FINAL HEAD AND NECK PART 3
DISCUSSION SESSION: GROSS ANATOMY

ONN BLOCK

Feb 15, 2021

FAQ – Topics raised by students
Skull, Scalp infections

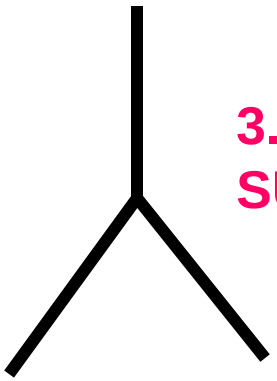
SKULL

SUTURES

1. CORONAL SUTURE

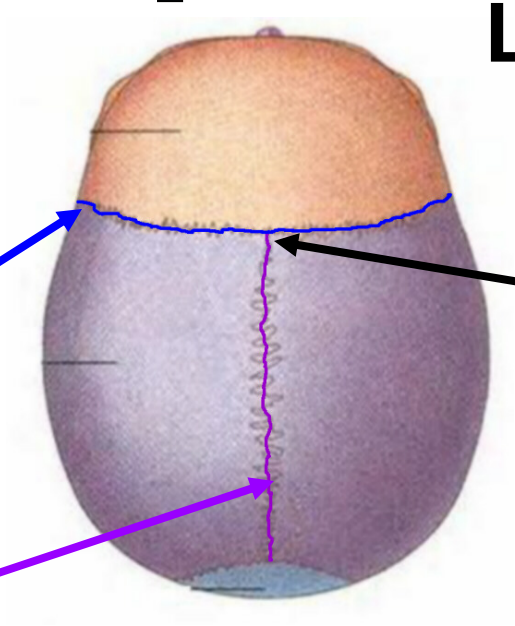
2. SAGITTAL SUTURE

3. LAMBDOIDAL SUTURE

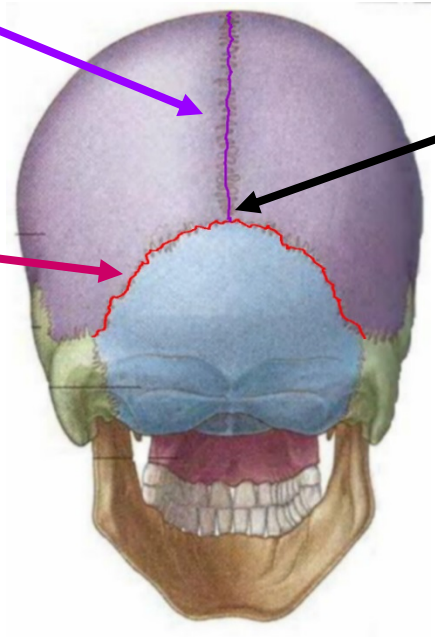


LAMBDA - Greek letter

NOSE



superior (top) view



posterior (back) view

LANDMARKS

**

1. BREGMA - MID POINT OF CORONAL SUTURE

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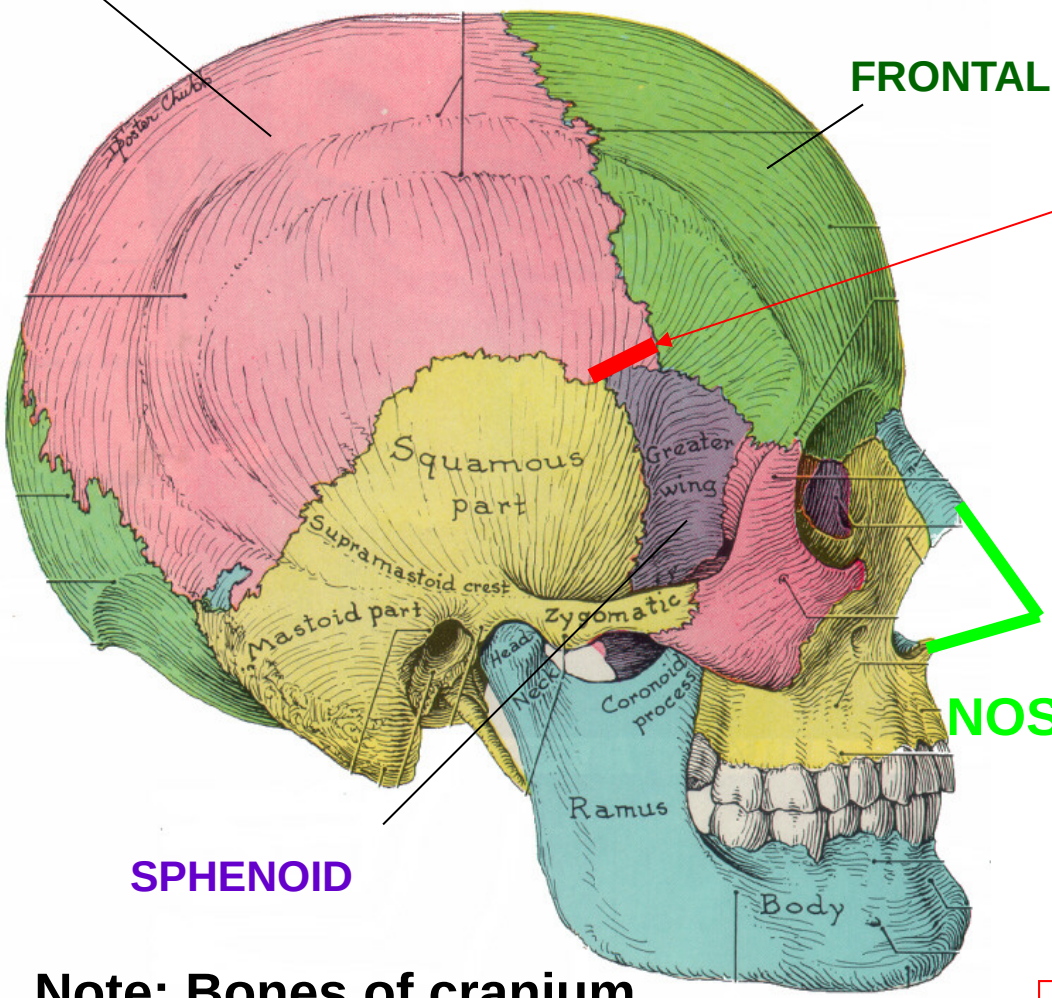
2. LAMBDA - MID POINT OF LAMBDOIDAL SUTURE

SKULL LANDMARKS

CORONAL SUTURE

PARIETAL

FRONTAL



NOSE

SPHENOID

Note: Bones of cranium fuse (sutures disappear) with age)

PTERION **

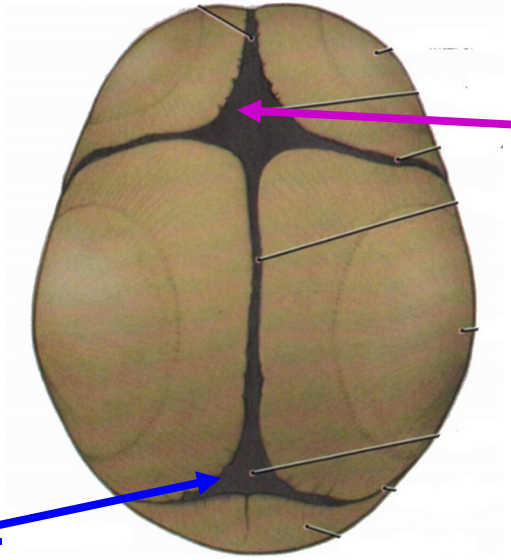
- JUNCTION OF TEMPORAL SPHENOID PARIETAL AND FRONTAL BONES

PIC THANKS TO DR. ALBERICO

** **Note: Skull fractures in region of pterion clinically important (Epidural Hematoma)**

SKULL - FONTANELLES - Membranes that link bones at birth

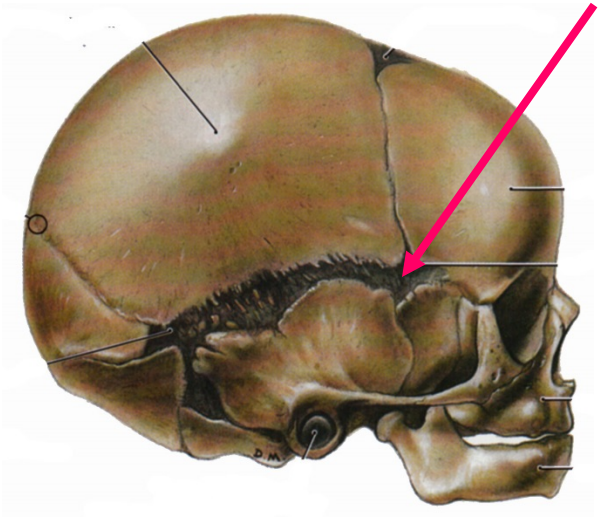
- FONTANELLES ('soft spots') PERMIT CRANIAL COMPRESSION AT BIRTH - CRANIAL GROWTH



1. ANTERIOR FONTANELLE AT BREGMA

2. POSTERIOR FONTANELLE - AT LAMBDA

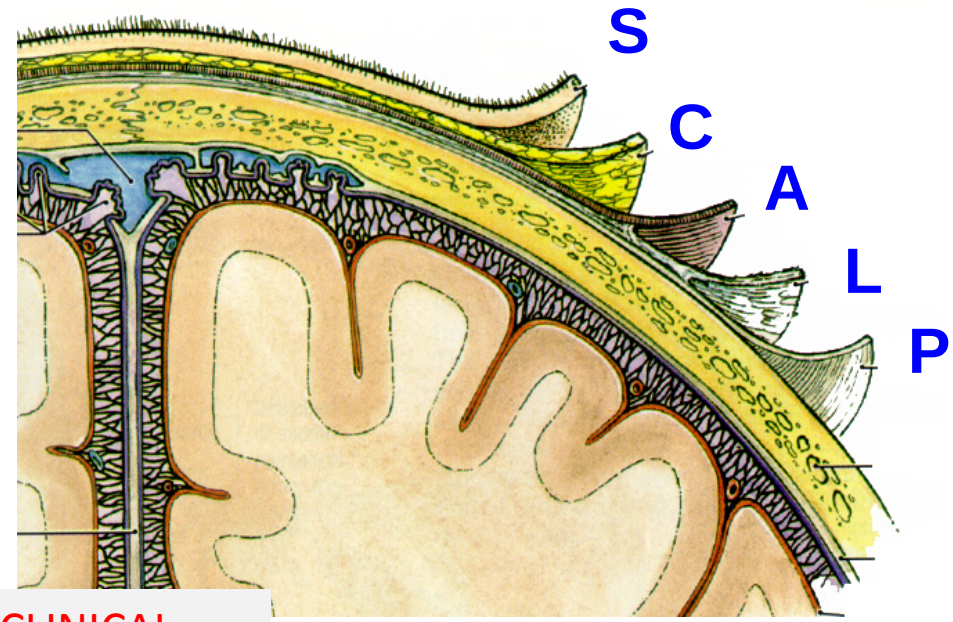
3. LATERAL FONTANELLE AT PTERION



Note: Anterior Fontanelle can be used to access Superior Sagittal venous sinus in neonates

SKULL - SCALP

mnemonic - layers spell SCALP



CLINICAL

Clinical note: Infections can readily spread through loose areolar layer deep to epicranial aponeurosis. **

LAYERS

1. SKIN – HAIR, SWEAT AND SEBACEOUS GLANDS

2. CONNECTIVE TISSUE – SURROUND ARTERIES, VEINS (ORIGIN OF EMISSARY VEINS)

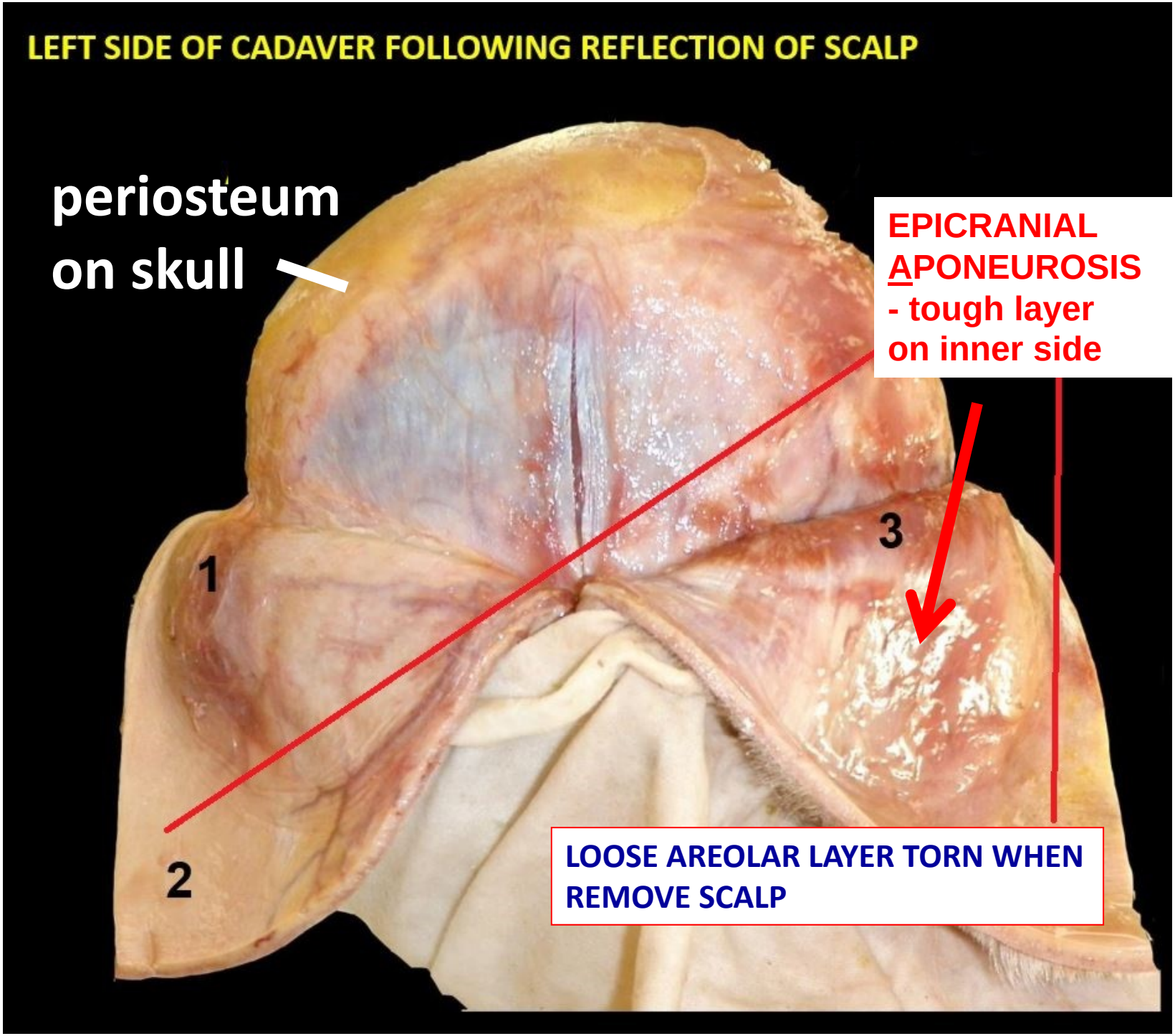
3. EPICRANIAL APONEUROSIS – TENDINOUS SHEET, ATTACHES TO SCALP MUSCLES; MOVEABLE ANTERIOR AND POSTERIOR; LATERAL ATTACHES TO TEMPORALIS FASCIA

4. LOOSE AREOLAR TISSUE- LOOSELY CONNECTS APONEUROSIS AND PERIOSTEUM CROSSED BY EMISSARY VEINS

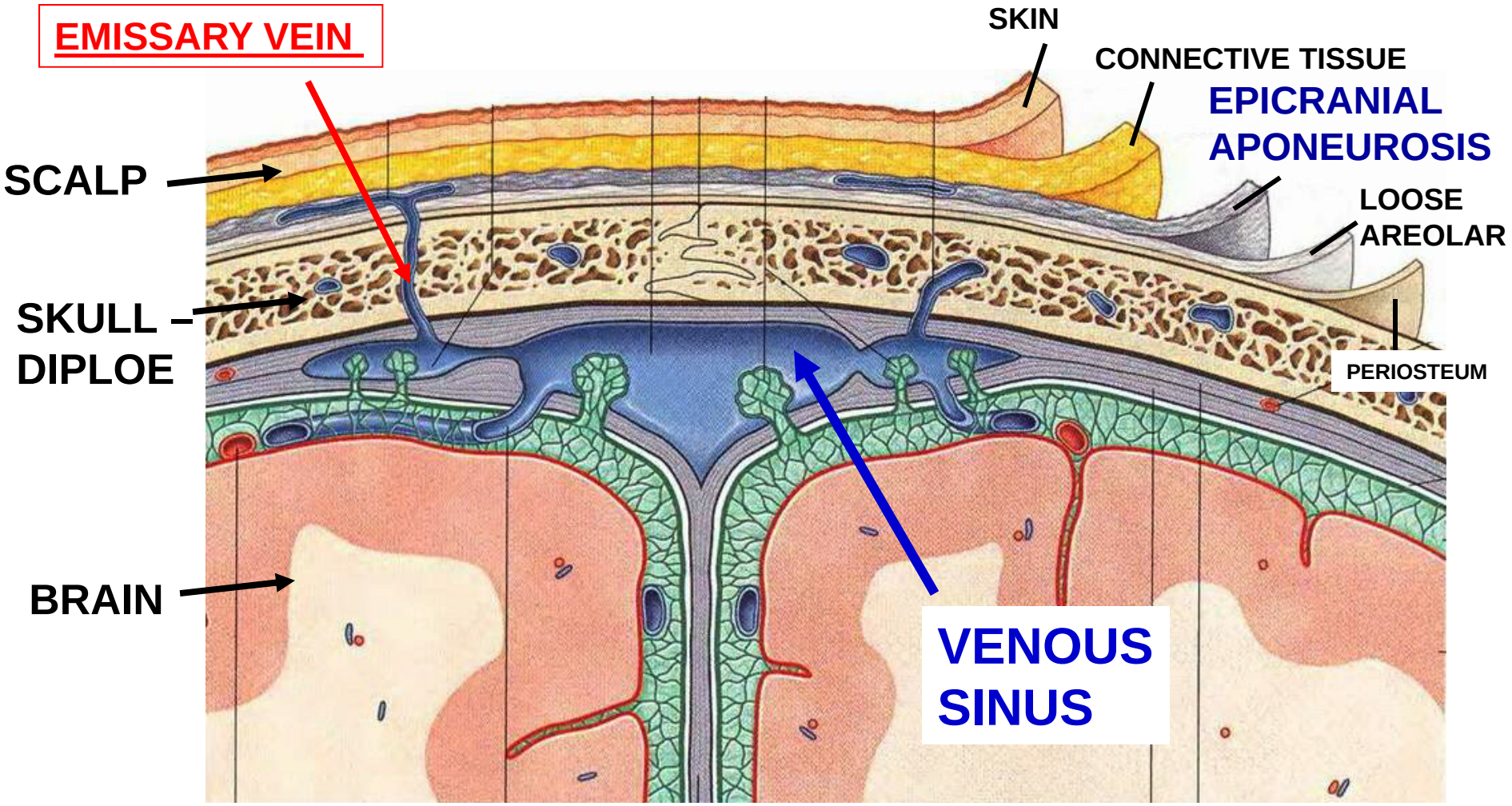
5. PERIOSTEUM (PERICRANIUM) CT LAYER ON OUTER SIDE OF CALVARIUM

SCALPING SOMEONE: REMOVE SCALP BETWEEN 3 (EPICRANIAL APONEUROSIS) AND 4 (LOOSE AREOLAR TISSUE);

Note: SAVING SCALP AS SOUVENIR - not done in civilized societies (including medical students)

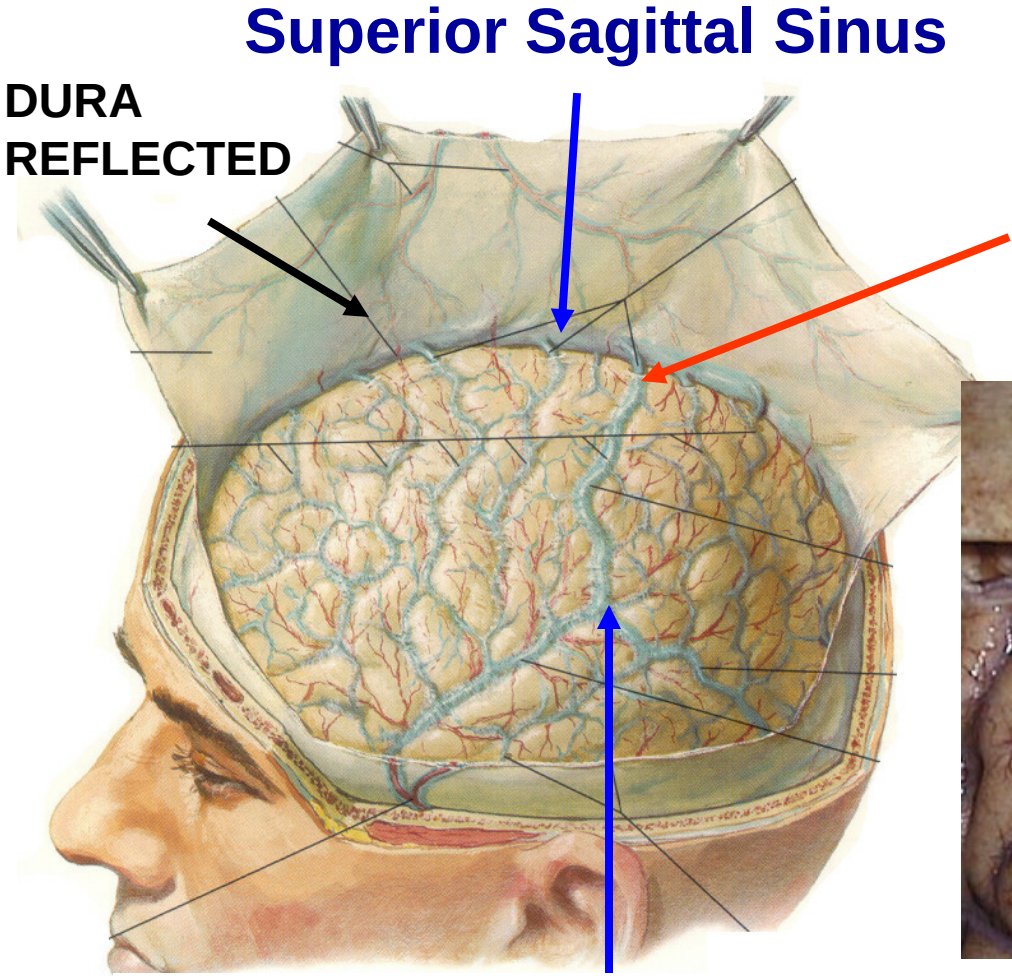

LEFT SIDE OF CADAVER FOLLOWING REFLECTION OF SCALP
periosteum on skull
EPICRANIAL APONEUROSIS - tough layer on inner side
1
2
3
LOOSE AREOLAR LAYER TORN WHEN REMOVE SCALP

INFECTION SPREADS FROM SCALP TO INTERIOR OF SKULL



note: Emissary vein - 'outside' to sinus; Bridging vein - brain (inside) to sinus

SUPERIOR SAGITTAL SINUS receives blood from Superior Cerebral veins through 'BRIDGING' VEINS



'BRIDGING' VEINS – SUBDURAL HEMATOMA

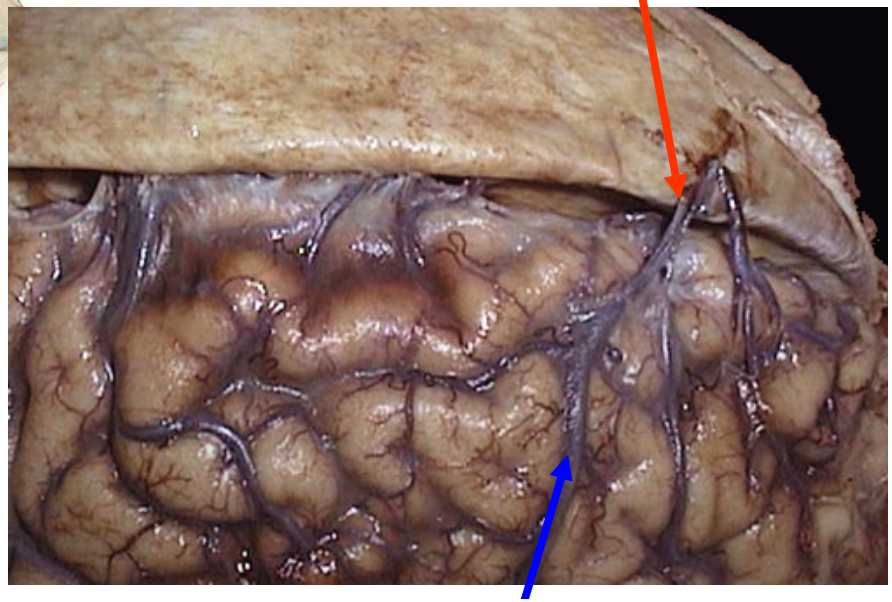


Photo from lecture of Dr. Nancy Norton