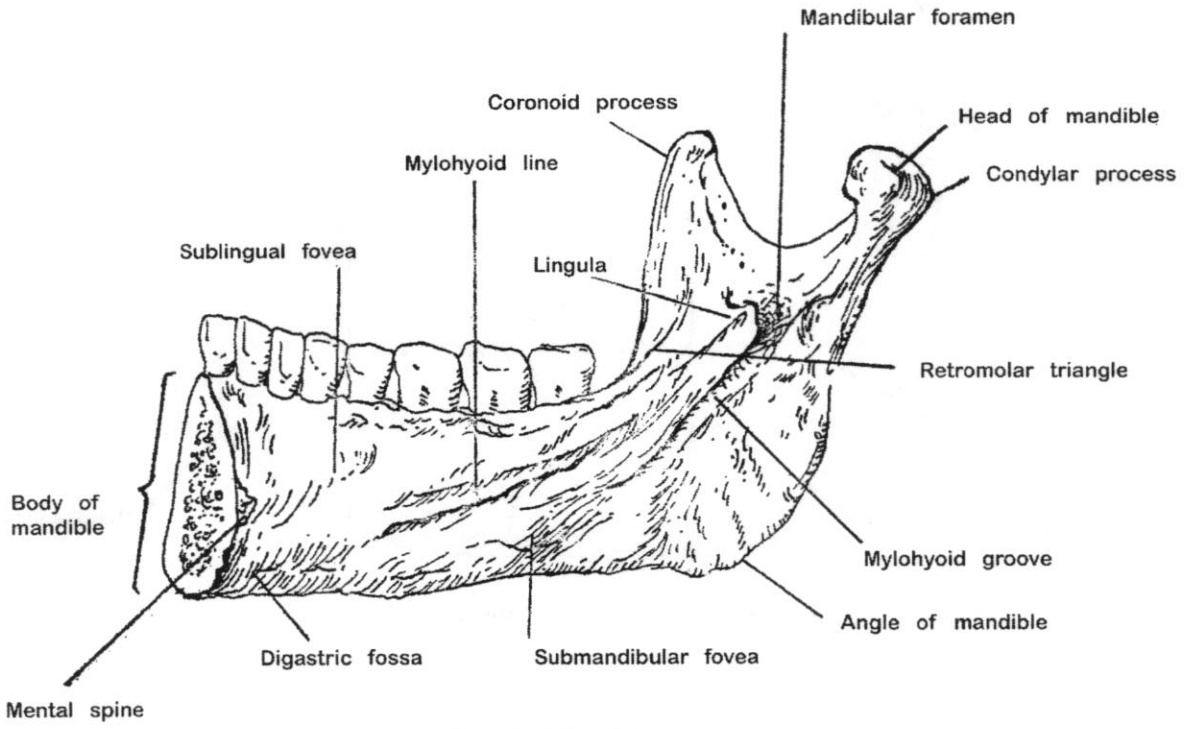


The mandible as seen from the front

MANDIBLE



Right lateral aspect



Medial aspect of the right half

กิตติกรรมประกาศ

๑. กะโหลกคนไทย (การศึกษาทางมนุษยวิทยากายภาพ) : โดย นายแพทย์สรรใจ แสงวิเชียร ภาควิชากายวิภาคศาสตร์ คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล : วิทยานิพนธ์เพื่อปริญญาแพทยศาสตร์ ดุษฎีบัณฑิต คณะแพทยศาสตร์ศิริราชพยาบาล มหาวิทยาลัยมหิดล ๒๕๑๔

๒. Anatomy; A Regional Study of Human Structure. 3rd edition, 1965

๓. Anatomy; A Regional Atlas of the Human Body. 1975

๔. Cunningham's Textbook of Anatomy. 10th edition, 1964

๕. Grant's Method of Anatomy. 9th edition, 1975

ภาพวาดโดย อุทัย สาลิการิน ป. เวชนิทัศน์ หน่วยโสตทัศนศึกษา
คณะทันตแพทยศาสตร์ มหาวิทยาลัยมหิดล