

CHAPTER I

Gross Anatomy Dissections

Scalp Layers Dissection

Superficial Temporal Artery Dissection

Interfacial And Fat Pad Dissection

Temporalis Fascia Dissection

Skull Anatomy





Dissection of the scalp layers

ML = midline incision
 HL = horizontal line extension (T-Shaped incision for anatomical dissection)
 S = skin
 C = connective tissue

OA = occipital artery
 GA = galea apponeuritis
 L = loose areolar connective tissue
 P = pericranium

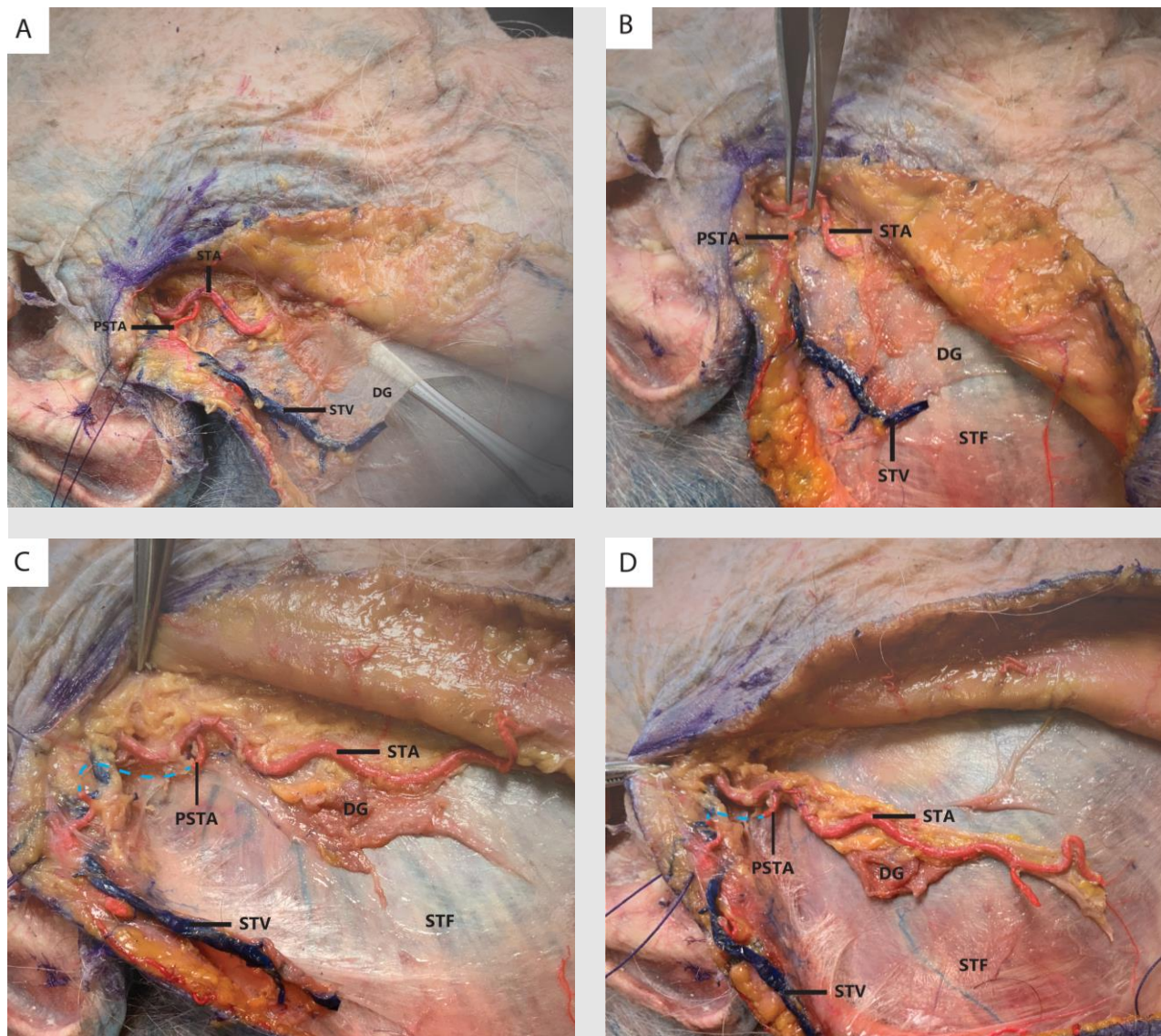




Dissection of the scalp layers

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- C = connective tissue
- GA = galea apponeurica
- L = loose areolar connective tissue
- P = pericranium





Superficial Temporal Artery Preservation Technique.

(A) Subcutaneous dissection was made using a fine scissor, and deep galeal tissue was exposed, which contains the superficial temporal artery (STA).

(B) The posterior branch was cut and divided to allow for the mobilization of the STA.

(C) the STA was mobilized anteriorly.

(D) STA flap with deep galeal cuff.

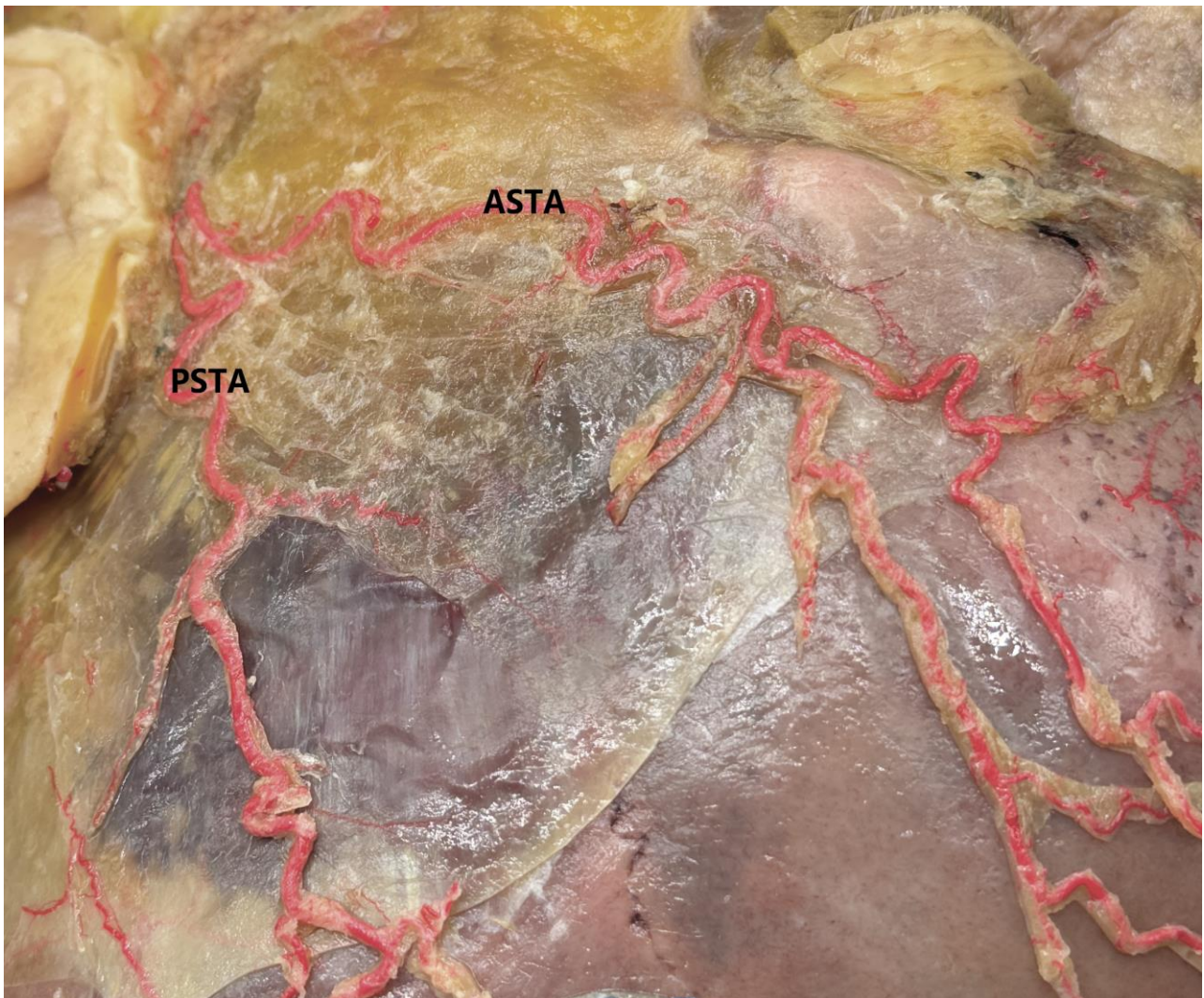
PSTA = posterior branch of the superficial temporal artery

STV = superficial temporal vein

DG = deep galea

STF = superficial temporal fascia



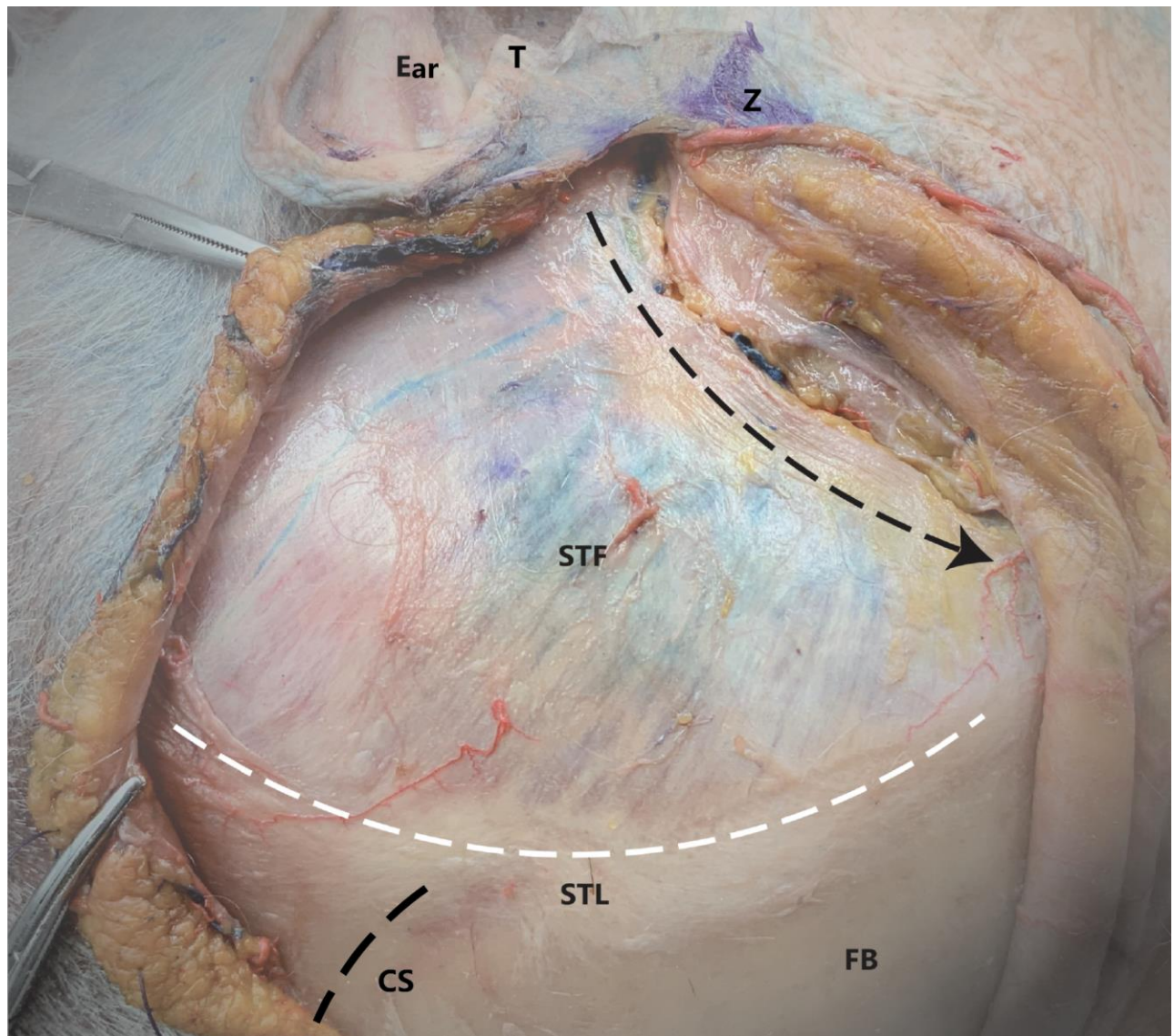


Dissection of Superficial Temporal Artery

ASTA = anterior branch of the superficial temporal artery

PASTA = parietal branch of the superficial temporal artery





Interfacial dissection. A cut was made, parallel to the posterior root of the zygomatic arch from posterior to anterior.

STF = superficial temporal fascia

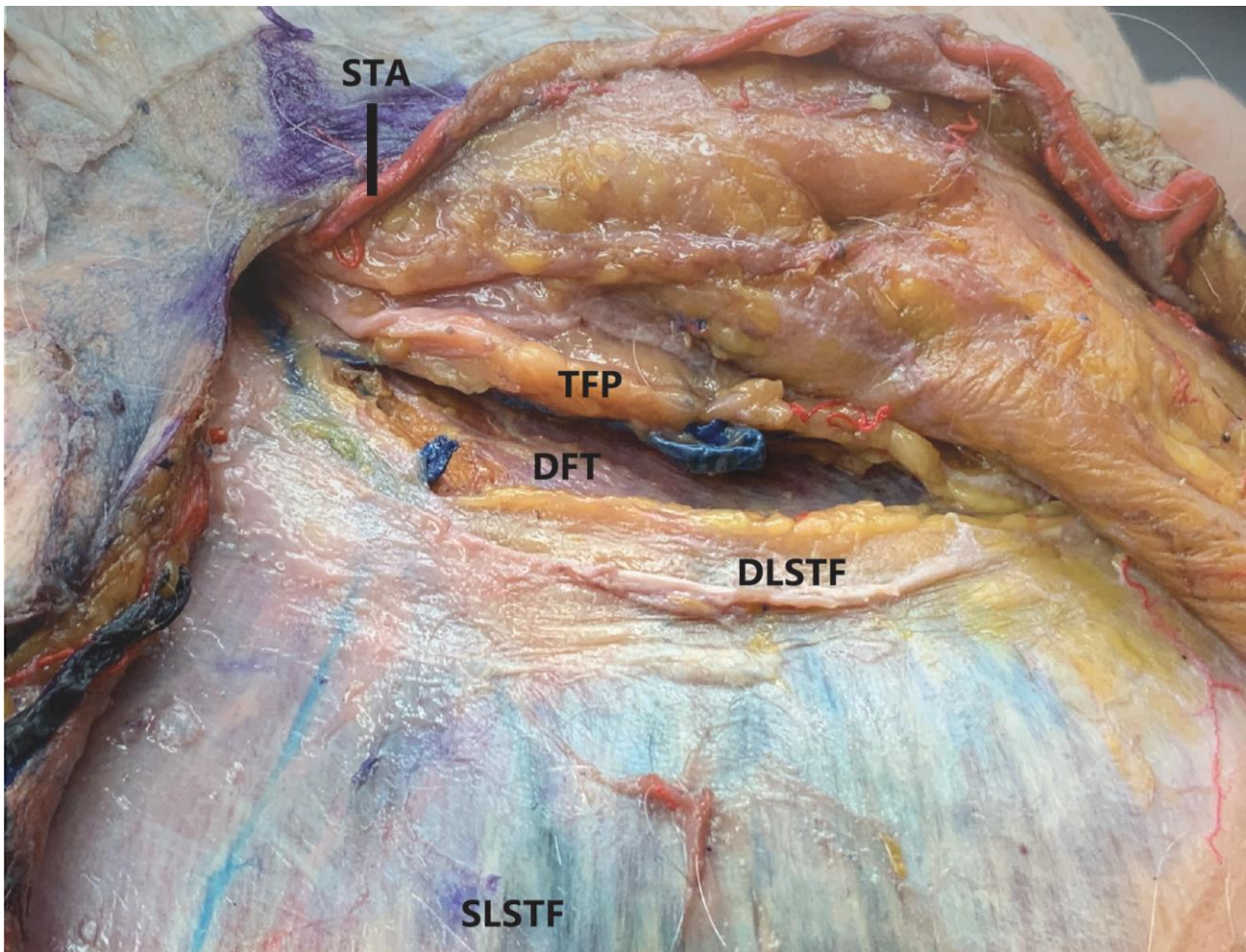
FB = frontal bone

STL = superior temporal line (white dashed line)

CS = coronal suture

Z = Zygomatic arch



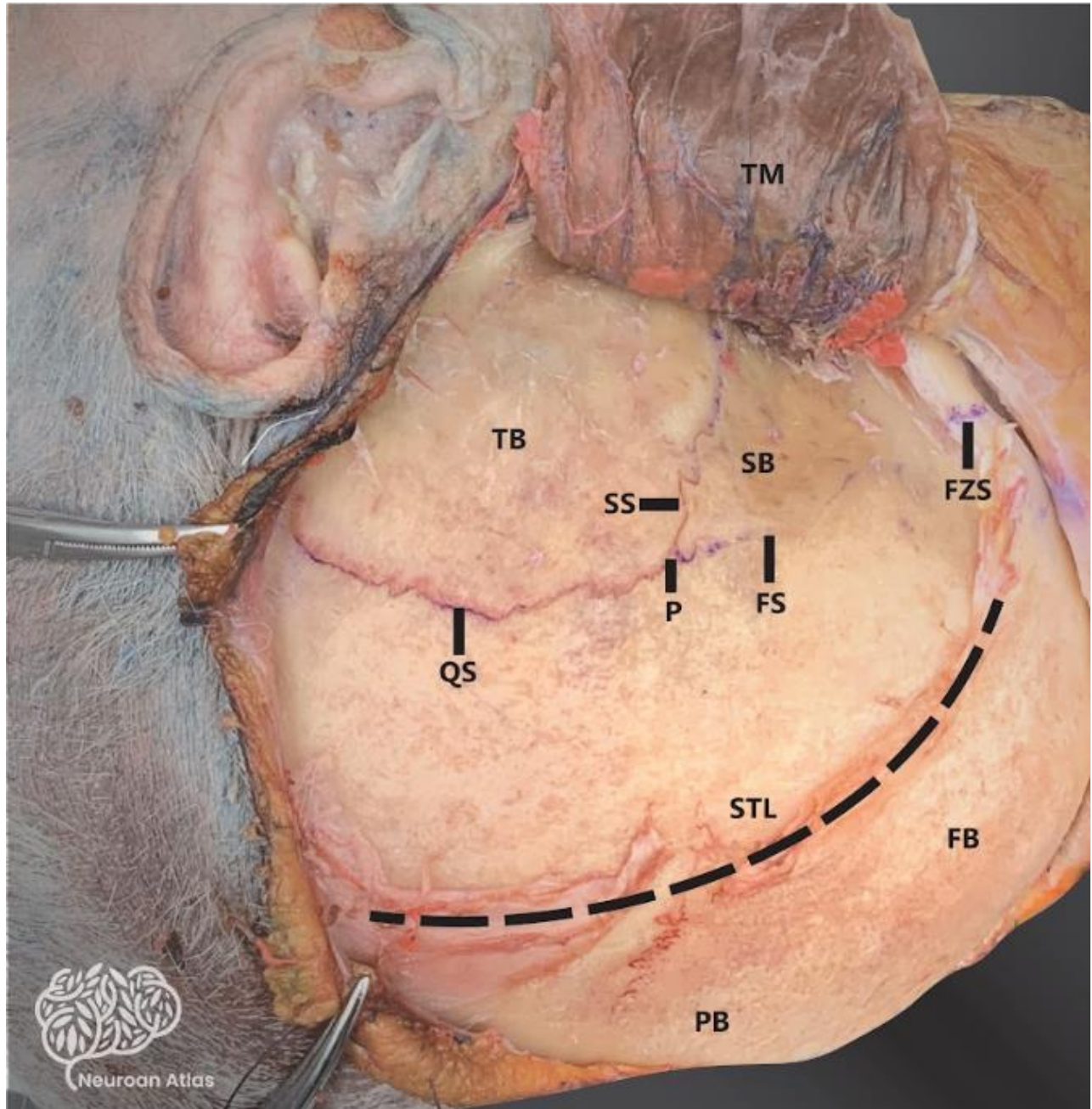


Fat Pad Dissection; a vein deep to the fat pad might be used to navigate the nerve to the temporalis.

STF = superficial layer of superficial temporal fascia
STA = superficial temporal artery
FP = fat pad

DLSTF = deep layer of superficial temporal fascia
DFT = deep temporal fascia
TFP = temporal fat pad (cutted)





Muscle was released from the superior temporal line (STL) & calf of the fascia was left over STL.

Black dotted line = superior temporal line

FB = frontal bone
PB = parietal bone
SB = sphenoid bone

TB = temporal bone

P = pterion

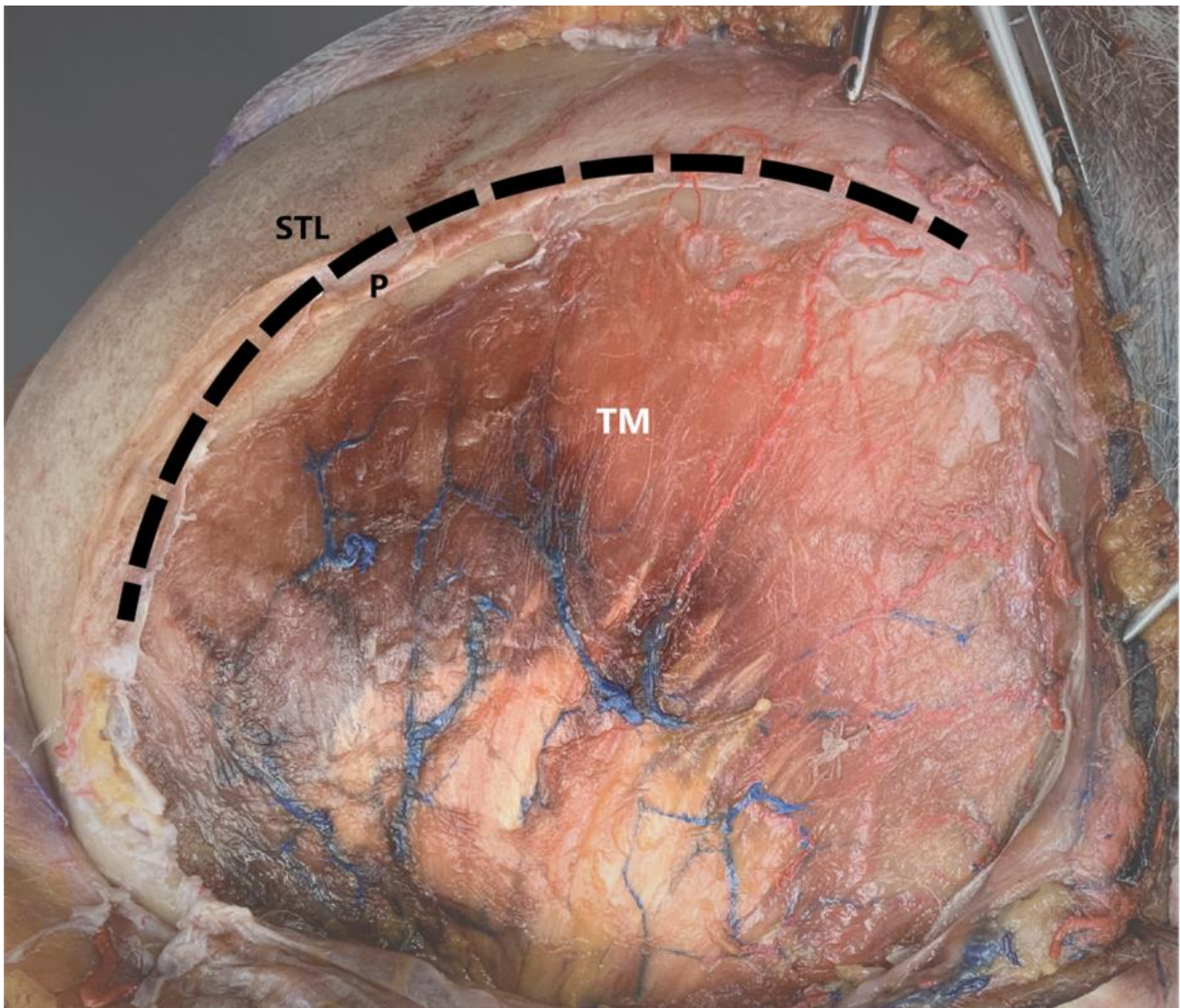
TM = temporal bone

FS = fronto-sphenoid suture

QS = squamous suture

SS = spheno-squamosal bone

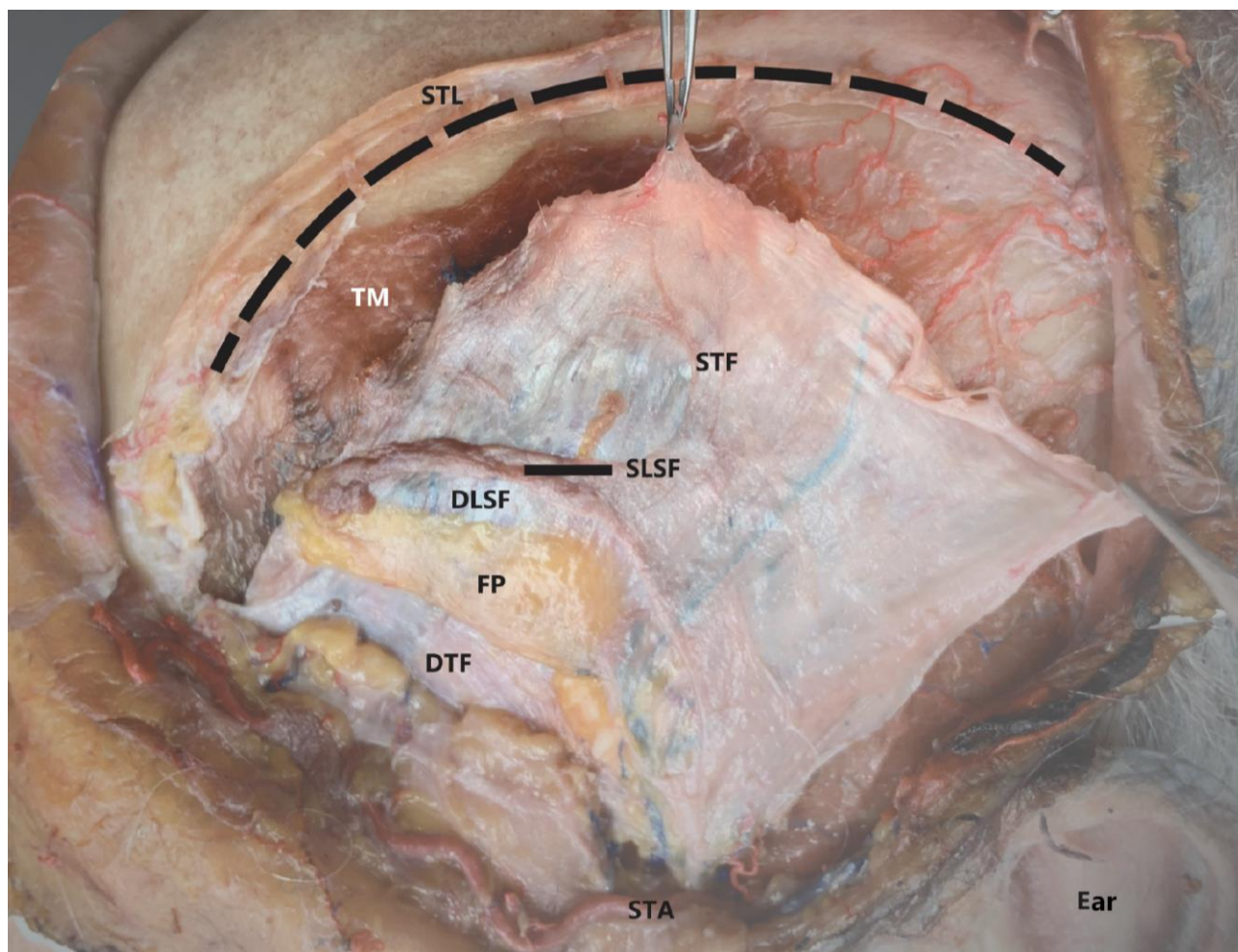




Superficial temporal fascia and deep temporal fascia were removed in this specimen for anatomical illustration.

TM = temporalis muscle
STL = superior temporal line
P = cuff of pericranium





Temporalis fascia dissection.

STL = superior temporal line

STA = superficial temporal artery

FP = fat pad

STF = superficial temporal fascia

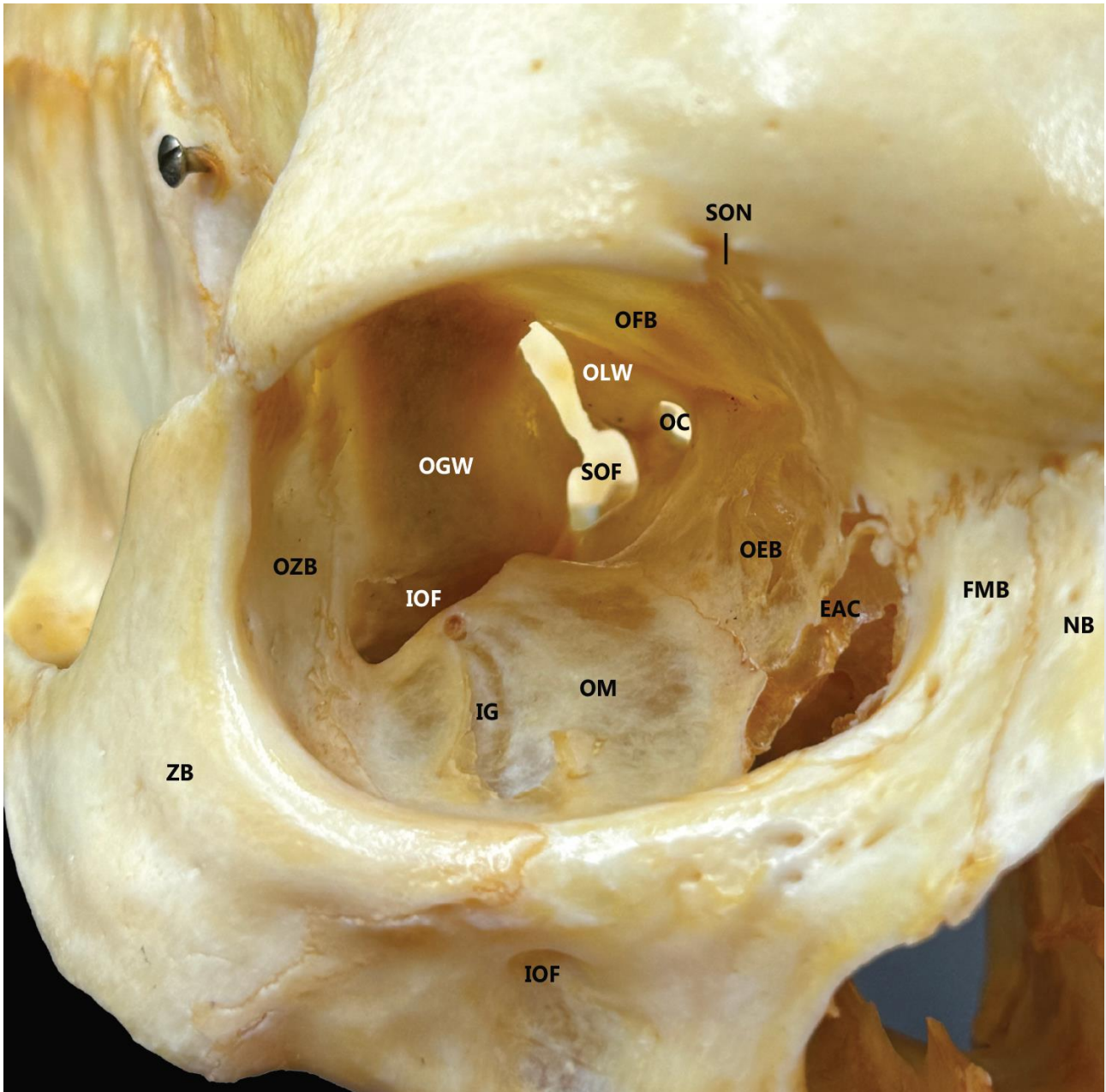
DLSF = deep layer of superficial temporal fascia

DTF = deep temporal fascia

SLSF = superficial layer of superficial temporal fascia

TM = temporalis muscle





The orbit

OFB = orbital surface of frontal bone
 OLW = orbital surface of lesser wing of sphenoid bone
 SOF = superior orbital fissure
 OC = optic canal
 OGW = orbital surface of greater wing of sphenoid bone
 OZB = orbital surface of zygomatic bone

IOF = inferior orbital fissure
 IG = infraorbital groove
 SON = supraorbital notch
 OEB = orbital plate of ethmoid bone/lamina papyracea
 OM = orbital surface of maxilla
 IOF = infraorbital foramen
 EAC = ethmoid air cell



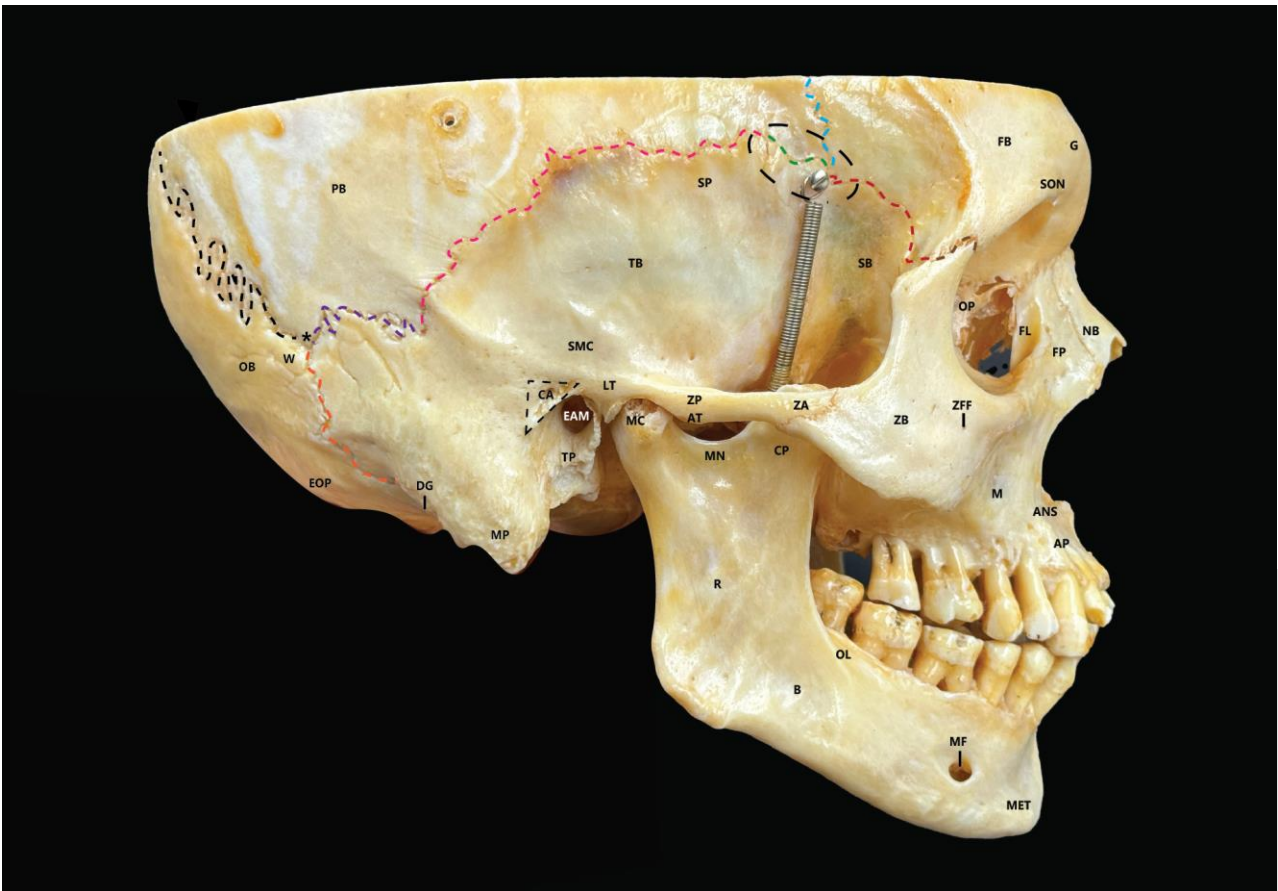


Inferior view of skull.

IF = incisive fossa
 IMS = intramaxillary suture
 PPPM = palatine process of maxilla
 ZP = zygomatic process
 PNA = posterior nasal aperture (choana)
 black dashed line = palatomaxillary suture
 C = choanae
 HPPB = horizontal plate of palatine bone
 LPP = lesser palatine process
 PPPB = pyramidal process of palatine bone
 AOV = ala of vomer
 V = vomer
 ZB = zygomatic bone
 ZP = zygomatic process
 PF = pterygoid fossa
 GW = greater wing
 GOA = groove of auditory tube
 LPP = lesser palatine foramina
 GPF = greater palatine foramen

PH = pterygoid hamulus
 MPP = medial plate
 LPP = lateral plate
 PF = pterygoid fossa
 MF = mandibular fossa
 FM = foramen magnum
 JFO = jugular fossa
 JF = jugular foramen
 green dashed line = petrotympanic fissure
 CC = carotid canal
 HC = hypoglossal canal
 OC = occipital condyle
 black asterisk = inferior tympanic canaliculus
 pink asterisk = mastoid canaliculus
 purple line = mastoid notch
 PT = pharyngeal tubercle
 OAG = occipital artery groove
 COC = condylar canal
 BP = basilar part

CF = condylar fossa
 SNL = superior nuchal line
 EOP = external occipital protuberance
 INL = inferior nuchal line
 EOC = external occipital crest
 MN = mastoid notch
 EAM = external acoustic meatus
 SP = styloid process
 SMF = stylomastoid foramen
 MP = mastoid process
 SF = scaphoid fossa
 LPP = lateral pterygoid plate
 FL = foramen lacerum
 FS = foramen spinosum
 FO = foramen ovale
 AT = articular tubercle
 S = spine of sphenoid bone
 APPB = apex of petrous part of temporal bone



Lateral view of skull.

SB = sphenoid bone

FB = frontal bone

SON = supraorbital notch

G = glabella

OP = orbital plate

FLS = fossa for lacrimal sac

NB = nasal bone

M = maxilla

ANS = anterior nasal spine

AP = alveolar process

ZB = zygomatic bone

ZFF = zygomaticofacial foramen

ZA = zygomatic arch

PB = parietal bone

TF = temporal bone

Blue dashed line = coronal suture

Black dashed circle = pterion

SP = squamous part of temporal bone

ZP = zygomatic process

AT = articular tubercle

SMC = supramastoid crest

EAM = bony external acoustic meatus

MP = mastoid process

Black dashed line = lambdoid suture

OB = occipital bone

W = sutural bone (Wormian)

EOP = external occipital protuberance

M = mandible

MC = mandibular condyle

MN = mandibular notch

CP = coronoid process

R = ramus

OL = oblique line

B = body

MF = mental foramen

Orange dashed line = occipitomastoid suture

Purple dashed line = parietomastoid suture

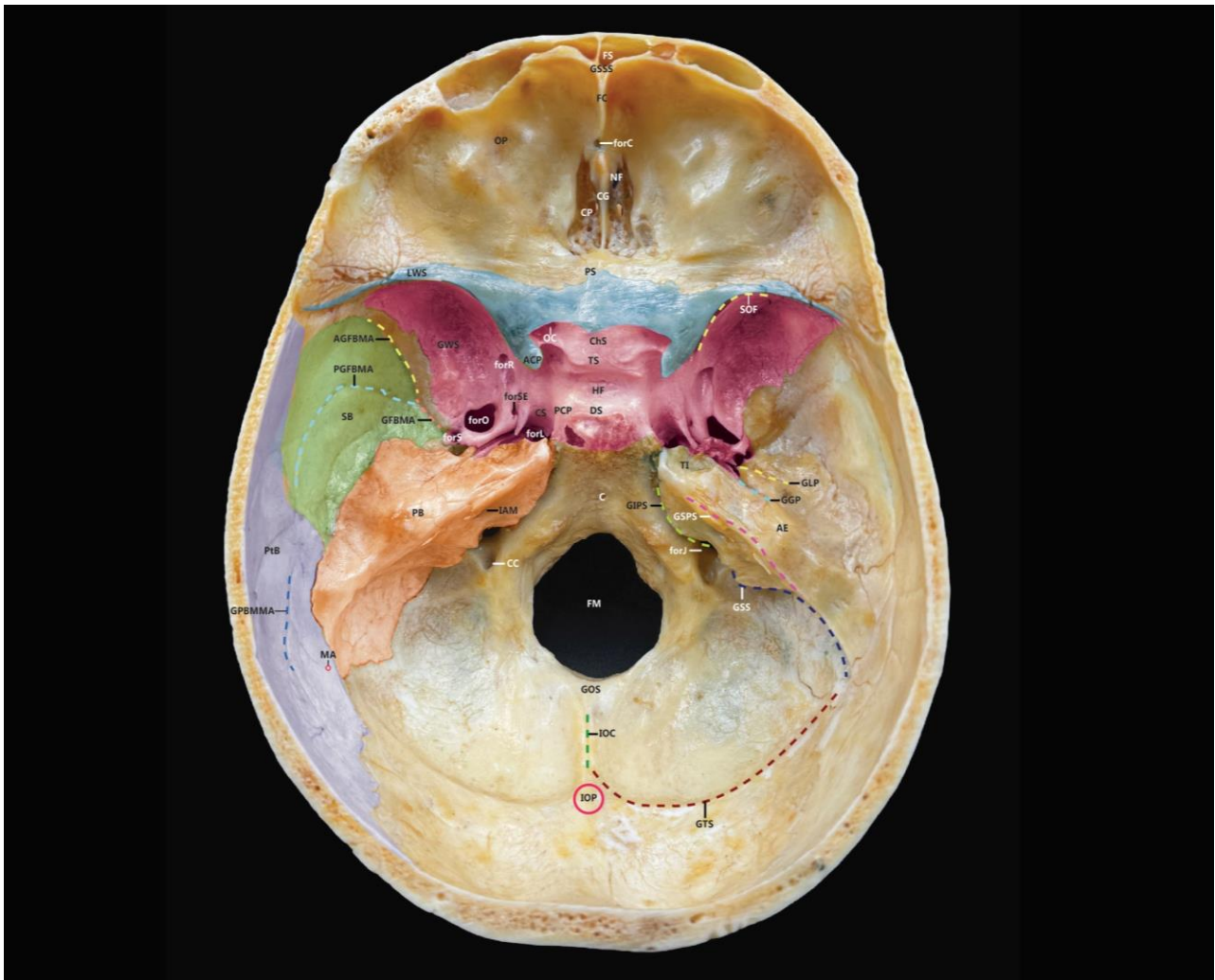
Green dashed line = sphenofrontal suture

Brown dashed line = frontozygomatic suture

Black dashed triangle = suprimeatal triangle

MET = mental protuberance





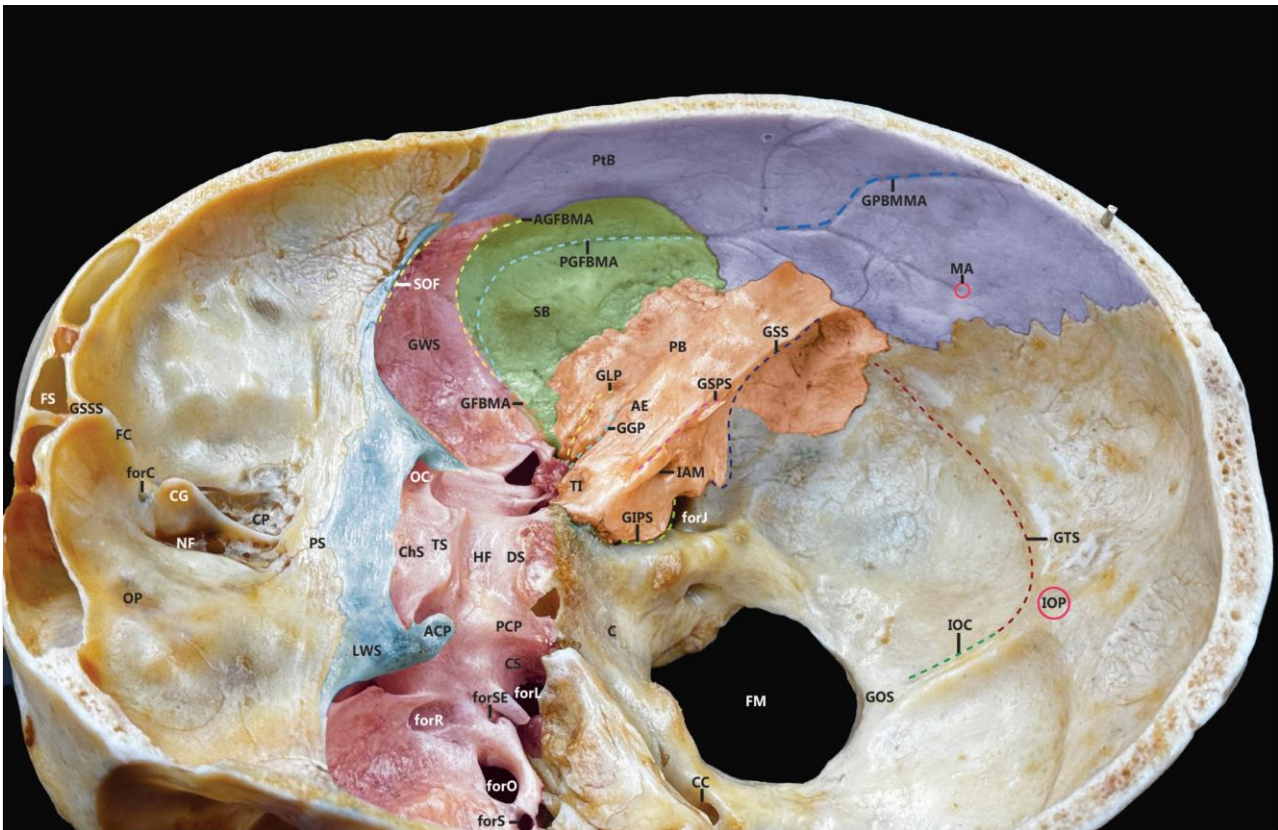
Superior view of opened skull.

FS = frontal sinus
 GSSS = groove of superior sagittal sinus
 FC = frontal crest
 forC = foramen cecum
 OP = orbital plate
 NF = nasal fissure
 CG = crista galli
 CP = cribriform plate
 PS = planum sphenoidale
 Chs = chiasmatic sulcus
 TS = tuberculum sellae
 HF = hypophysial fossa
 DS = dorsum sellae
 PCP = posterior clinoid process
 CS = carotid sulcus
 forL = foramen lacerum
 LWS = lesser wing of sphenoidal bone

ACP = anterior clinoid process
 OP = optic canal
 SOF = superior orbital fissure
 GWS = greater wing of sphenoidal bone
 forR = foramen rotundum
 forSE = foramen of sphenoidal emissary
 for = foramen ovale
 fors = foramen spinosum
 GFBMA = groove of frontal branch of middle meningeal artery
 AGFBMA = anterior GFBMA
 PGFBMA = posterior GFBMA
 SB = squamous bone
 PB = petrosal bone
 IAM = internal acoustic meatus
 PtB = parietal bone
 GPBMMA = groove of posterior branch of

middle meningeal artery
 MA = mastoid angle
 CC = condylar canal
 forJ = jugular foramen
 GLP = groove of lesser petrosal
 GGP = groove of greater petrosal
 TI = trigeminal impression
 AE = arcuate eminence
 GSPS = groove of superior petrosal sinus
 GIPS = groove of inferior petrosal sinus
 GSS = groove of sagittal sinus
 GTS = groove of transverse sinus
 IOP = internal occipital protuberance
 IOC = internal occipital crest
 GOS = groove of occipital sinus
 C = clivus
 FM = foramen magnum





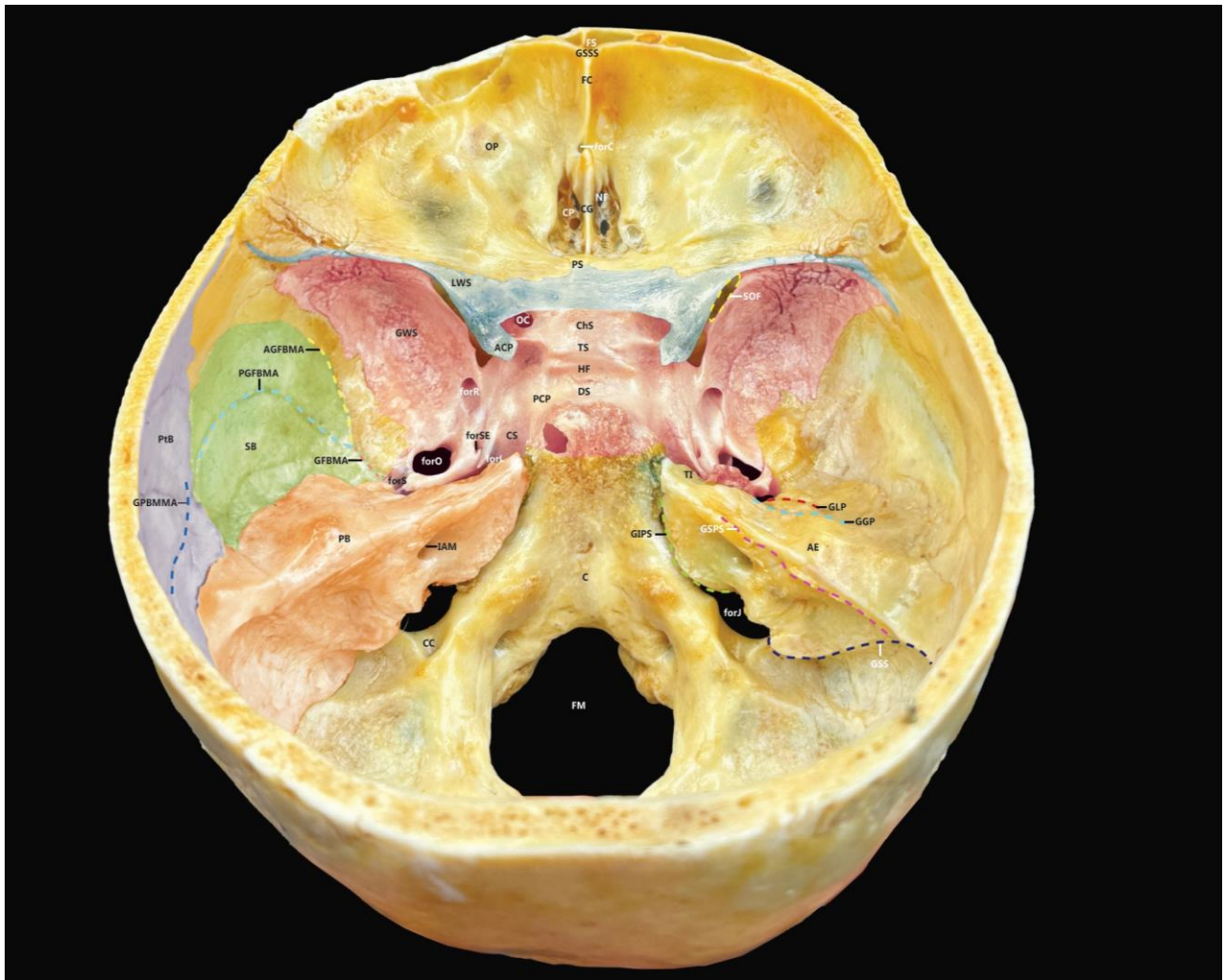
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