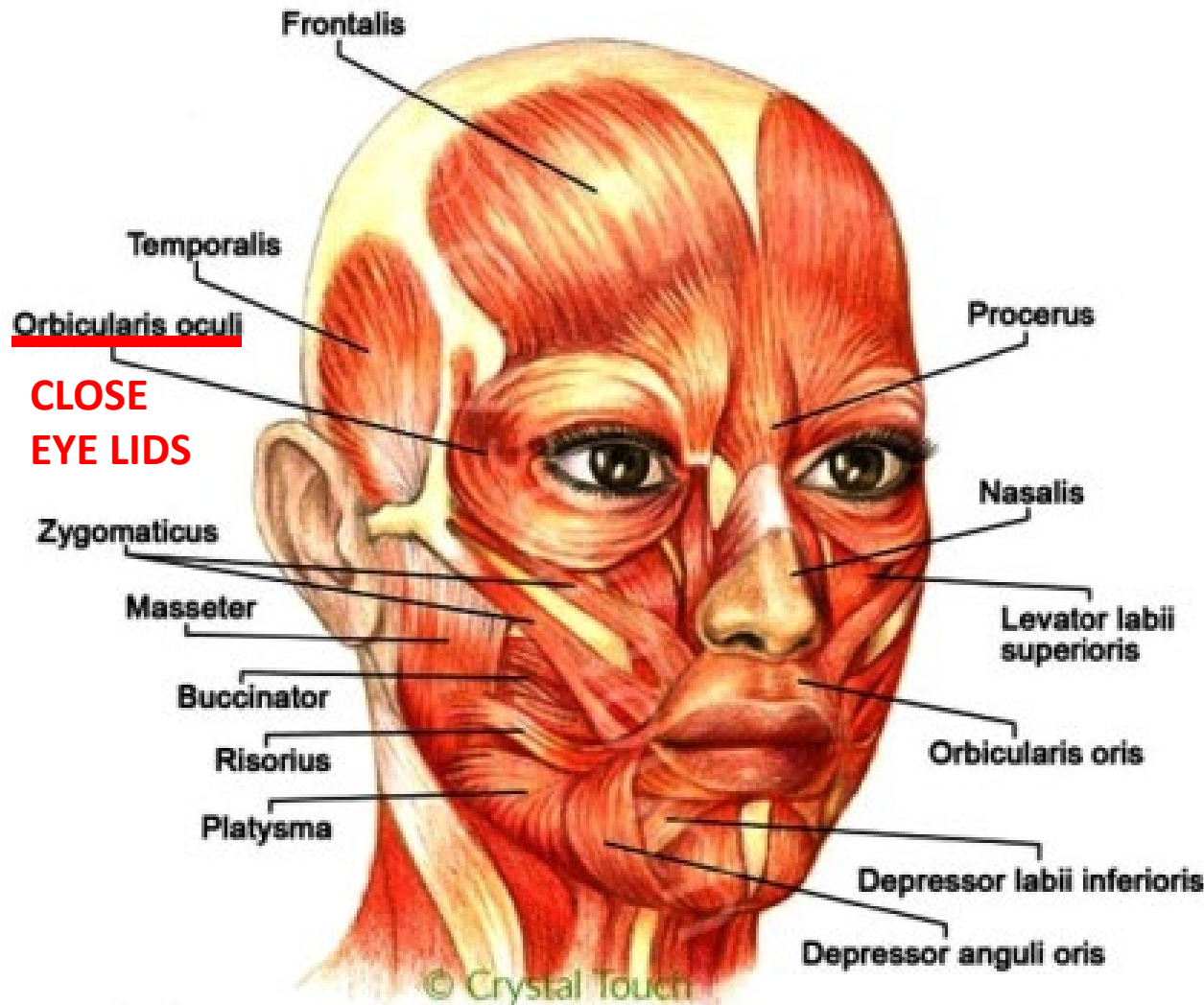


FINAL REVIEW HEAD AND NECK

2024

MUSCLES OF FACIAL EXPRESSION

FACE

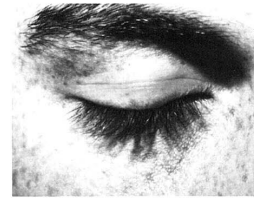


Skeletal muscles - under voluntary control (CN VII Facial) and 'emotional' control (ex. amygdala inputs)

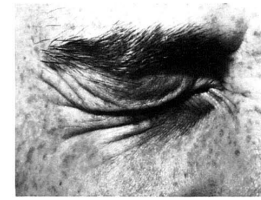
Insert to skin - repair limited to facial transplants (skin and muscles)

No muscle (or very few) spindles. Monitoring thought to occur by stretch of skin.

PRACTICE USING FACIAL MUSCLES SELECTIVELY IN FRONT OF MIRROR



Palpebral Part



Orbital Part

Orbicularis Oculi

**Sneering –
Procerus**



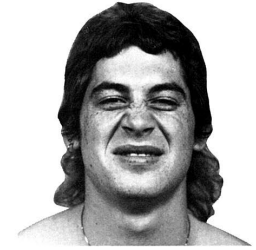
Procerus



Frontalis



Corrugator Supercilii



Procerus



Nasalis



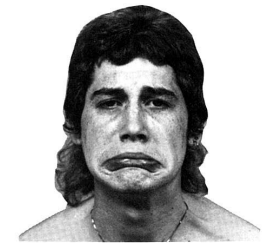
**Contempt –
Dilator Naris**



Nasalis

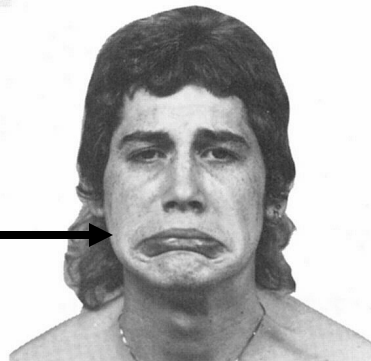


Risorius



Depressor Anguli Oris

**Grading Policy -
Depressor Anguli
Oris**



Depressor Anguli Oris



Orbicularis Oris



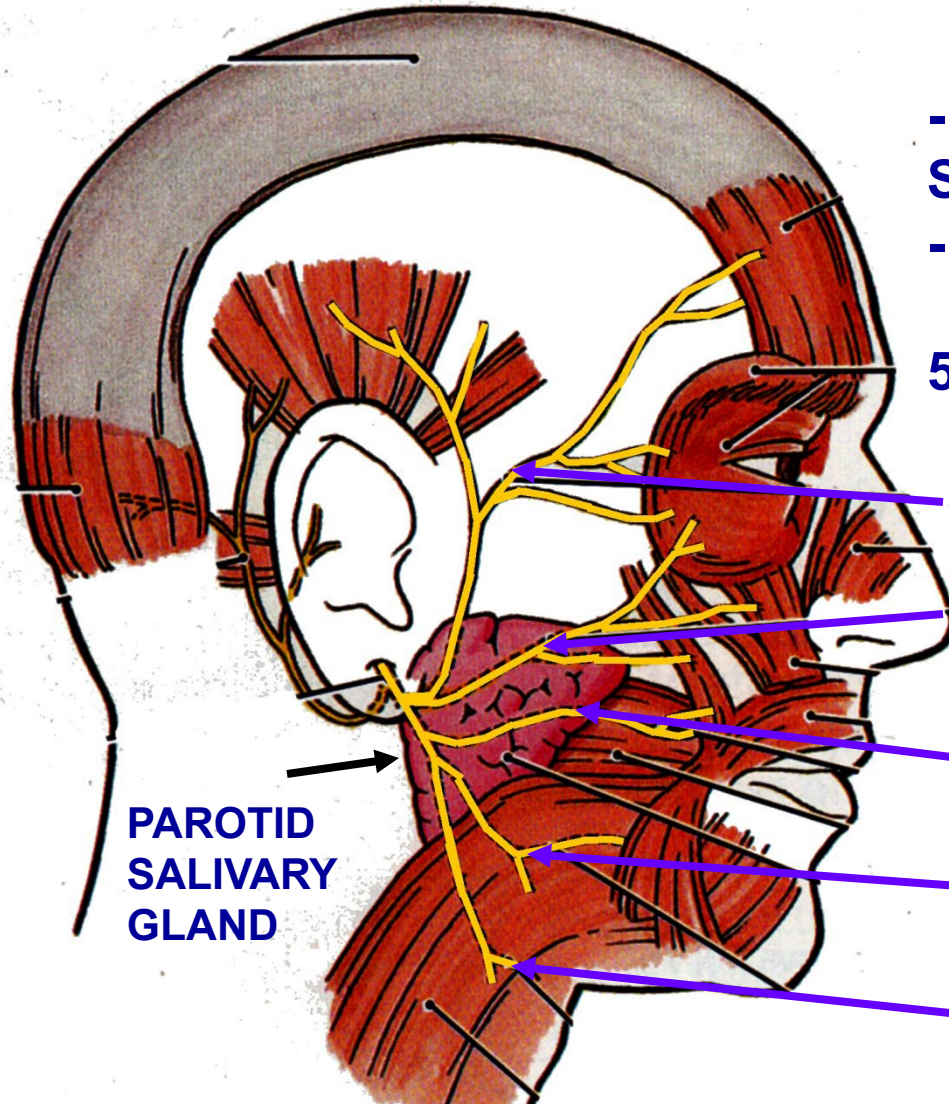
Zygomaticus Major



Mentalis

7-15B MUSCLES OF EXPRESSION IN ACTION

MOTOR INNERVATION TO MUSCLES OF FACIAL EXPRESSION - FACIAL NERVE (CRANIAL NERVE VII)



- leaves skull via Stylomastoid foramen
- divides in parotid gland into

5 terminal branches

1. TEMPORAL

2. ZYGOMATIC

3. BUCCAL

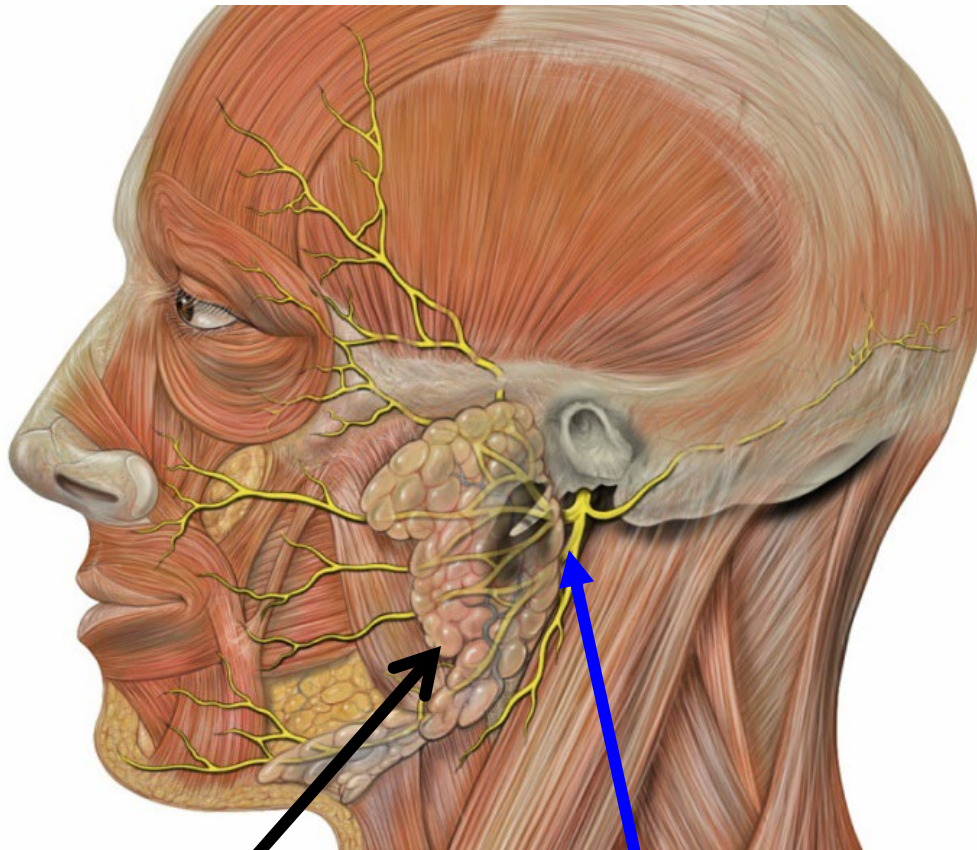
4. MANDIBULAR

5. CERVICAL

PAROTID SALIVARY GLAND

Note: Buccal Br. VII = Motor; Buccal Br. V = Sensory

FACIAL NERVE DAMAGE



Parotid
Salivary
gland

FACIAL NERVE
(Cranial Nerve VII)

- Facial nerve exits skull via Stylomastoid foramen (base of skull)
- Facial nerve passes through and branches in Parotid salivary gland
- can be **damaged by Parotid tumors.**
- more common, may be associated with viral infections:
 - Bell's palsy** - loss of function of Facial nerve
 - others - ex. Ramsay-Hunt syndrome**

BELL'S PALSY - SYMPTOMS REFLECT ANATOMY OF FACIAL NERVE

UNABLE TO
CLOSE EYE DUE
TO PARALYSIS
OF
ORBICULARIS
OCULI MUSCLE

NOTE: CONTROL
OF EYELIDS

1) CLOSE
EYELIDS

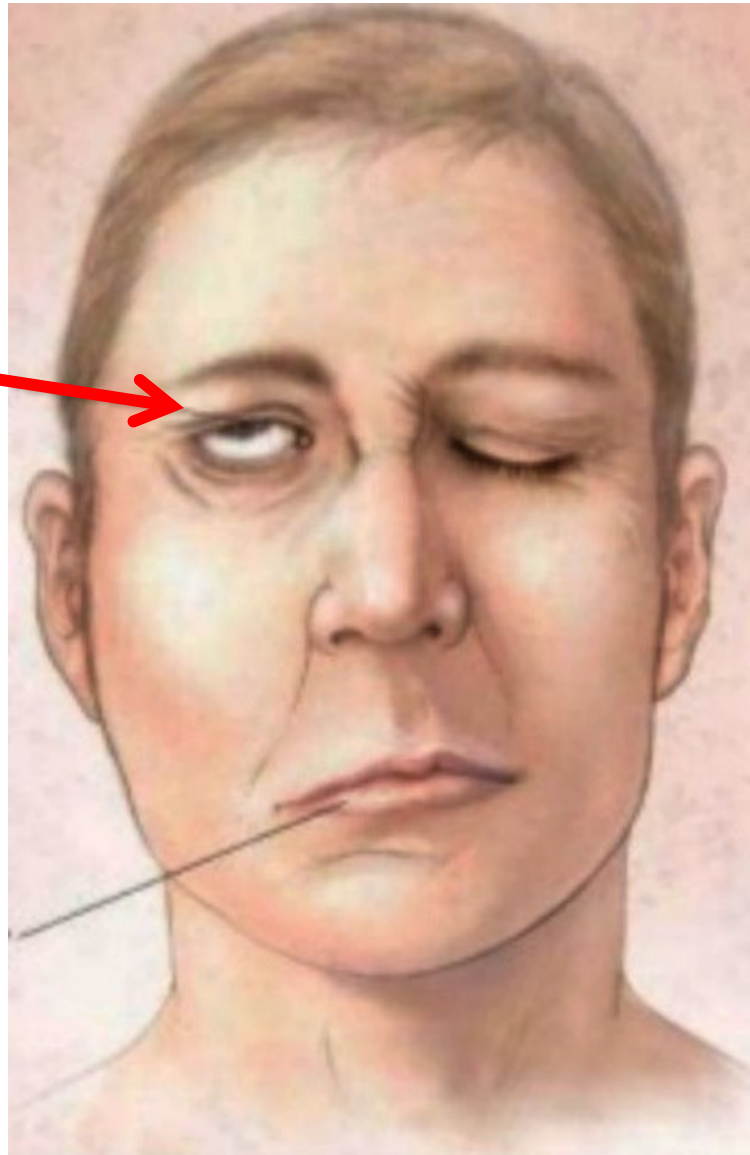
= CRANIAL
NERVE VII
(FACIAL N.)

2) OPEN EYELIDS

- CRANIAL
NERVE III
(OCULOMOTOR)

+

SYMPATHETICS
DAMAGE -
PTOSIS



FACIAL PARALYSIS
(as in Bell's Palsy)

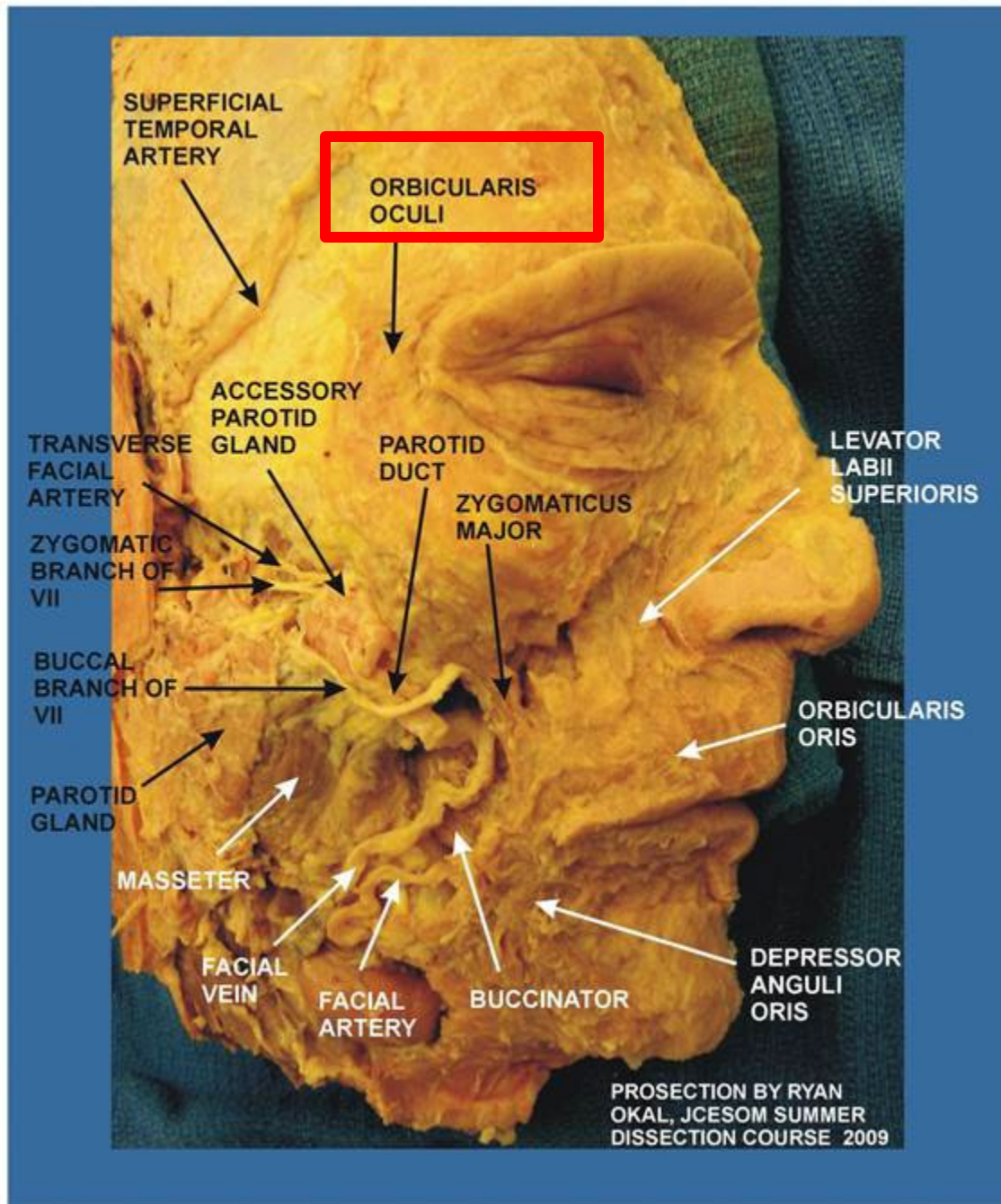
can paralyze
ORBICULARIS
OCULI MUSCLE

- patient is unable to
close eye

- can damage cornea
of eye

- in newborns, can
sew eyelid shut to
prevent corneal
damage

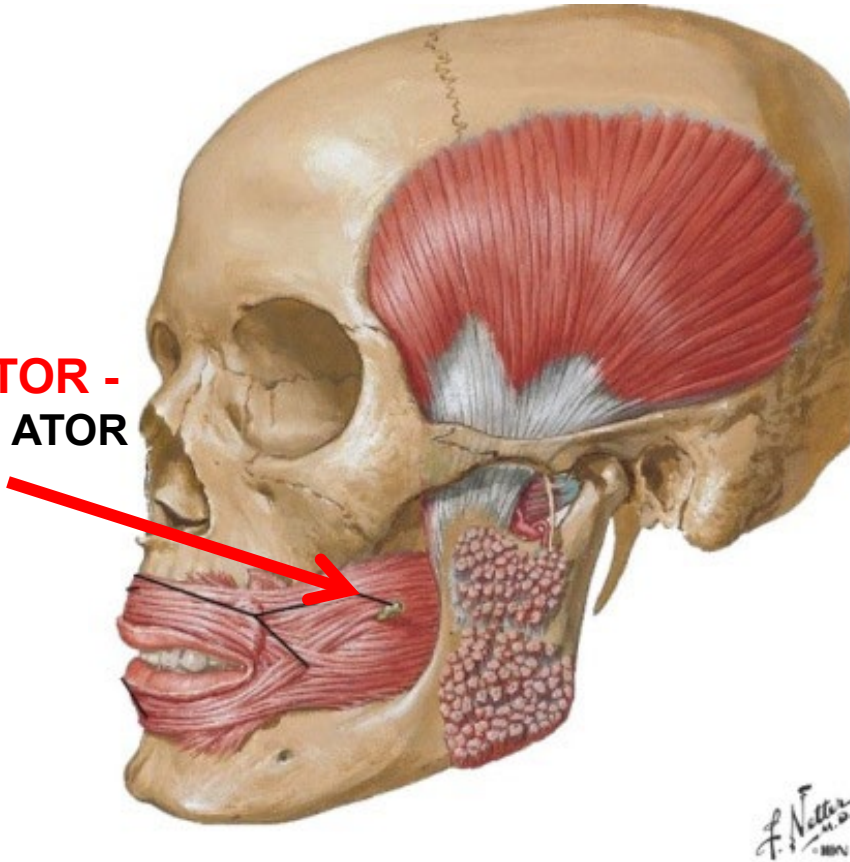
312



PARALYSIS OF BUCCINATOR MUSCLE

CLINICAL * *

BUCCINATOR -
BUCK, SIN, ATOR



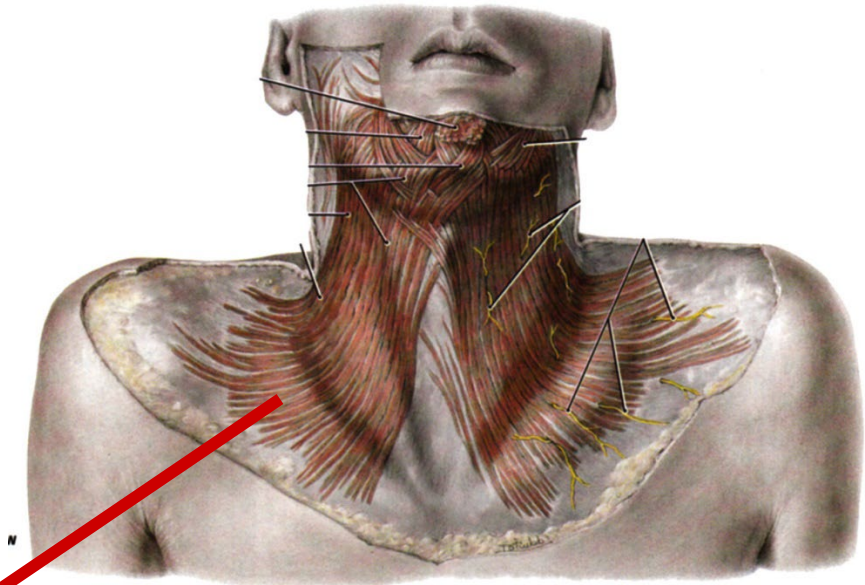
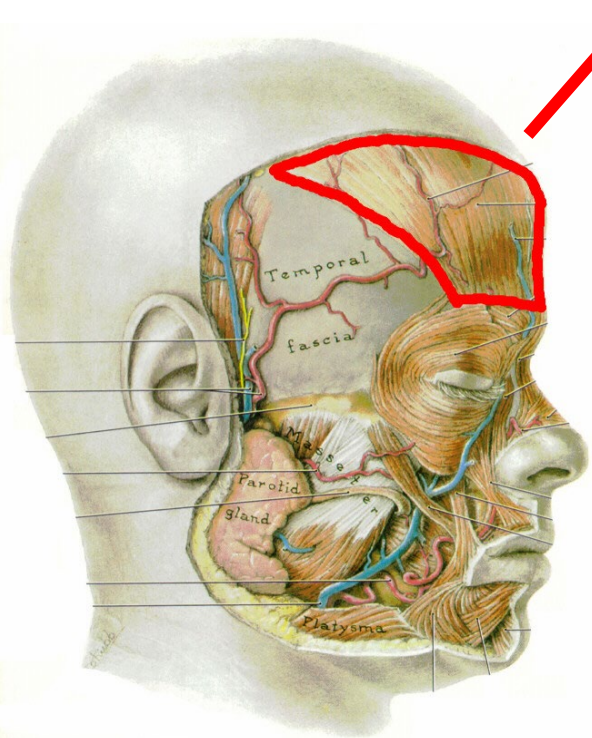
FACIAL PARALYSIS
can paralyze
BUCCINATOR

- patient is unable to
hold food between
teeth

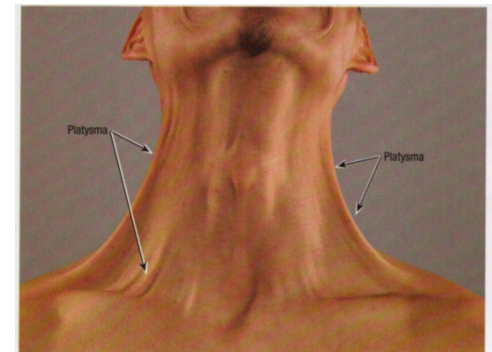
- **DIFFICULTY IN**
CHEWING FOOD

BUCCINATOR FORMS WALL OF
MOUTH - PARALYZE UNABLE TO
HOLD FOOD BETWEEN TEETH

FRONTALIS - muscle in scalp attached to **Epicranial Aponeurosis**; **raises eyebrows** (used in clinical test of Facial nerve)



PLATYSMA - extends from mandible to fascia over Pectoralis Major; tenses, moves skin of neck

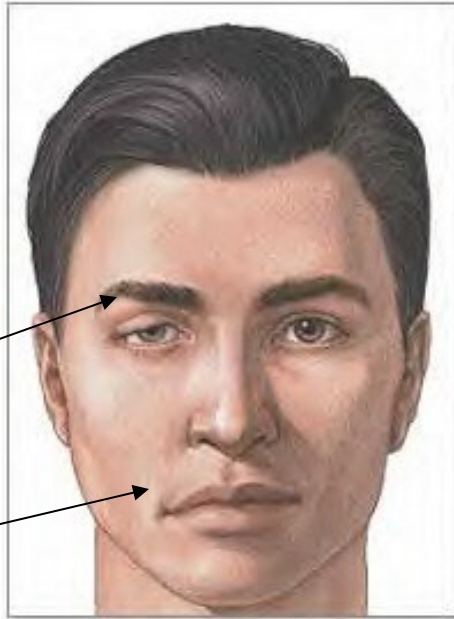


OVERVIEW OF FACIAL MUSCLES: FACIAL PARALYSIS

FACIAL PARALYSIS - BELL'S PALSY - CN VII

'drooping' eyebrow

'drooping' upper lip

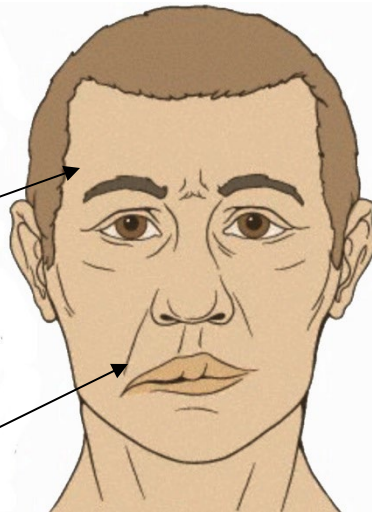


BELL'S PALSY- Lower Motor Neuron (Alpha motor neuron) disorder of Facial Nerve (CN VII): associated with viral infection (herpes simplex); Symptoms unilateral: sudden onset paralysis of all facial muscles on one side; SYMPTOMS: drooling; inability to close eye; loss of taste to anterior tongue; pain in or behind ear; hyperacusia

UPPER MOTOR NEURON LESIONS

MUSCLES OF UPPER FACE NOT AFFECTED

'drooping' upper lip



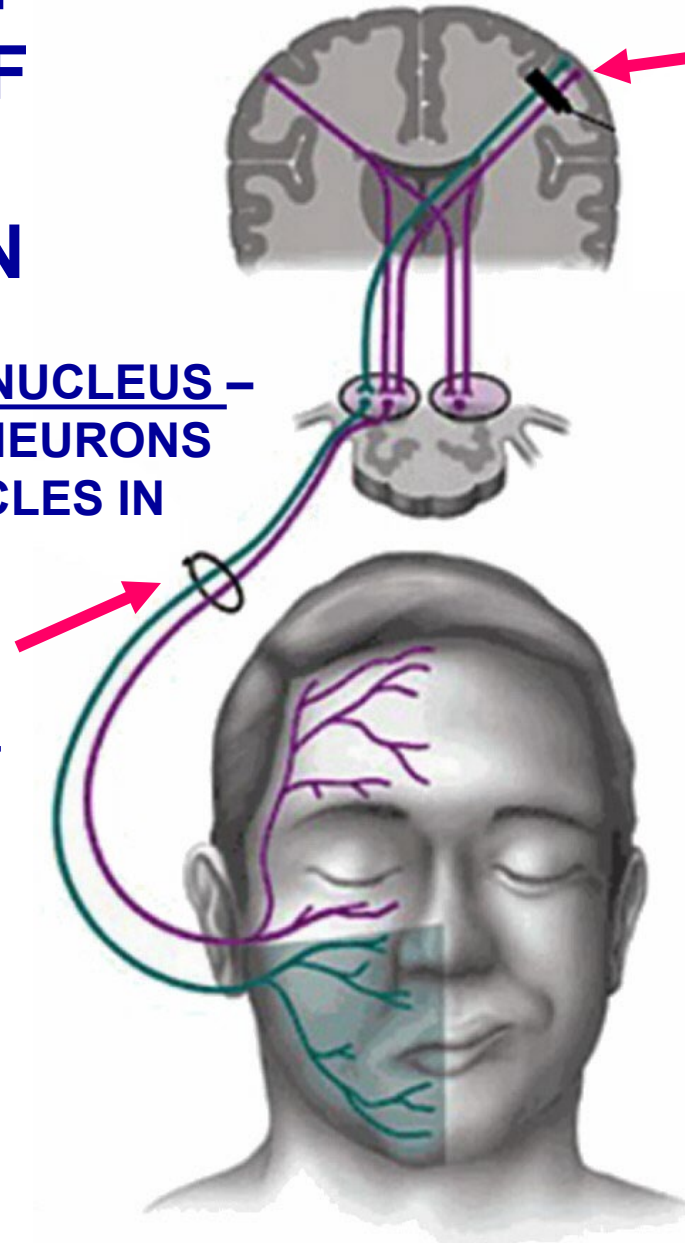
UPPER MOTOR NEURONS DISORDERS OF VII - 'sparing' of upper face - After cortical strokes, often only muscle of lower face are paralyzed on one side, muscles of upper face are not paralyzed (ex. brow, orbicularis oculi); cortical projections are bilateral to upper face.

CONTROL OF MUSCLES OF FACIAL EXPRESSION

FACIAL MOTOR NUCLEUS -
ALPHA MOTOR NEURONS
TO FACIAL MUSCLES IN
BRAINSTEM

LOWER MOTOR
NEURON LESION
- ex. BELL'S
PALSY -

AFFECTS ALL
MUSCLES OF
FACIAL
EXPRESSION



UPPER MOTOR
NEURON LESION -
ex. CORTICAL
STROKE (vascular
occlusion)

AFFECTS ONLY
MUSCLES OF LOWER
FACE ('SPARING OF
UPPER FACE')

UPPER FACE
CONTROL IS
BILATERAL (both sides
of Cortex)

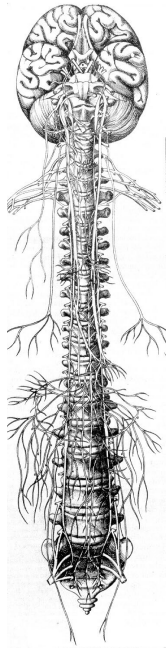
LOWER FACE
CONTROL IS
UNILATERAL (ONLY
CONTRALATERAL
CORTEX)

Cranial Nerves - different types of neurons

ARISE FROM,
PROJECT TO

CRANIAL
NERVES

SPINAL
NERVES



BRAIN
(BRAIN-
STEM)

SPINAL
CORD

REFERENCE CHART - WAY TO REMEMBER TYPE OF NEURONS - USEFUL

VII. SUMMARY OF TYPES OF NEURONS IN CRANIAL NERVES (parenthesis - OLD 3 Letter system)

Nerve	SOMATIC MOTOR (GSE)	BRANCHIO-MOTOR (SVE)	VISCERAL MOTOR (GVE)	SOMATIC SENSORY (GSA)	VISCERAL SENSORY (GVA)	CHEMICAL SENSE (SVA)	SPECIAL SENSES (SSA)
III.	+		+				
IV.	+						
VI.	+						
XII.	+						
V.		+		+			
VII.		+	+	+	+	+	
IX.		+	+	+	+	+	
X.		+	+	+	+	+	
XI.		+					
I.						+	
II.							+
VIII.							+

TYPES OF NEURONS

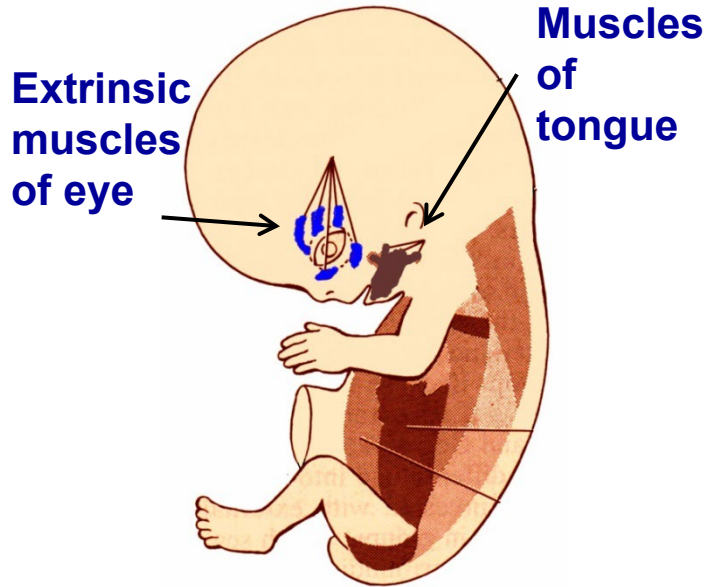
1. Somatic motor
2. Somatic sensory
3. Visceral motor
4. Visceral sensory
5. Special senses
6. Chemical senses
7. Branchiomotor

NOTE: THREE LETTER SYSTEM - NO LONGER ON BOARD EXAMS BUT MAY BE REFERRED TO IN NEUROANATOMY - NO QUESTIONS IN GROSS ANATOMY

Important (Clinically) to Differentiate:
SOMATIC - def. generally refers to BODY; here refers to SOMITES that develop EMBRYOLOGICALLY
VISCERAL - def. refers to INTERNAL ORGANS (ex. GI tract, Circulatory system, Glands, etc.)

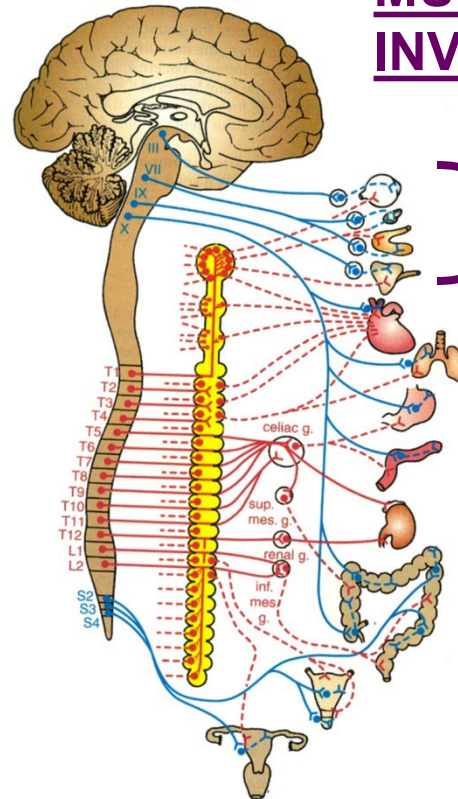
Cranial Nerves - Somatic Motor vs Visceral Motor

SOMATIC - SKELETAL
MUSCLE - VOLUNTARY



Somatic Motor - Motor neurons to skeletal muscles that are embryologically derived from Somites (other skeletal muscles derived from Branchial arches)

VISCERAL - SMOOTH
MUSCLE -
INVOLUNTARY

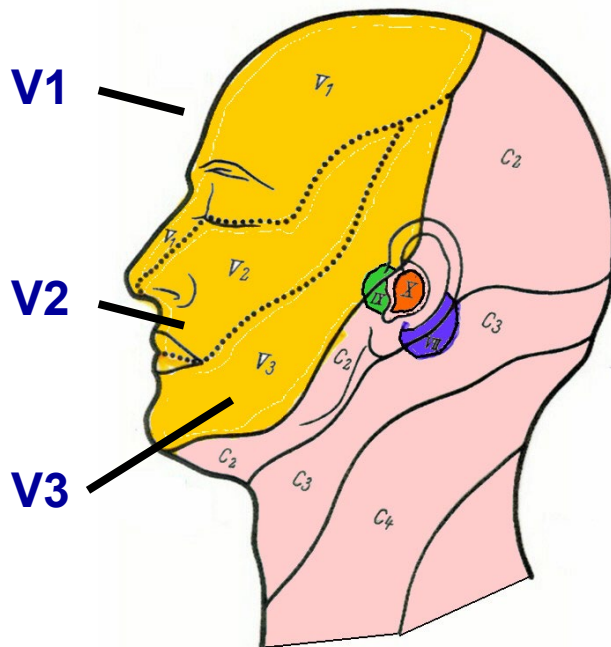


Visceral Motor - AUTONOMICS - Motor neurons to smooth muscles, glands, etc. ; also cardiac muscle

Cranial Nerves - Somatic Sensory (Precise Sensation) vs Visceral Sensory (Imprecise Sensation)

Somatic - in head - sensory to skin, ORAL cavity, NASAL cavity, joints, muscle

MOSTLY TRIGEMINAL NERVE TO SKIN - PRECISE SENSATION - TWO POINT DISCRIMINATION

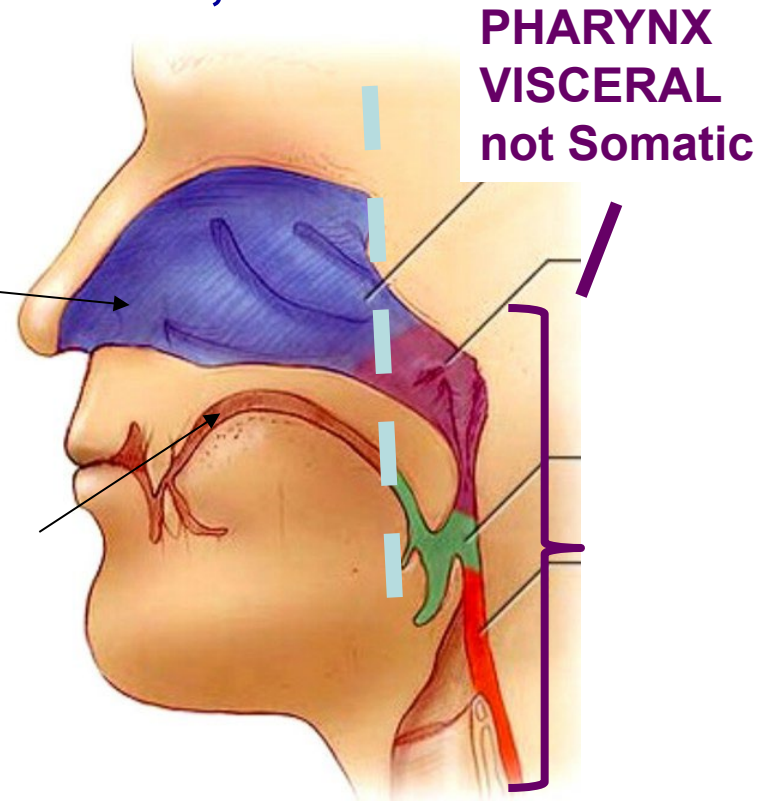


OUTER EAR - V, VII, IX, X

TRIGEMINAL NERVE ALSO - ORAL CAVITY, NASAL CAVITY

Nasal Cavity - Somatic Sensory

Oral Cavity Somatic Sensory



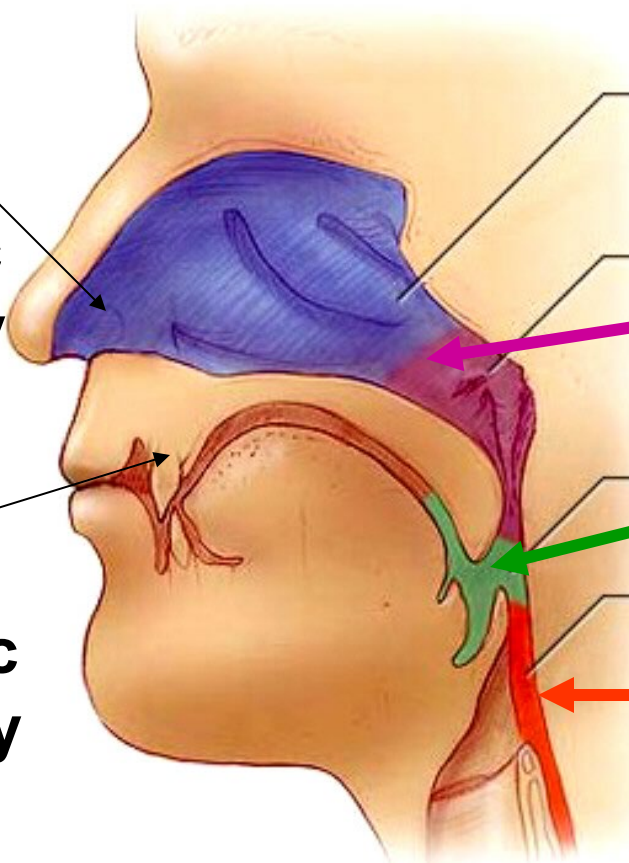
PHARYNX VISCERAL not Somatic

VISCERAL SENSORY

Sensory to Pharynx and derivatives

Nasal
Cavity
Somatic
Sensory

Oral
Cavity
Somatic
Sensory



All Pharynx is
Visceral Sensory
In 3 Cranial Nerves

NASOPHARYNX - VII

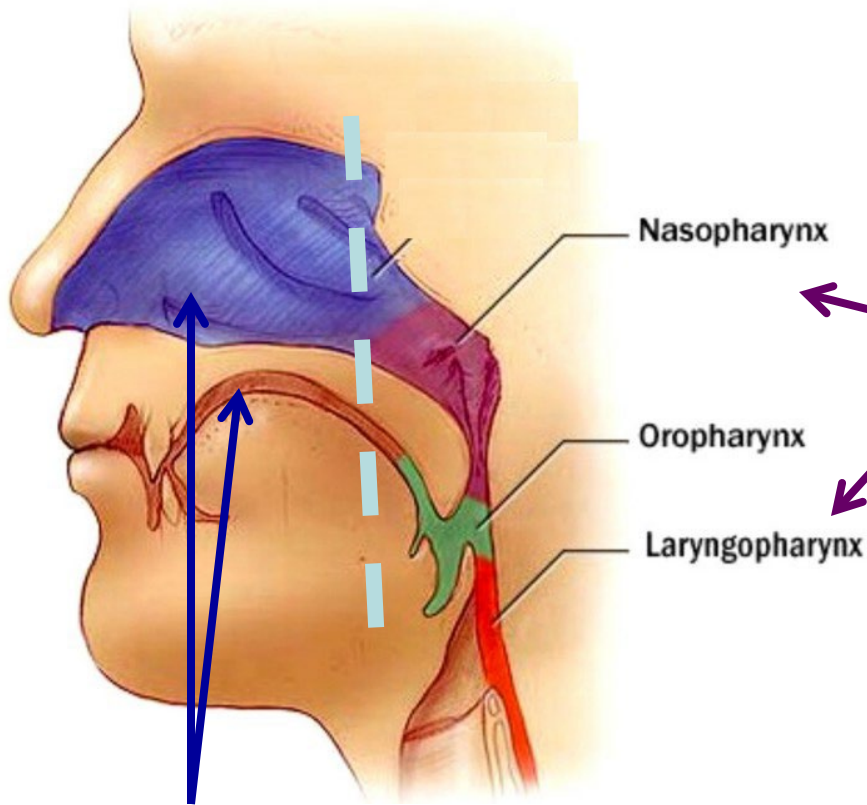
OROPHARYNX - IX

LARYNGOPHARYNX - X

PHARYNX IS UPPER PART OF GI TRACT = VISCERAL

Note: Authors disagree on innervation of nasopharynx

VISCERAL SENSORY - IMPRECISE - sensory to internal organs, GI and Cardiovascular



**ORAL, NASAL CAVITIES
(ANTERIOR TONGUE) -
TOUCH, PAIN PRECISELY
LOCALIZED**

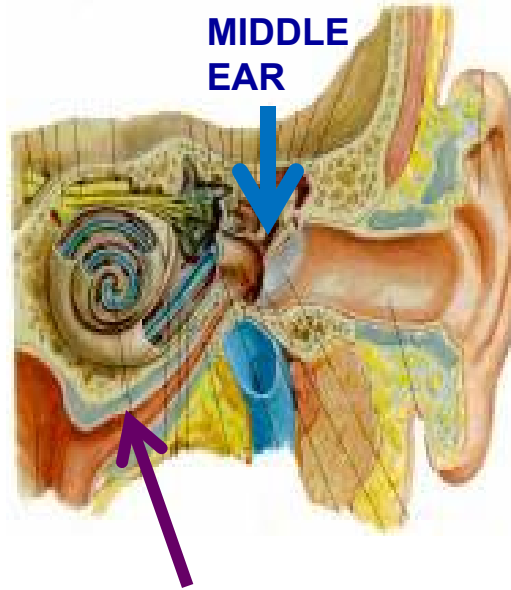
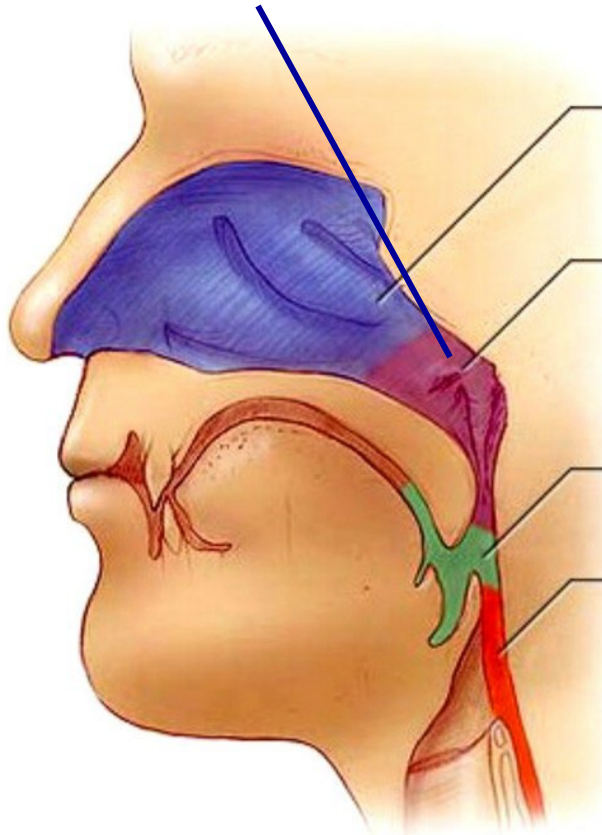
**IN HEAD - VISCERAL
SENSORY ALSO PHARYNX**

**PHARYNX (OR POSTERIOR
TONGUE IN OROPHARYNX) -
TOUCH, PAIN NOT
LOCALIZED, ELICITS 'GAG'
REFLEX**

**All Pharynx is Visceral
Sensory In 3 Cranial
Nerves - VII, IX, X**

VISCERAL SENSORY - IMPRECISE - Also AUDITORY TUBE

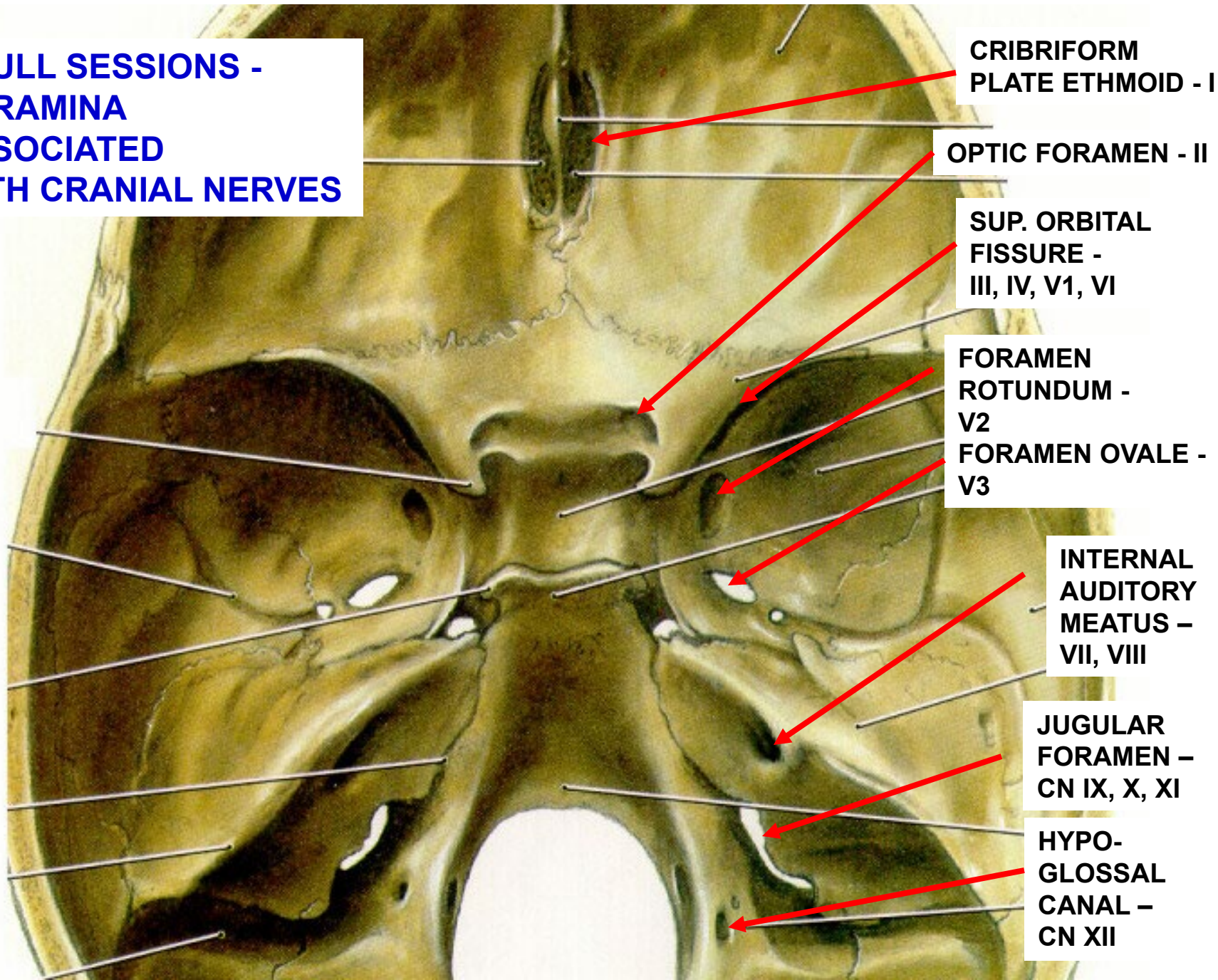
OPENING OF AUDITORY
TUBE IN NASOPHARYNX



AUDITORY TUBE IS
AN EXTENSION OF
NASOPHARYNX,
LEADS TO MIDDLE
EAR - INSIDE
TYMPANIC
MEMBRANE (EAR
DRUM)

AUDITORY (EUSTACHIAN) TUBE -
extension of ;Pharynx (Nasopharynx)
lead to middle ear; Innervation
Visceral Sensory (CN IX);
Children with middle ear infections
(Otitis media) can't localize pain -
'Whole side of my head hurts)

**SKULL SESSIONS -
FORAMINA
ASSOCIATED
WITH CRANIAL NERVES**



**CRIBRIFORM
PLATE ETHMOID - I**

OPTIC FORAMEN - II

**SUP. ORBITAL
FISSURE -
III, IV, V1, VI**

**FORAMEN
ROTUNDUM -
V2**

**FORAMEN OVALE -
V3**

**INTERNAL
AUDITORY
MEATUS -
VII, VIII**

**JUGULAR
FORAMEN -
CN IX, X, XI**

**HYP-
GLOSSAL
CANAL -
CN XII**

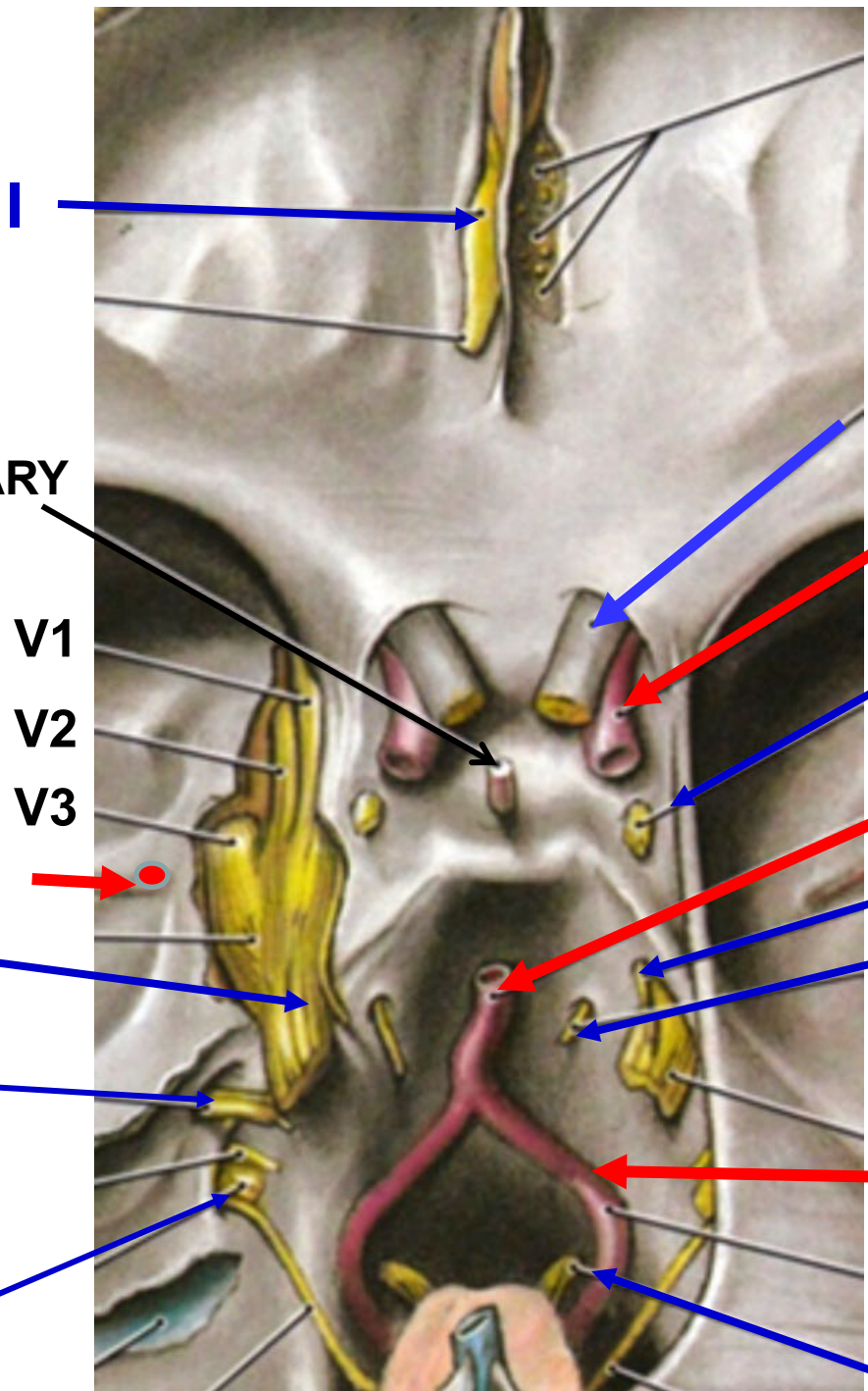
**BRAINSTEM
DISSECTION
IDENTIFY**

**PITUITARY
STALK**

**MIDDLE
MENINGEAL A.**

**VII
+VIII**

**IX, X
+XI**



I

V1

V2

V3

V

VII

IX, X

+XI

II

INTERNAL CAROTID A.

III

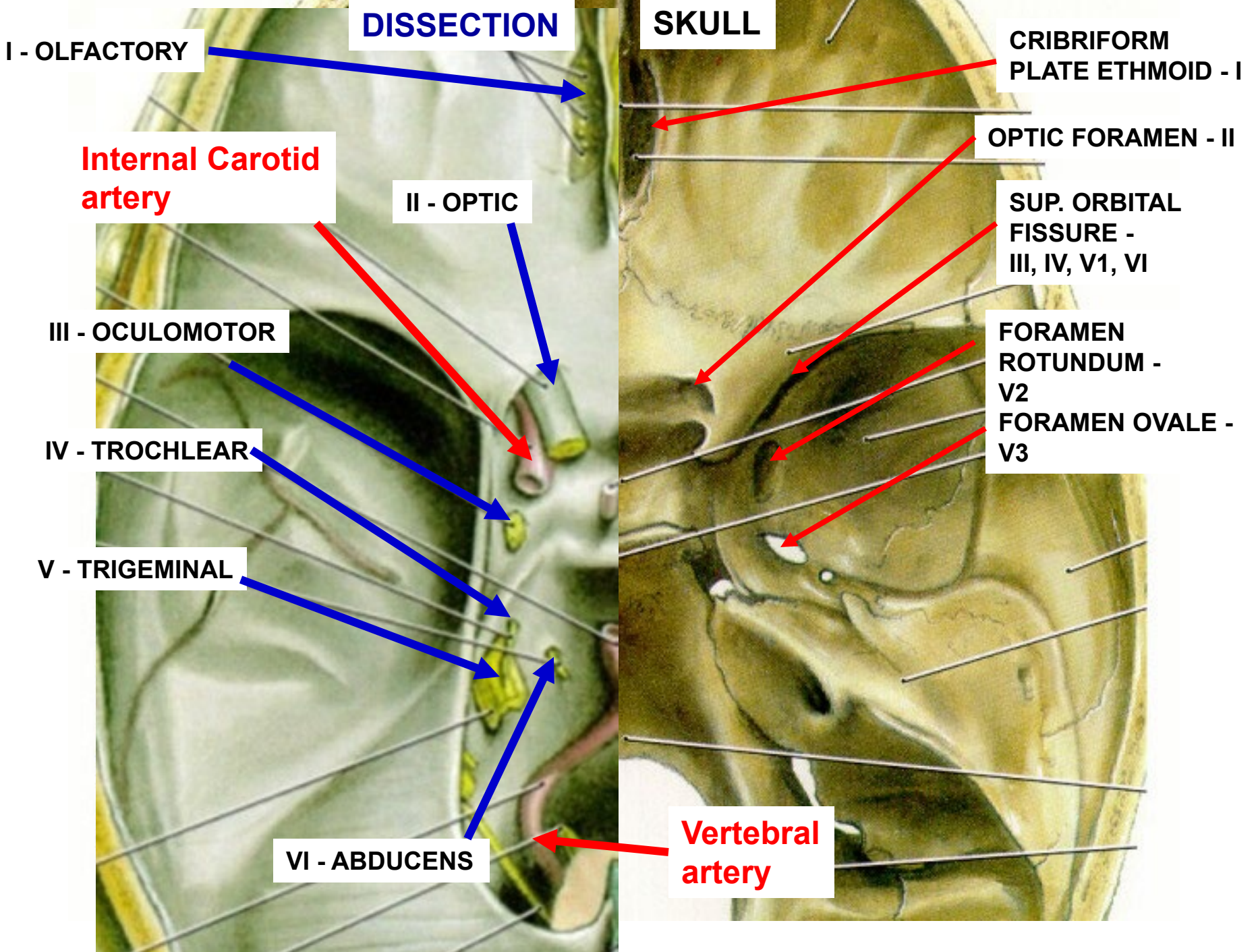
BASILAR A.

IV

VI

VERTEBRAL A.

XII



DISSECTION

SKULL

I - OLFACTORY

**CRIBRIFORM
PLATE ETHMOID - I**

**Internal Carotid
artery**

II - OPTIC

OPTIC FORAMEN - II

III - OCULOMOTOR

**SUP. ORBITAL
FISSURE -
III, IV, V1, VI**

IV - TROCHLEAR

**FORAMEN
ROTUNDUM -
V2**

V - TRIGEMINAL

**FORAMEN OVALE -
V3**

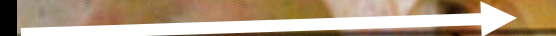
VI - ABDUCENS

**Vertebral
artery**

?



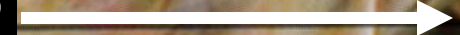
?



?



?



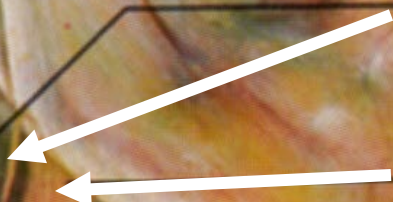
?



?



?

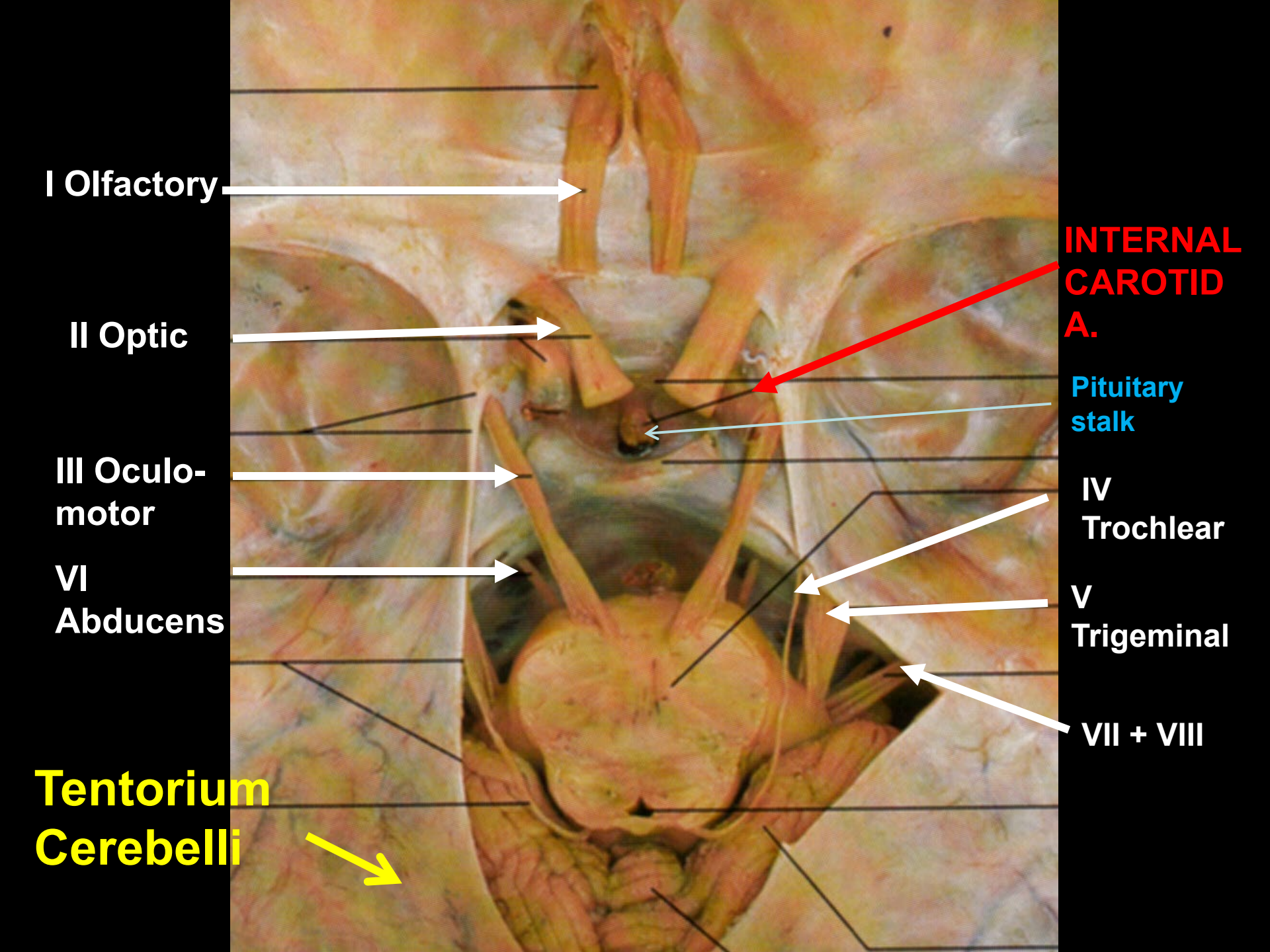


?



?

?



I Olfactory

II Optic

**III Oculo-
motor**

**VI
Abducens**

**Tentorium
Cerebelli**

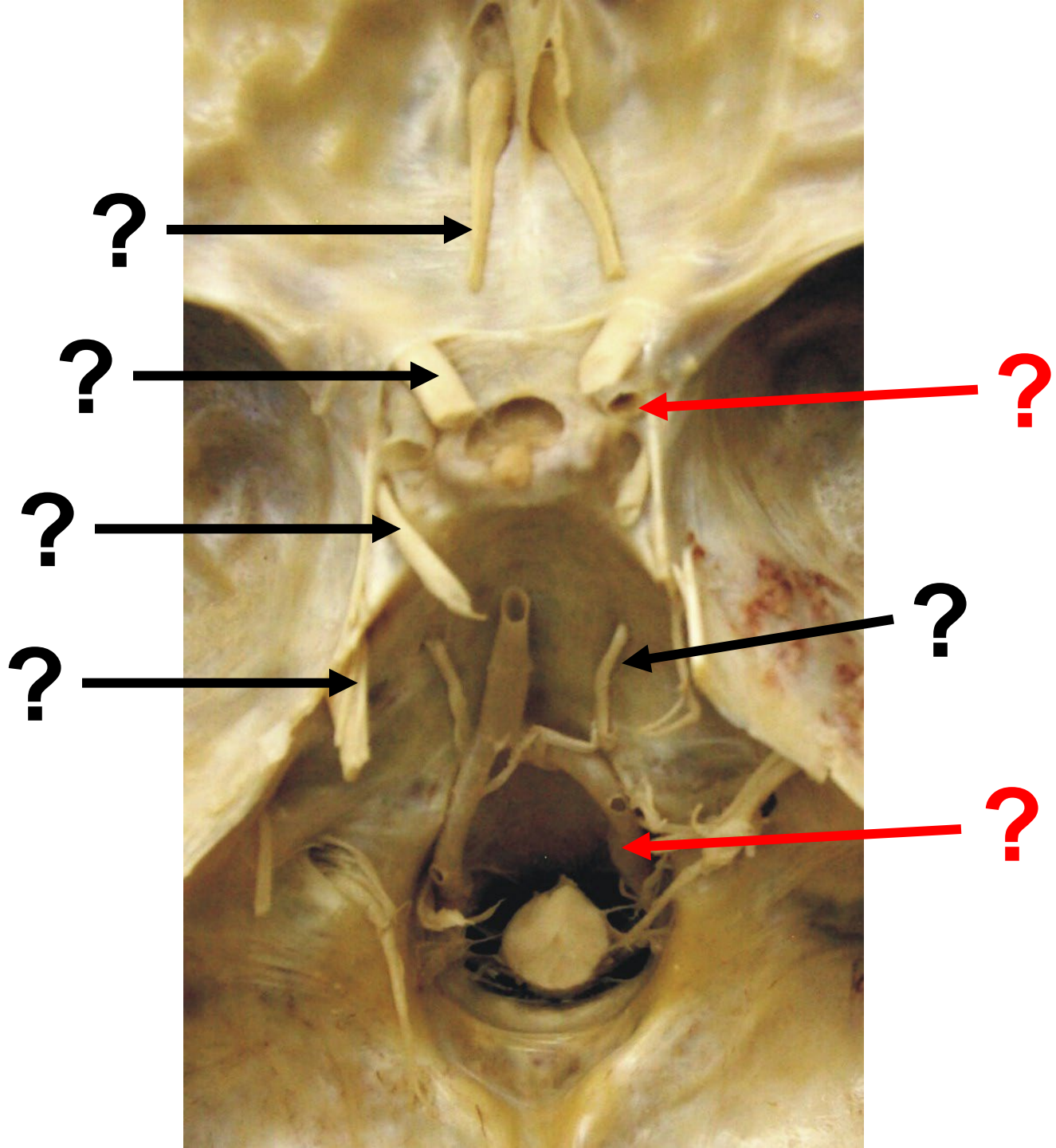
**INTERNAL
CAROTID
A.**

**Pituitary
stalk**

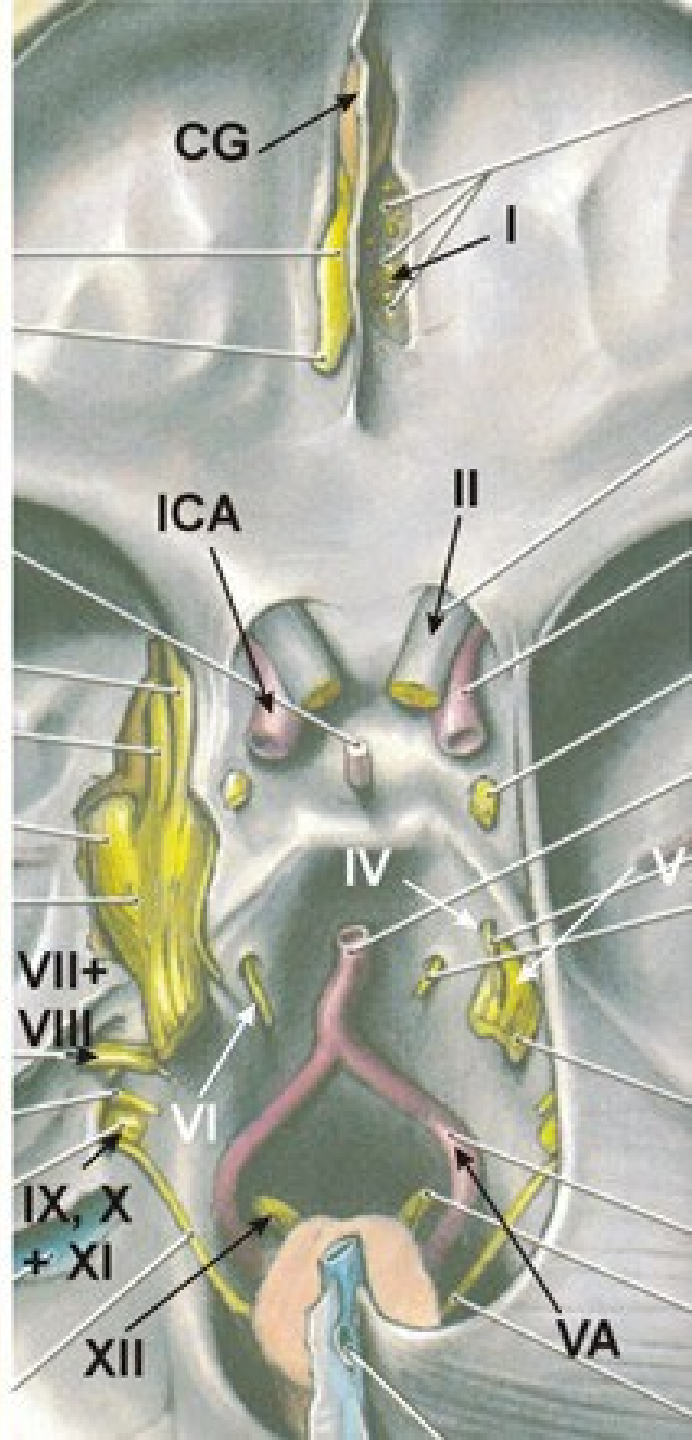
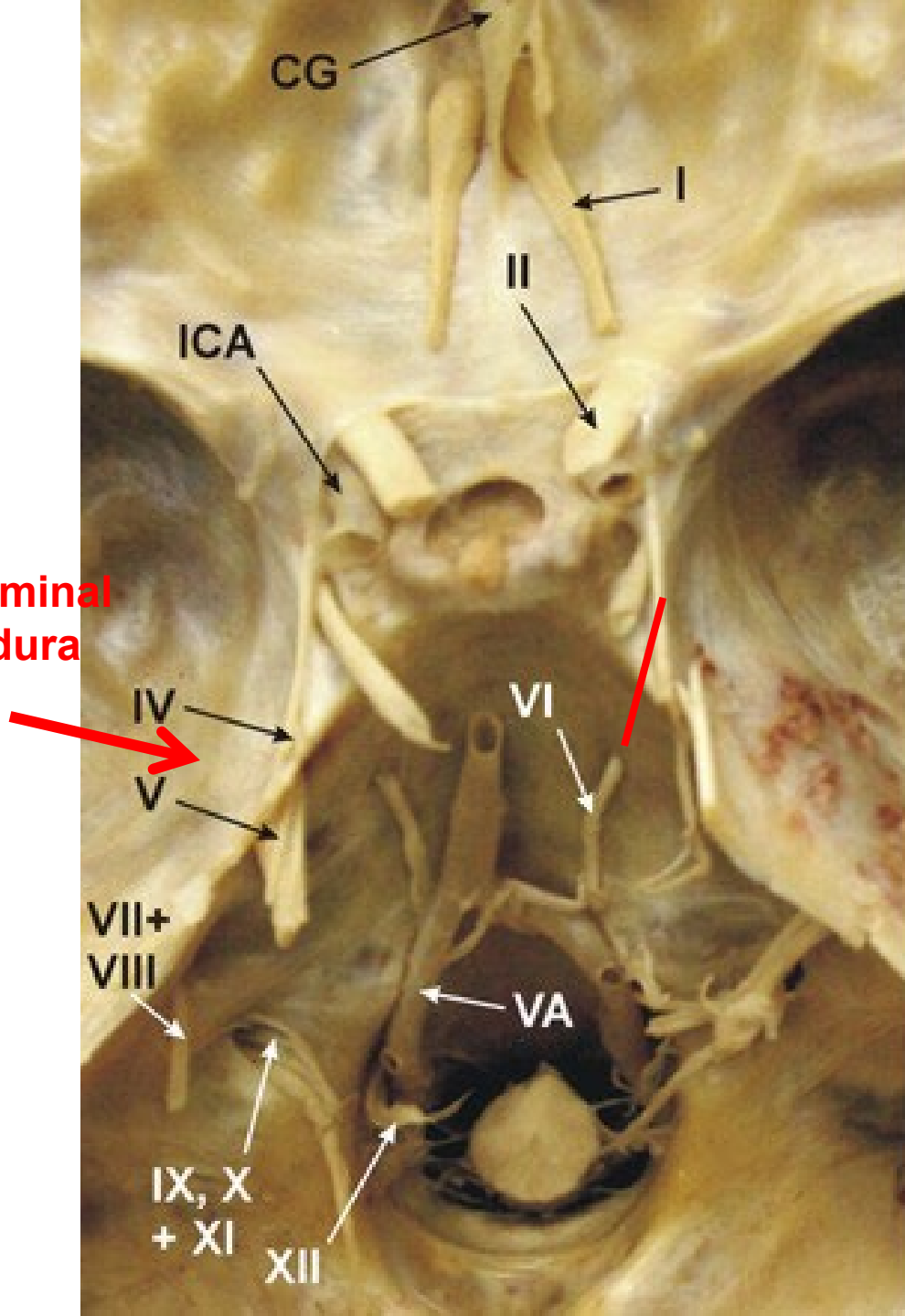
**IV
Trochlear**

**V
Trigeminal**

VII + VIII



**V Trigeminal
under dura**



DISSECTION

I - OLFACTORY

II - OPTIC

III - OCULOMOTOR

IV - TROCHLEAR

V - TRIGEMINAL

VI - ABDUCENS

VII - FACIAL

VIII - VESTIBULO-COCHLEAR

IX - GLOSSO-PHARYNGEAL

X - VAGUS

XI - ACCESSORY

XII - HYPOGLOSSAL

SKULL

CRIBRIFORM
PLATE ETHMOID - I

OPTIC FORAMEN - II

SUP. ORBITAL
FISSURE -
III, IV, V1, VI

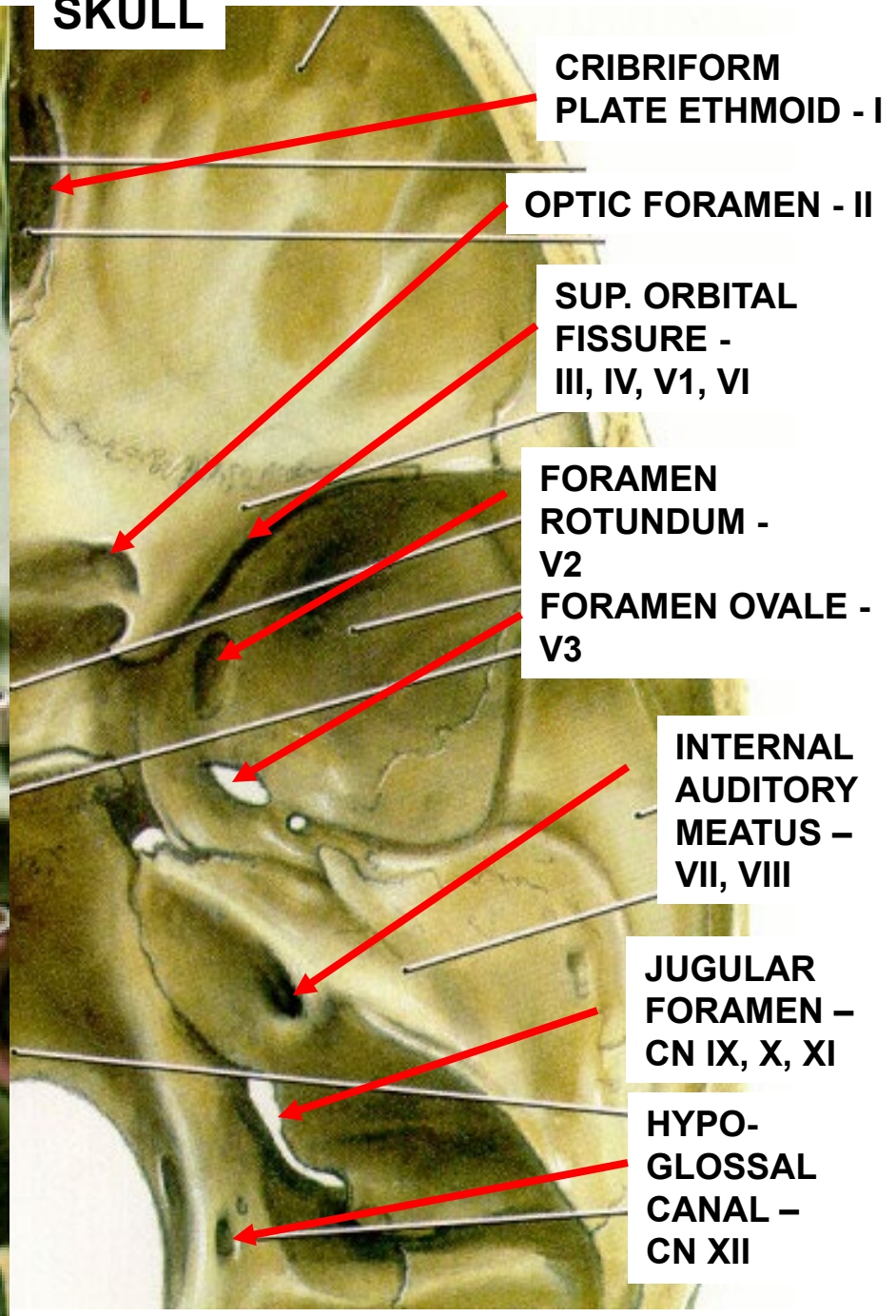
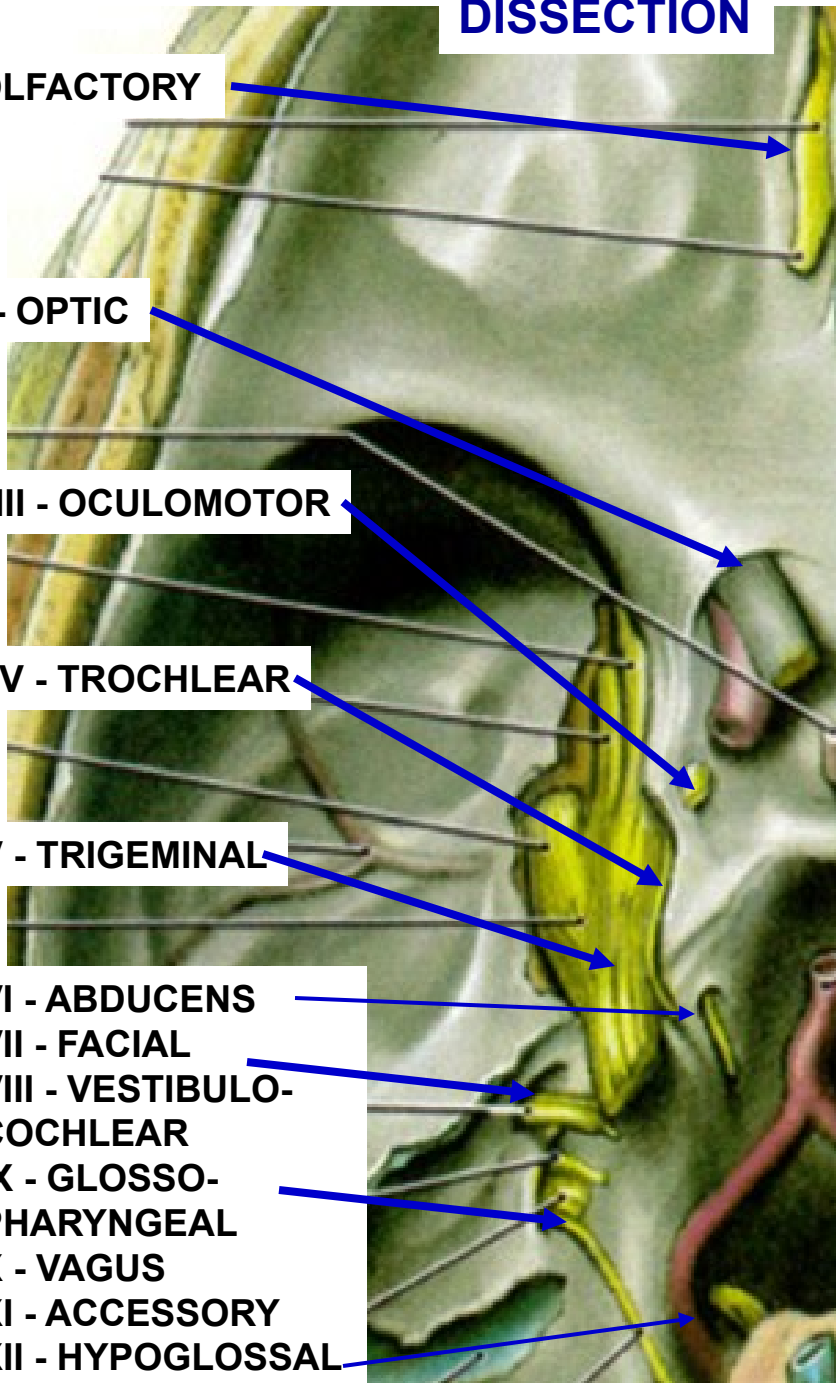
FORAMEN
ROTUNDUM -
V2

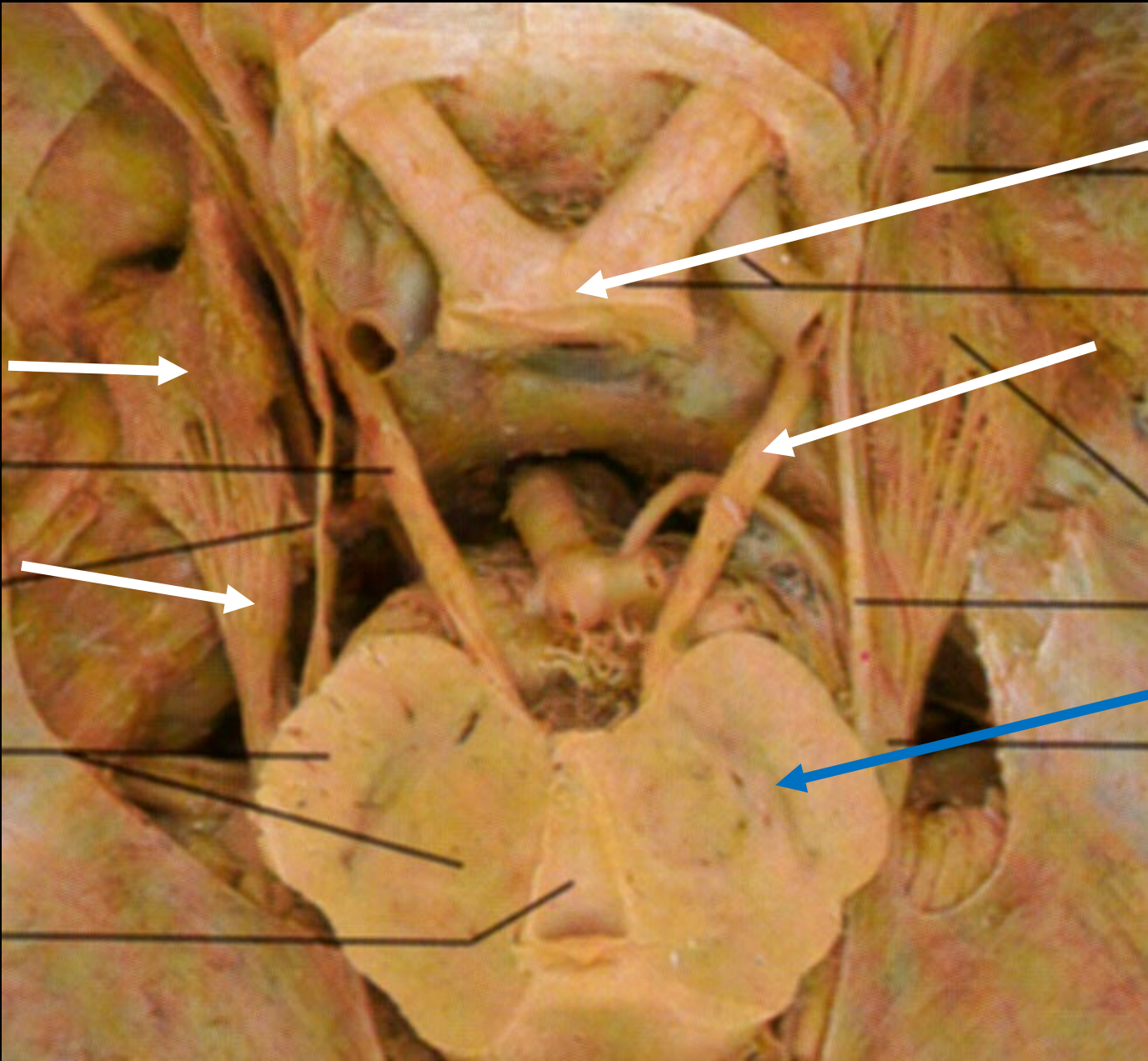
FORAMEN OVALE -
V3

INTERNAL
AUDITORY
MEATUS -
VII, VIII

JUGULAR
FORAMEN -
CN IX, X, XI

HYP-
GLOSSAL
CANAL -
CN XII





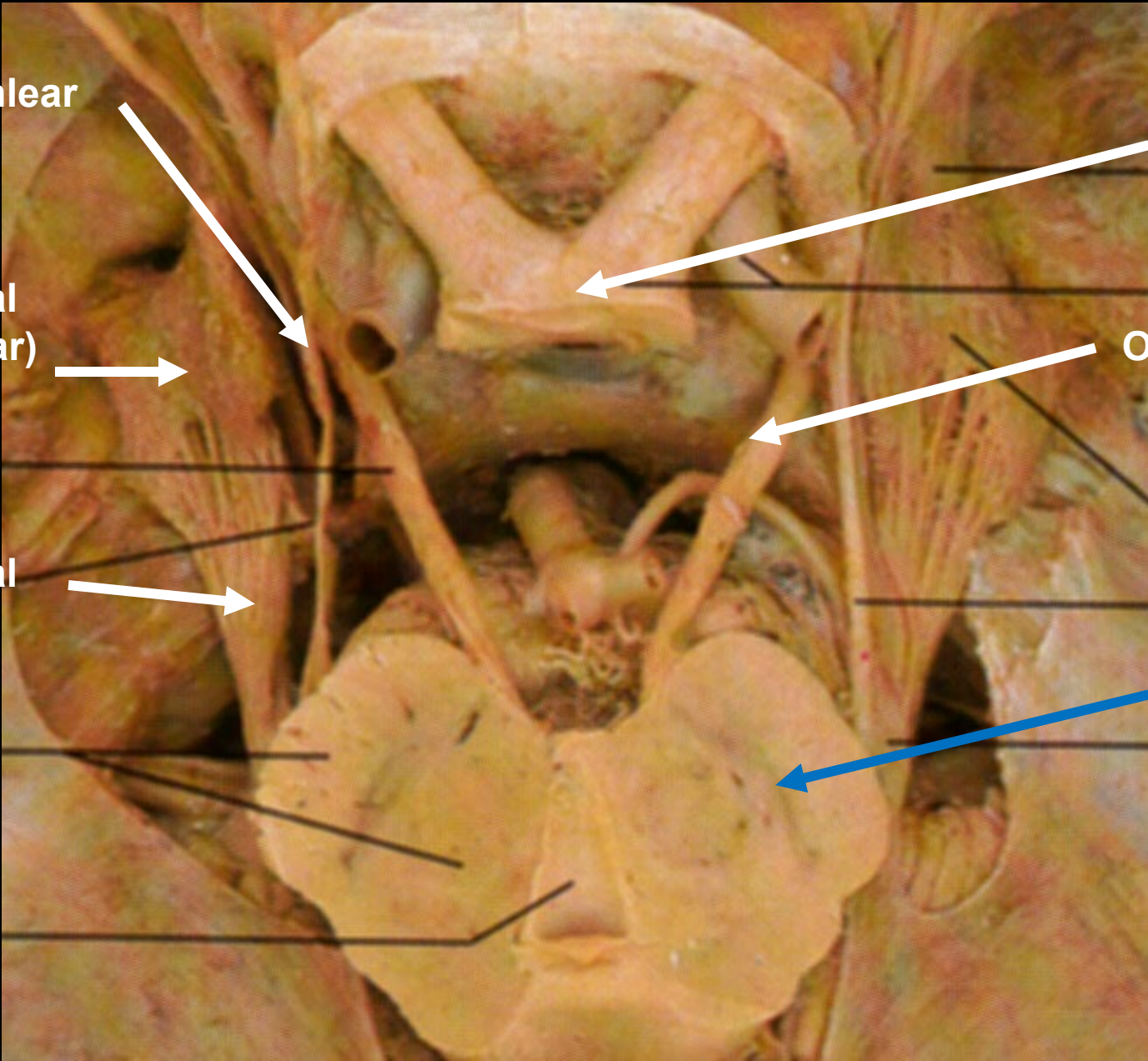
?

?

?

?

Substantia
Nigra
in
Midbrain
(Parkinson's
Disease)



**IV
Trochlear**

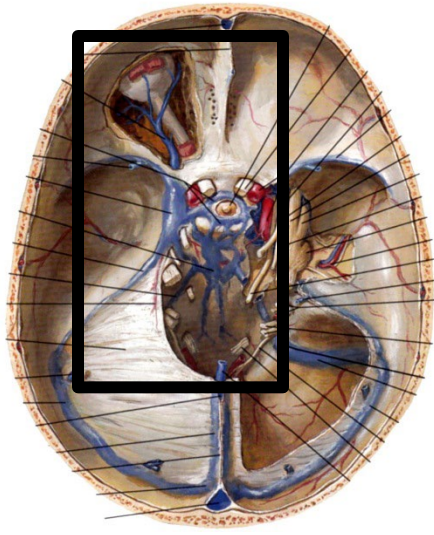
**II Optic
Chiasm**

**Trigeminal
(Semilunar)
Ganglion**

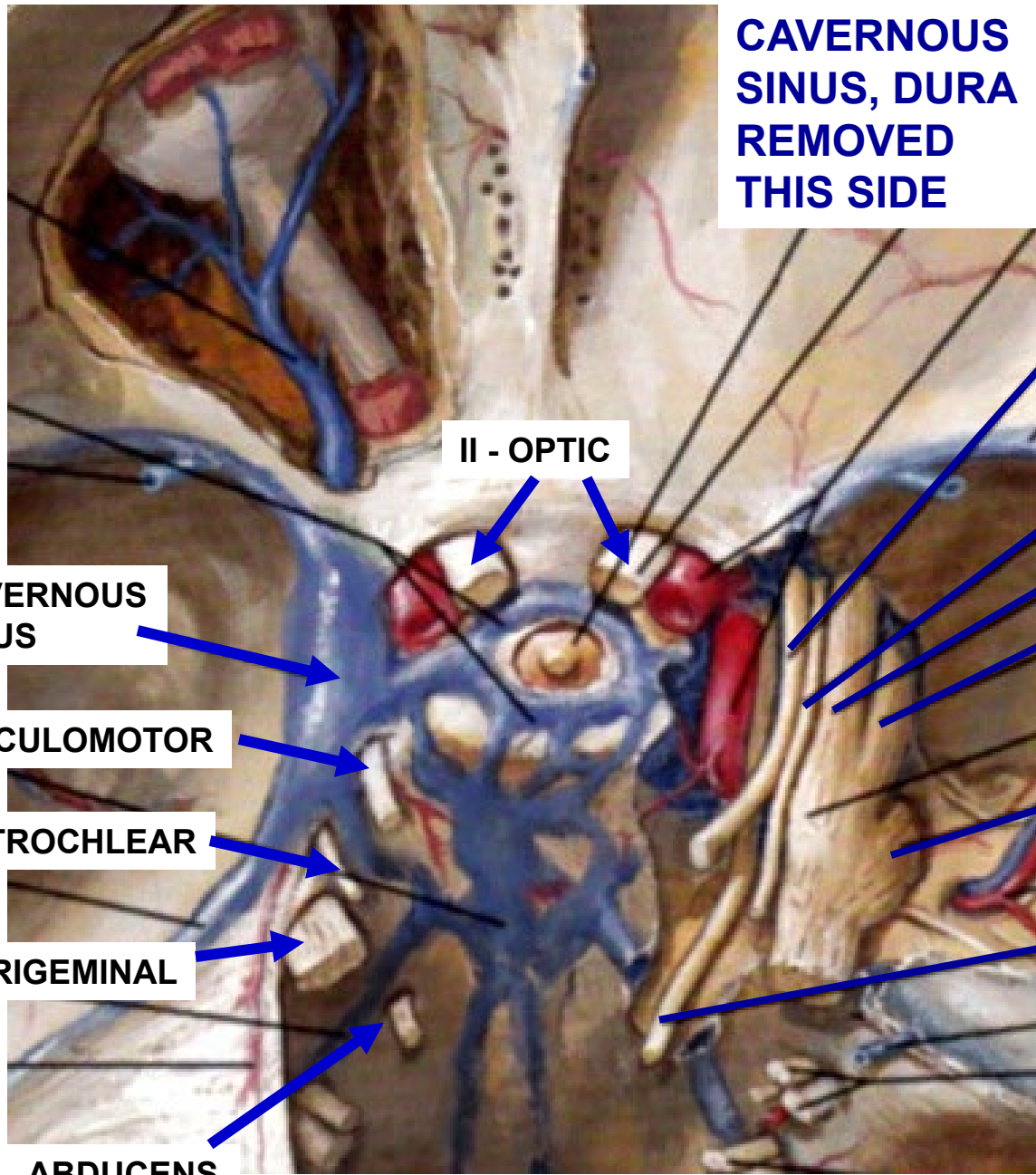
**III
Oculomotor**

**V
Trigeminal**

**Substantia
Nigra
in
Midbrain
(Parkinson's
Disease)**



NETTER
GREAT
ILLUSTRATIONS
FOR REVIEWING



CAVERNOUS
SINUS, DURA
REMOVED
THIS SIDE

CAVERNOUS
SINUS

II - OPTIC

III - OCULOMOTOR

IV - TROCHLEAR

V - TRIGEMINAL

VI - ABDUCENS

III

IV

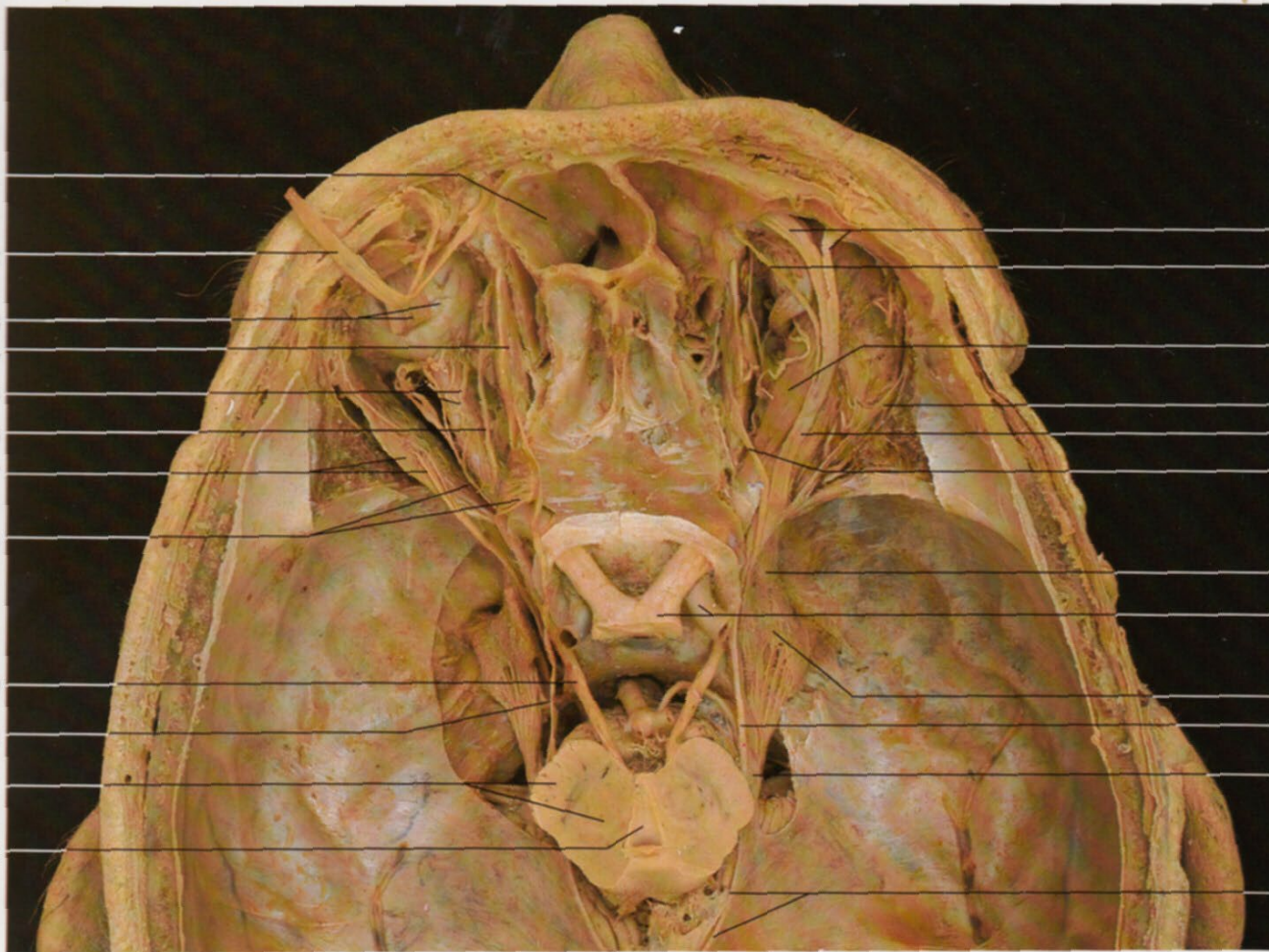
V1

V2

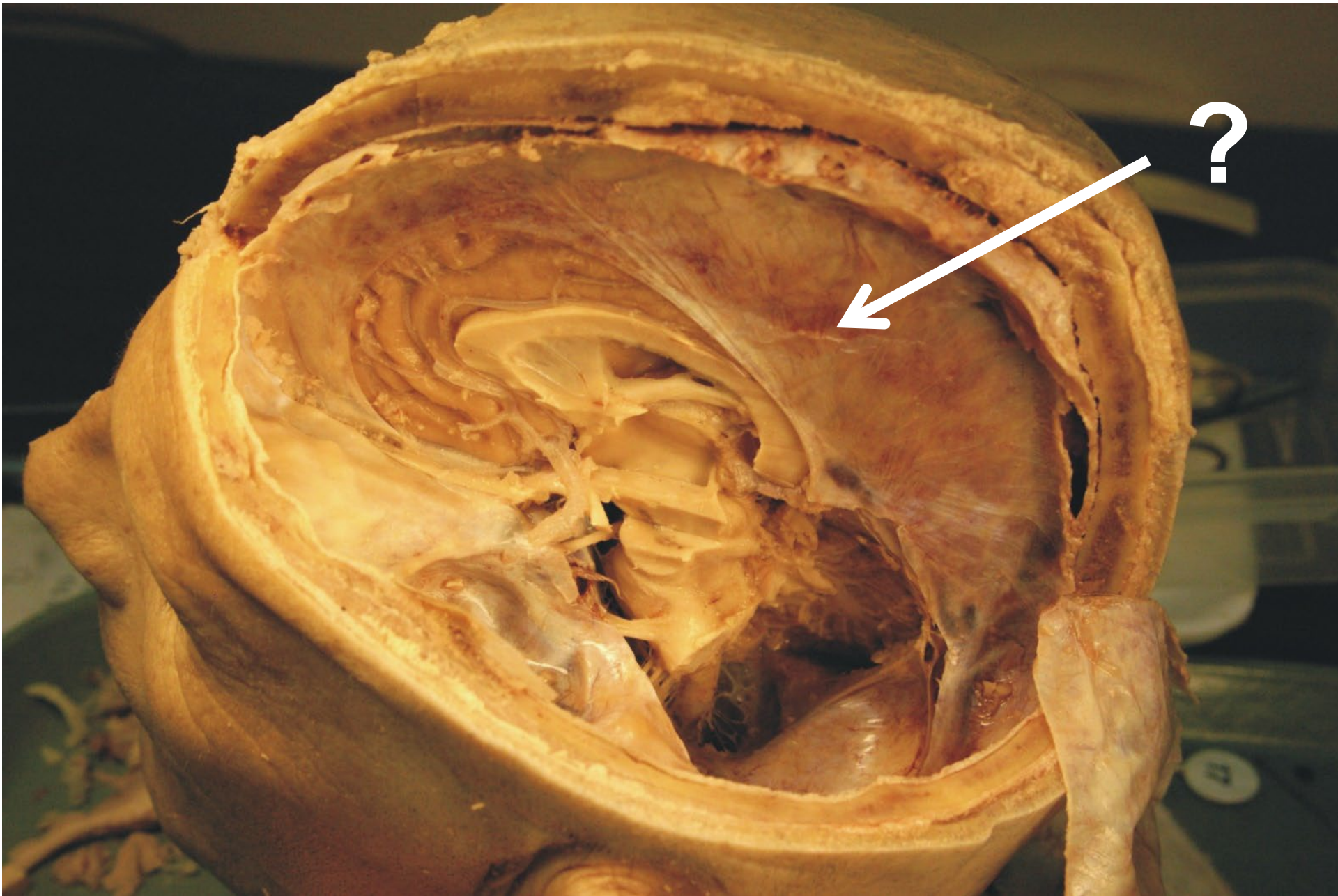
V3

VI

OVERVIEW ATLAS PICTURE

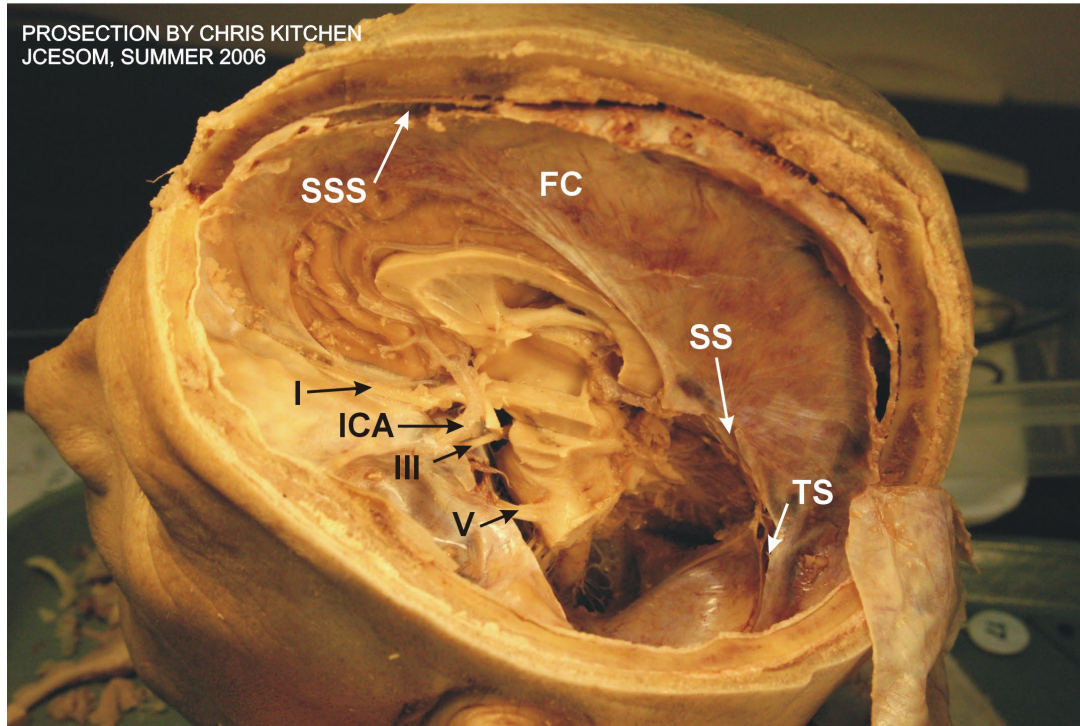


- 1 Frontal sinus (enlarged)
- 2 Frontal nerve (divided and reflected)
- 3 Superior rectus muscle (divided) and eyeball
- 4 Superior oblique muscle
- 5 Short ciliary nerves and optic nerve (n. II)
- 6 Nasociliary nerve
- 7 **Abducens nerve** (n. VI) and lateral rectus muscle
- 8 Ciliary ganglion and superior rectus muscle (reflected)
- 9 **Oculomotor nerve** (n. III)
- 10 **Trochlear nerve** (n. IV)
- 11 Crus cerebri and midbrain
- 12 Inferior wall of the third ventricle connected with cerebral aqueduct
- 13 Lateral and medial branch of supraorbital nerve
- 14 Supratrochlear nerve
- 15 Superior rectus muscle
- 16 Lacrimal nerve
- 17 Frontal nerve
- 18 **Ophthalmic nerve** (n. V1)
- 19 Optic chiasma and internal carotid artery
- 20 Trigeminal ganglion
- 21 **Trigeminal nerve** (n. V)
- 22 Tentorial notch
- 23 Falx cerebri
- 24 Cerebellum
- 25 Infundibulum
- 26 Olfactory tract

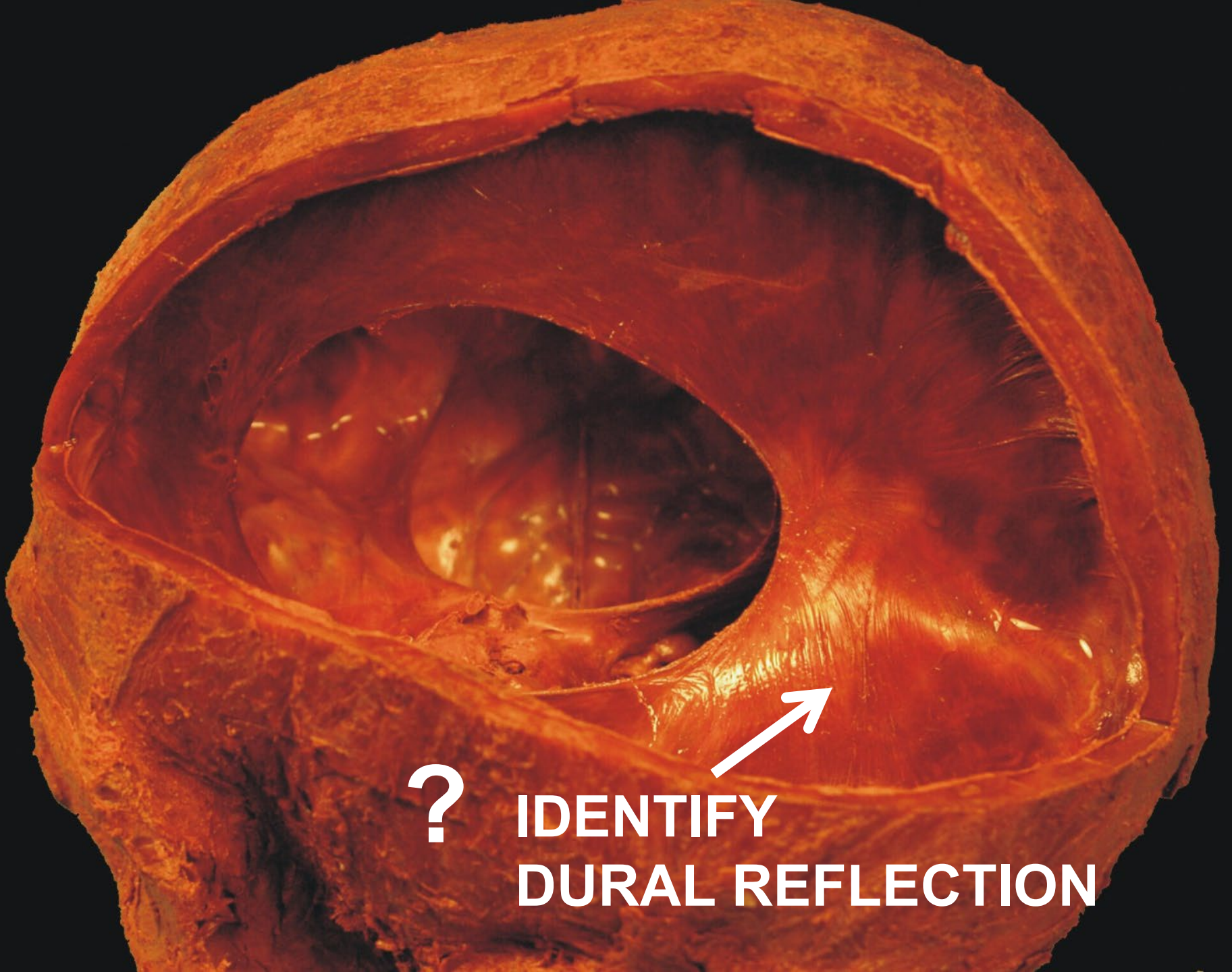


BRAIN (HEMISECTED) IN CRANIAL CAVITY

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- I - OLFACTORY TRACT
- ICA - INTERNAL CAROTID ARTERY
- III - OCULOMOTOR NERVE
- V - TRIGEMINAL NERVE
- SSS - SUPERIOR SAGITTAL SINUS
- FC - FALX CEREBRI
- SS - STRAIGHT SINUS
- TS - TRANSVERSE SINUS

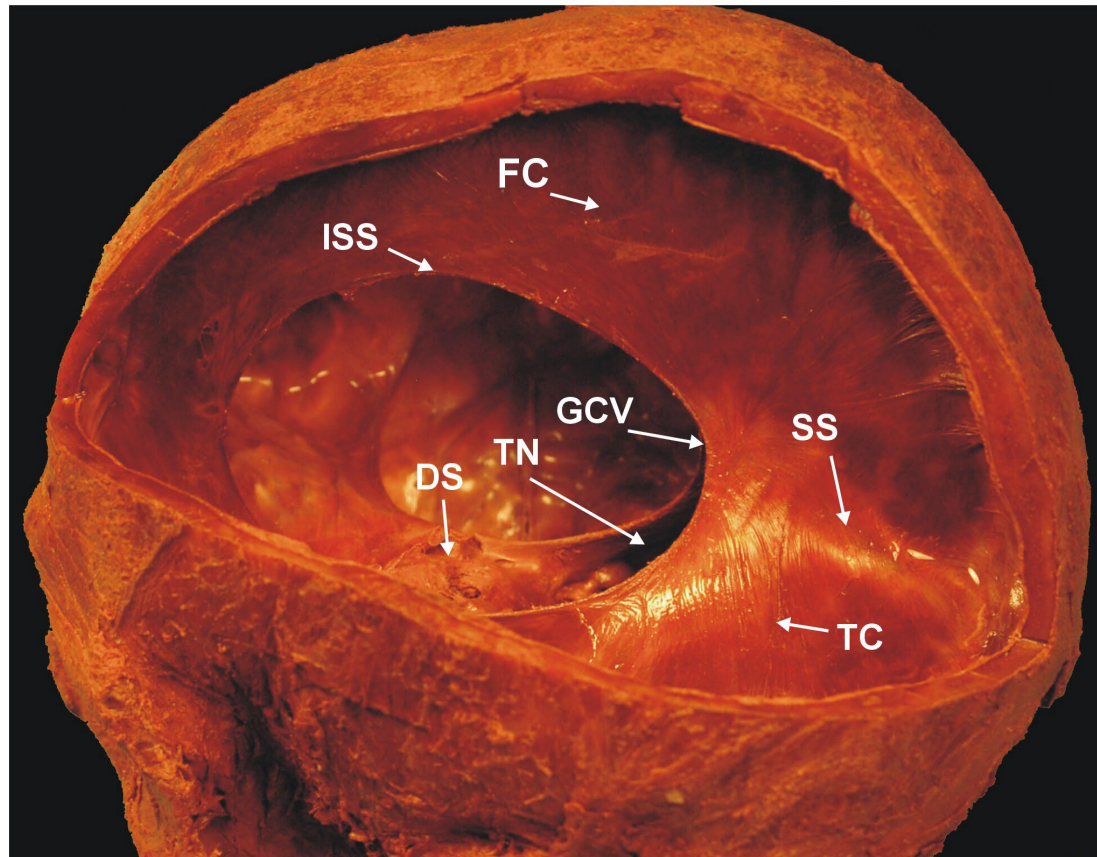


?

IDENTIFY

DURAL REFLECTION

DURAL REFLECTIONS AND VENOUS SINUSES



FC - FALX CEREBRI

TC - TENTORIUM CEREBELLI

ISS - LOCATION OF INFERIOR SAGITTAL SINUS

SS - LOCATION OF STRAIGHT SINUS

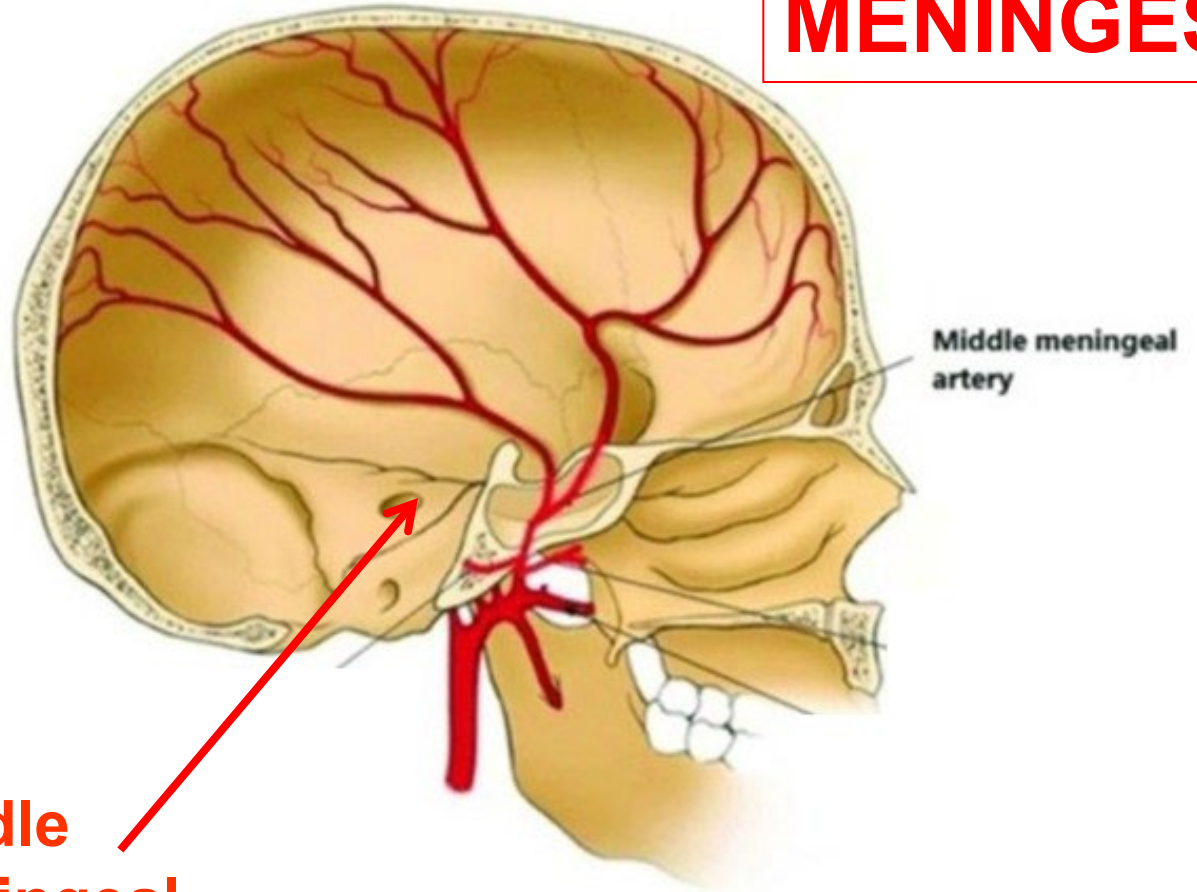
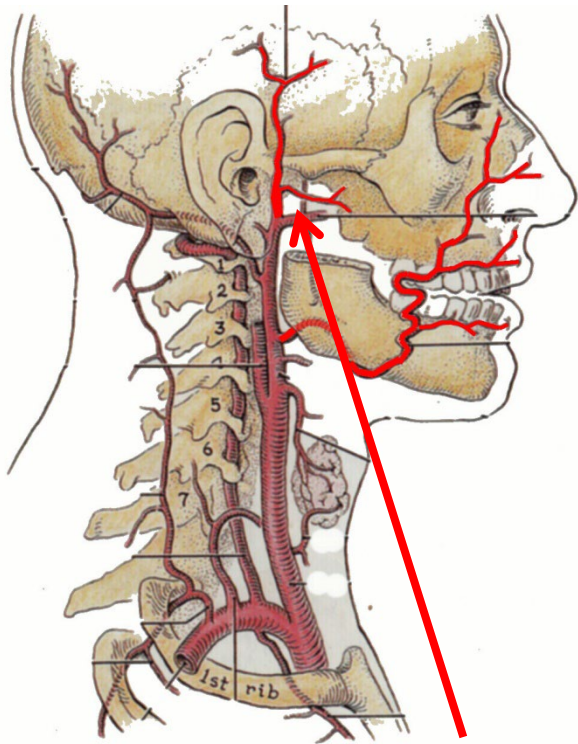
GCV - OPENING OF GREAT CEREBRAL VEIN OF GALEN

DS - DIAPHRAGMA SELLA

TN - TENTORIAL NOTCH

Middle Meningeal Artery – branch of External Carotid artery courses inside skull, outside dura – supplies calvarium (bones of skull 'cap')

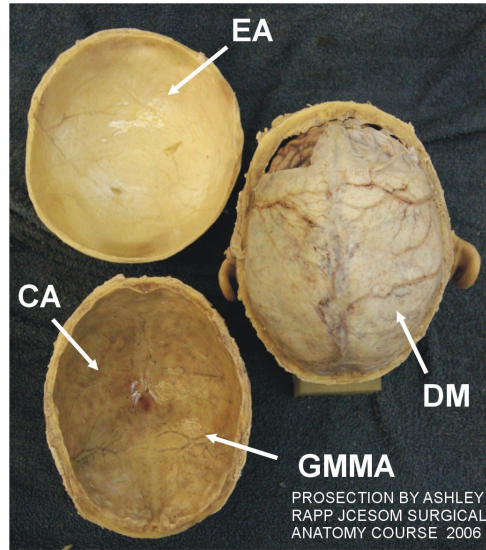
MENINGES



**Middle
Meningeal
Artery**

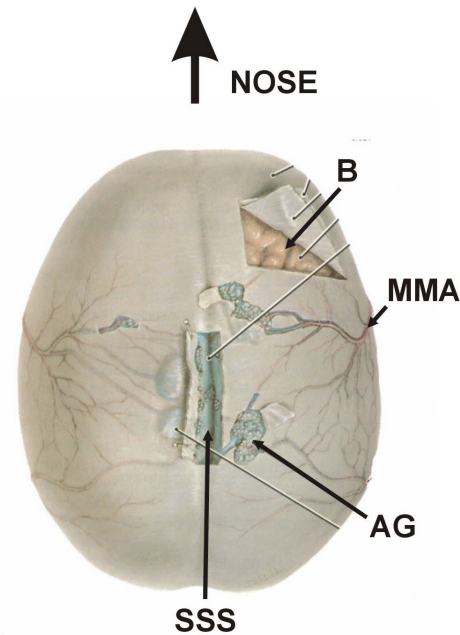
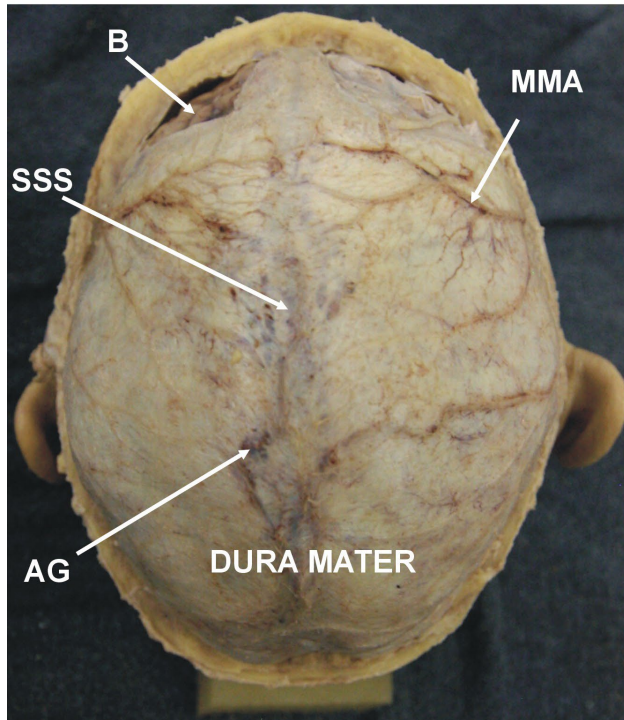
SCALP, CALVARIUM AND DURA MATER

INNER SIDE OF CALVARIUM AND SCALP



- EA - EPICRANIAL APONEUROSIS (ON INNER SIDE OF SCALP)
- CA - CALVARIUM WITH DURA MATER REMOVED
- GMMA - GROOVE FOR MIDDLE MENINGEAL ARTERY
- DM - DURA MATER
- B - BRAIN
- SSS - SUPERIOR SAGITAL SINUS
- AG - ARACHNOID GRANULATION
- MMA - MIDDLE MENINGEAL ARTERY

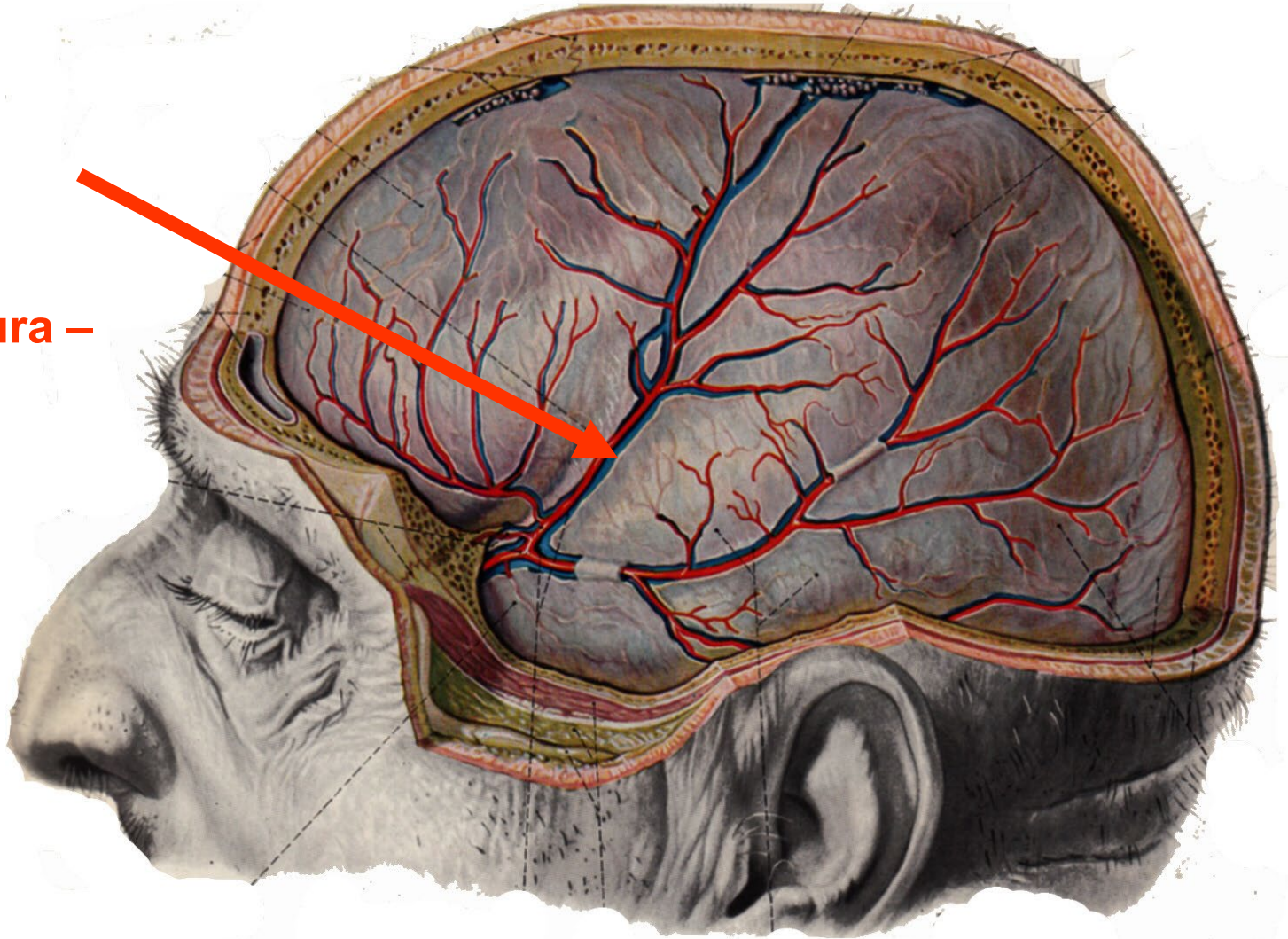
DURA MATER AT HIGH MAG



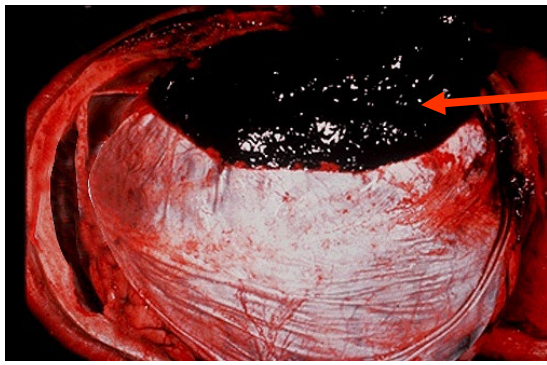
HEMATOMAS - INTERNAL BLEEDS

Middle
Meningeal
Artery –
courses
outside dura –
supplies
calvarium

HEMATOMA
= abnormal
mass of
blood outside
blood vessel



A. EPIDURAL HEMATOMA - bleeding between dura and bone



EPIDURAL HEMATOMA

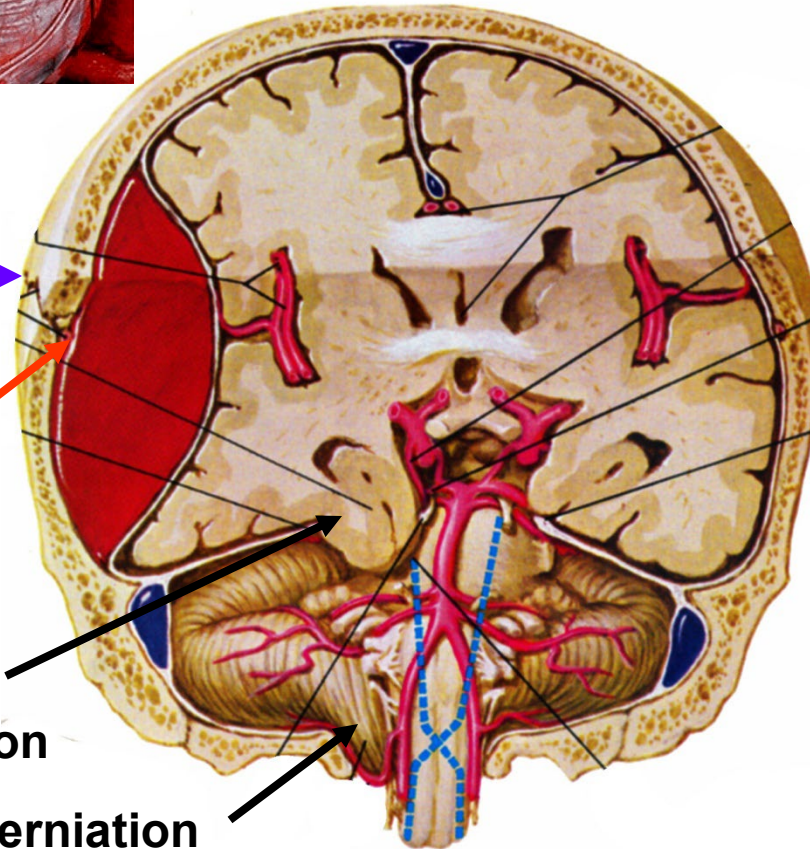
- 1) Skull fracture near Pterion
- 2) Tear Middle Meningeal Artery
- 3) Blood 'peels' dura from bone
- 4) Lens shaped (biconvex) mass on CT

Skull Fracture Near Pterion

Tear Middle Meningeal Artery

Uncal herniation

Tonsillar herniation

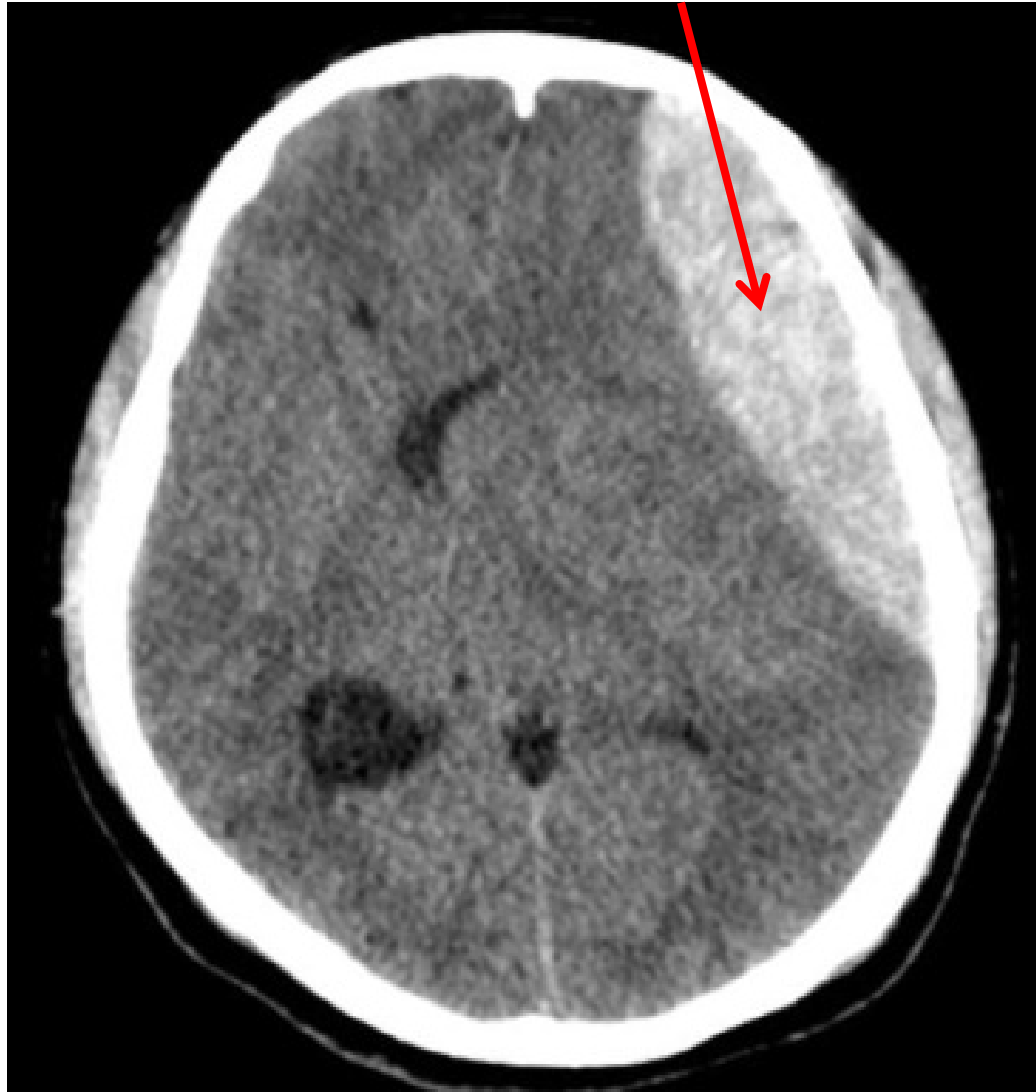


EPIDURAL HEMATOMA – **

- 1) **ARTERIAL – often MIDDLE MENINGEAL ARTERY**
- 2) **'LENS' SHAPED MASS**
- 3) **RAPID**

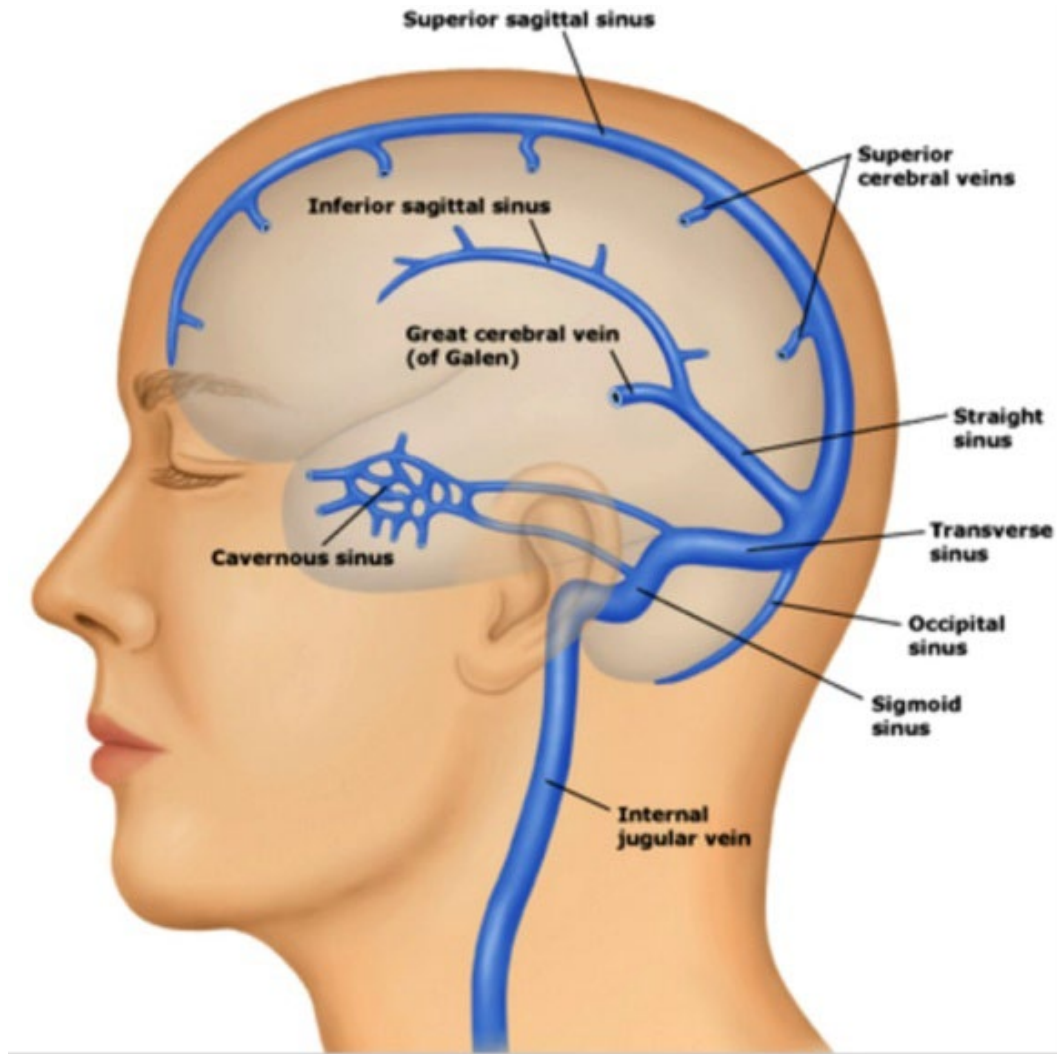
Clinical - bleeding is arterial; can be profuse and rapid (ex, car accident); patient lucid at first; can be fatal within hours if herniation occurs

EPIDURAL HEMATOMA



**'LENS'
SHAPED**

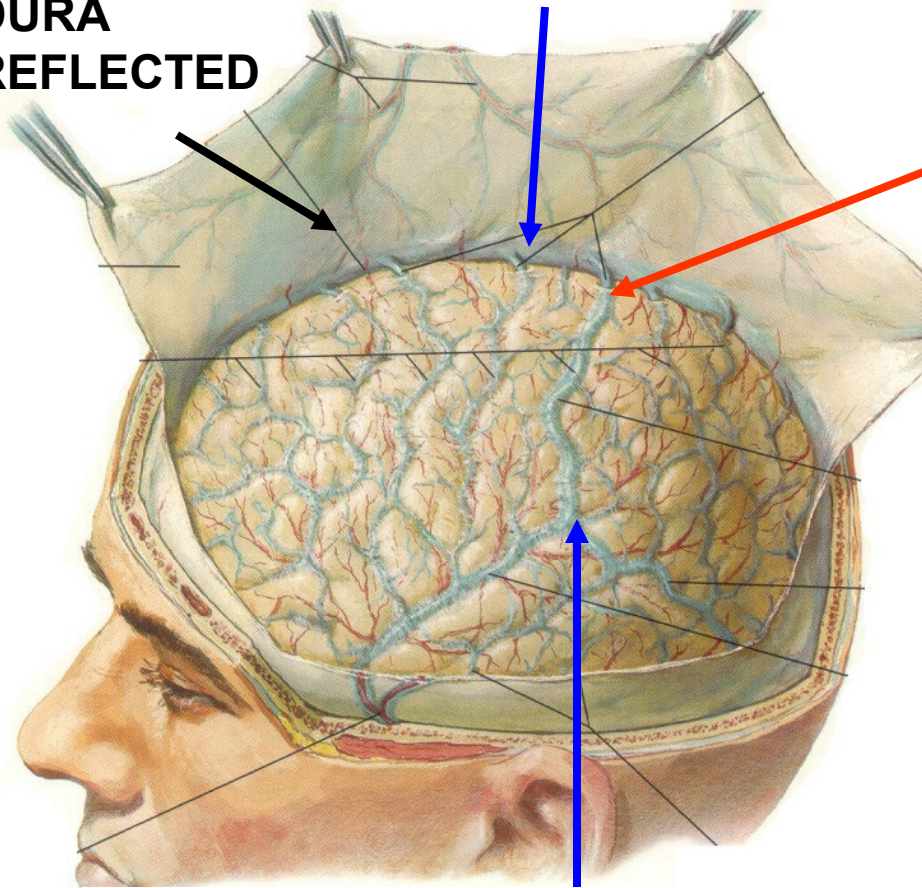
VENOUS DRAINAGE OF BRAIN IS DIFFERENT - VENOUS SINUSES - inside cranial cavity



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

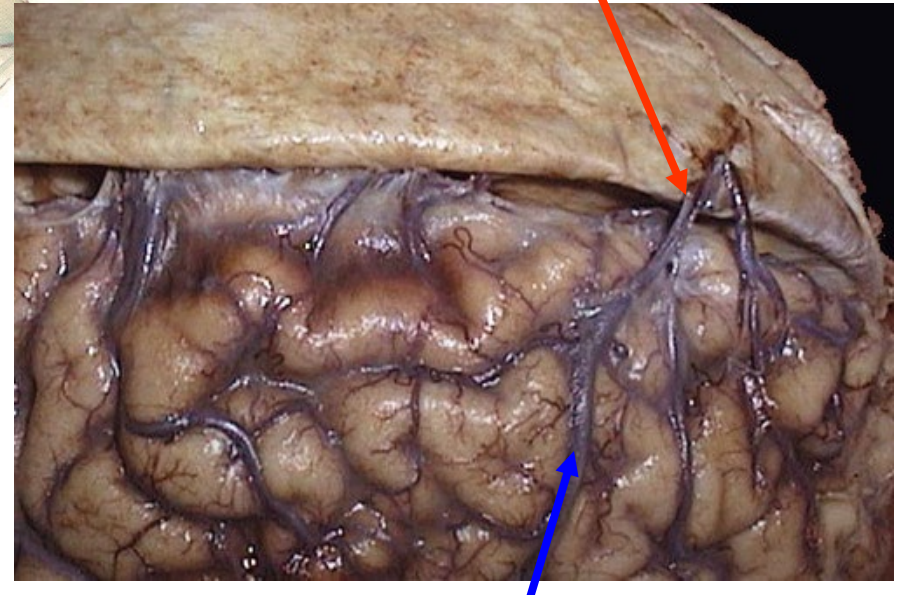
Superior Sagittal Sinus

DURA REFLECTED



Superior Cerebral veins

'BRIDGING' VEINS



Superior Cerebral veins

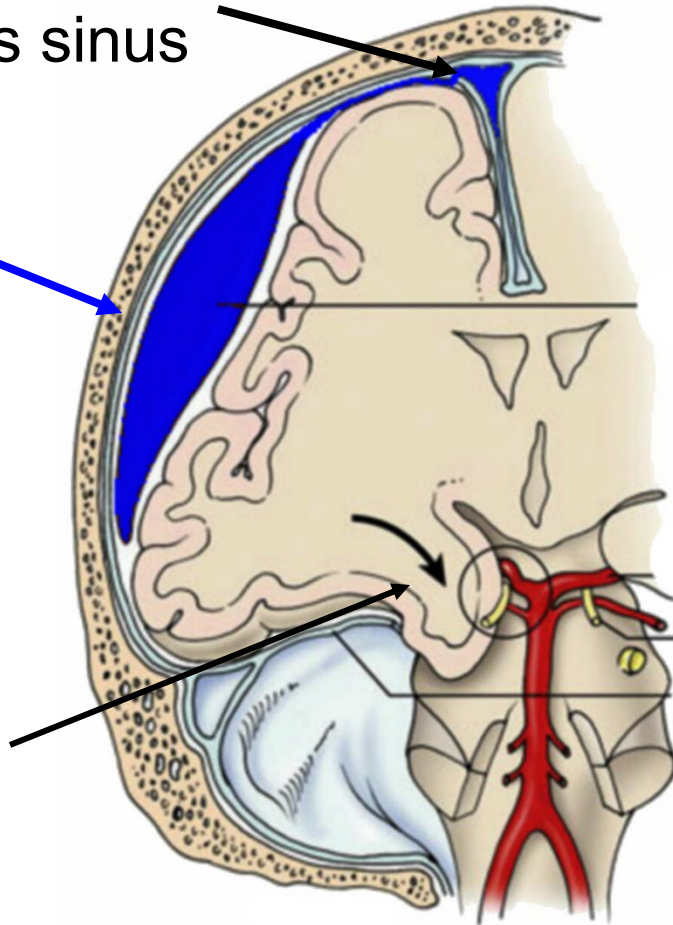
Photo from lecture of Dr. Nancy Norton

SUBDURAL HEMATOMA

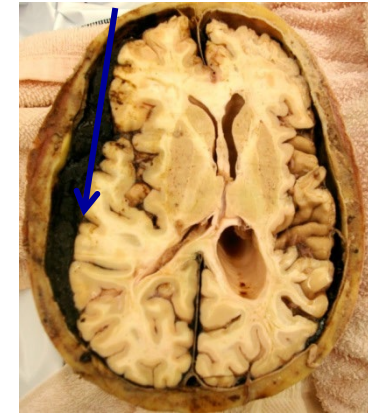
Tear 'bridging' vein
or venous sinus

Crescent
shaped
hematoma
on CT/MRI

Herniation
of uncus (L.
hook) of
temporal
lobe
through
Tentorial
notch



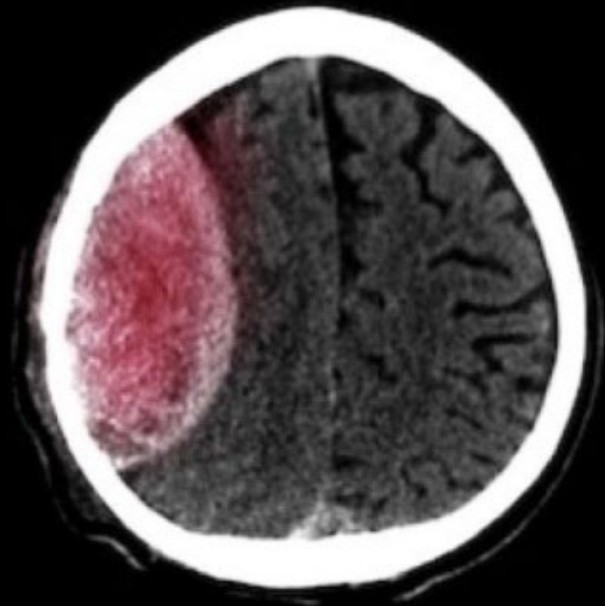
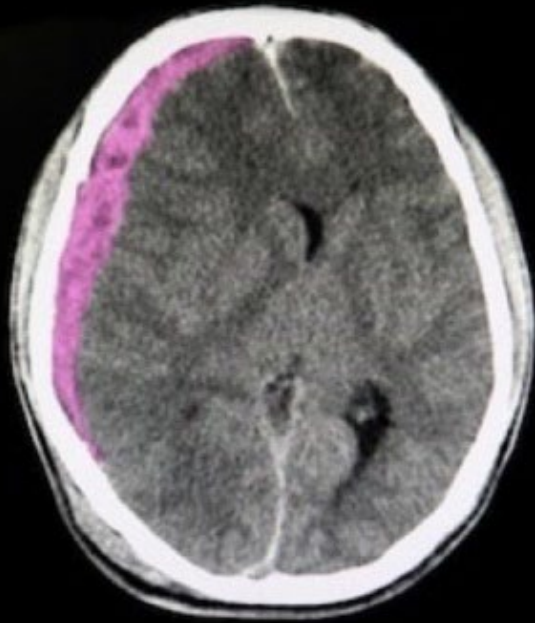
SUBDURAL HEMATOMA
BLOOD



**SUBDURAL **
HEMATOMA –
1) VENOUS – often
BRIDGING VEIN
2) CRESCENT
SHAPED MASS
3) SLOW**

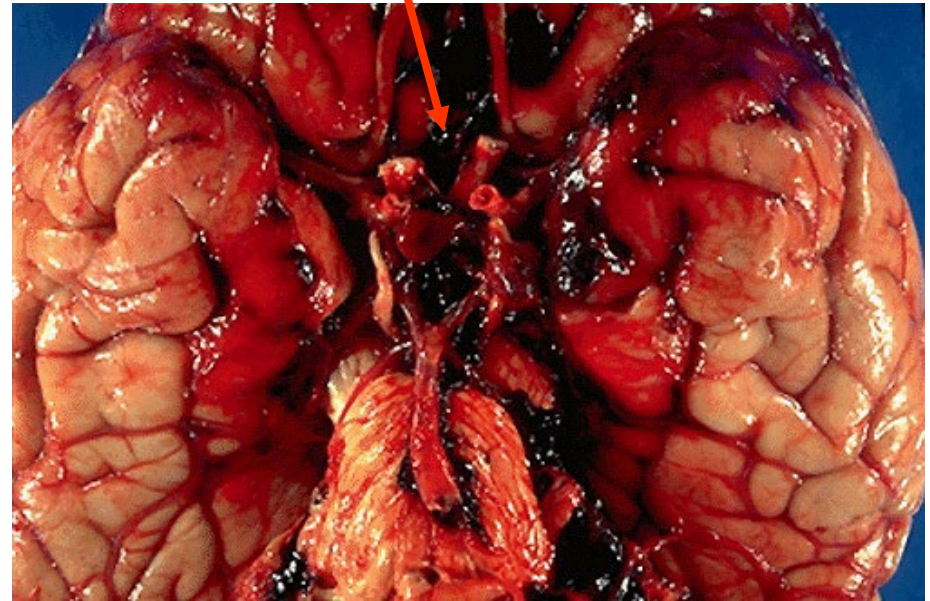
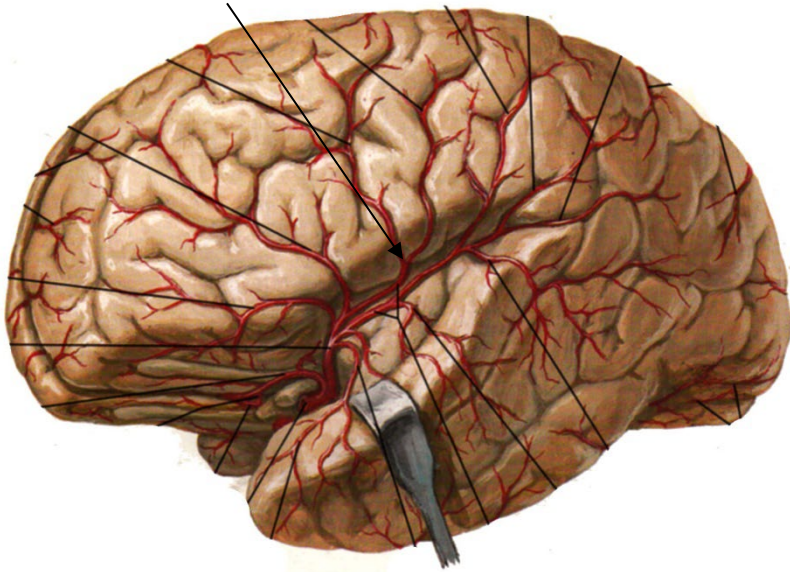
**Clinical: bleeding slow (venous); Chronic Subdural Hematomas
can remain undetected; can result in herniation if untreated**

Subdural vs Epidural



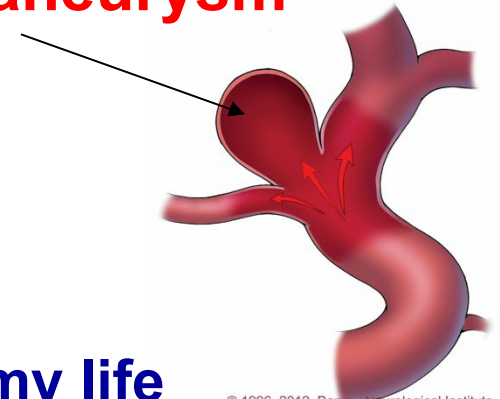
C. SUBARACHNOID HEMATOMA

Cerebral artery



Tearing cerebral artery or aneurysm (ex, berry aneurysma = swelling of vessel wall) or cerebral vein; If arterial can be rapid and fatal

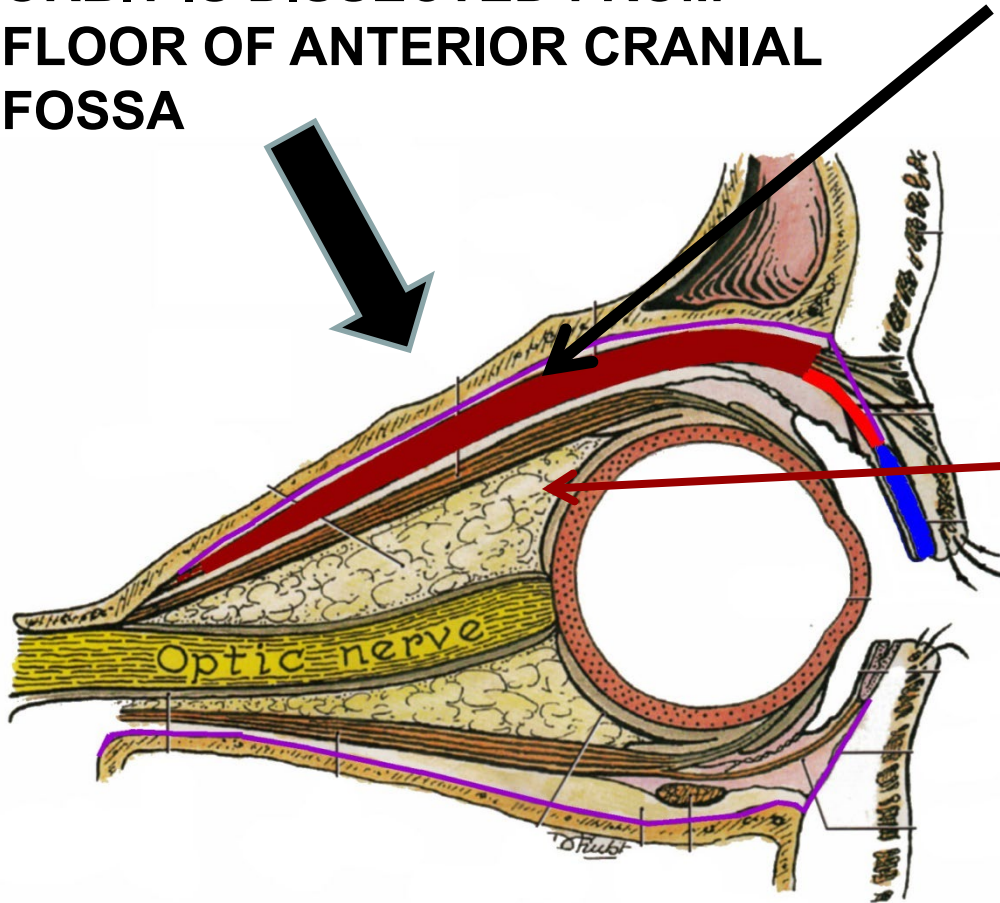
Berry aneurysm



**Thunderclap headache - Worst headache of my life
Sudden death 12%; 30 day mortality 45% (reported)**

ORBIT DISSECTION

ORBIT IS DISSECTED FROM FLOOR OF ANTERIOR CRANIAL FOSSA



SUPERFICIAL DISSECTION - remove bone, periorbita, fat; shows structures leaving orbit (V1 branches to face); also muscle of upper eyelid (Lev. Palp. Sup.) , Lacrimal gland

DEEP DISSECTION - Reflect Lev. Palp. Sup., Superior Rectus Muscles; see Optic Nerve, structures entering back of eye (Ciliary ganglion); also V1 branches to nasal cavity

**LEVATOR PALPEBRAE
SUPERIORIS**

**SUPERIOR
OBLIQUE**

SUPERFICIAL ORBIT

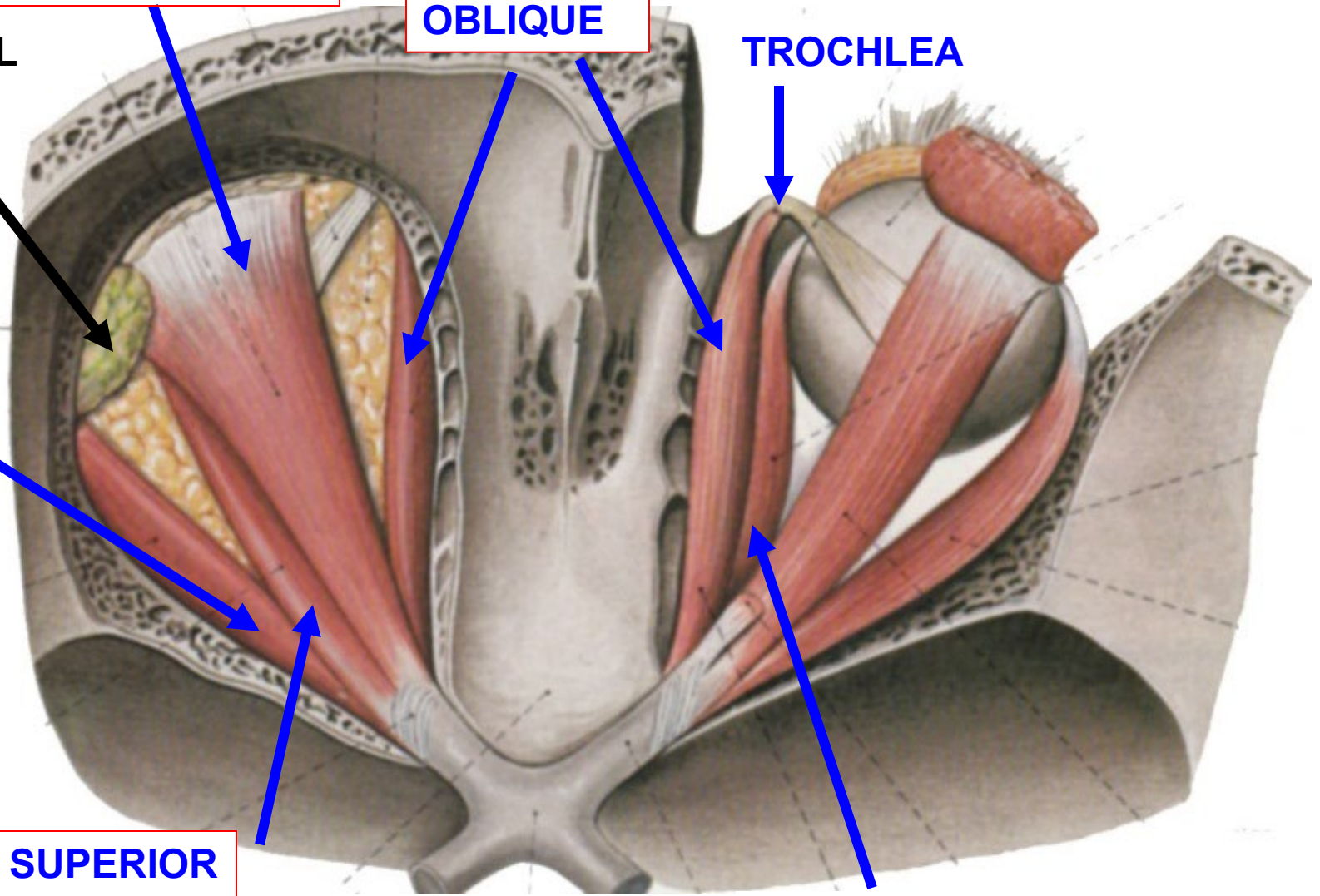
**LACRIMAL
GLAND**

TROCHLEA

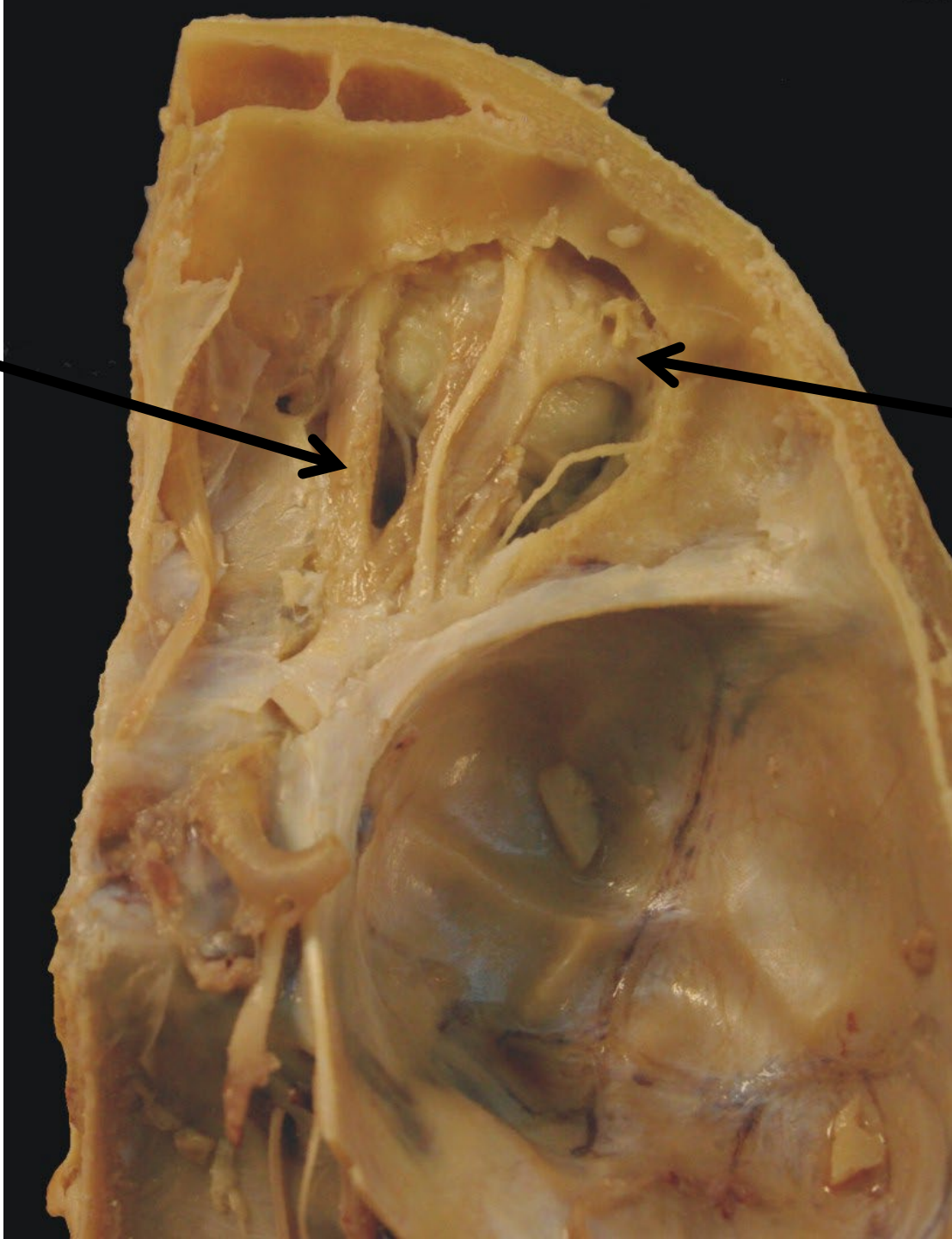
**LATERAL
RECTUS**

**SUPERIOR
RECTUS**

**MEDIAL
RECTUS**

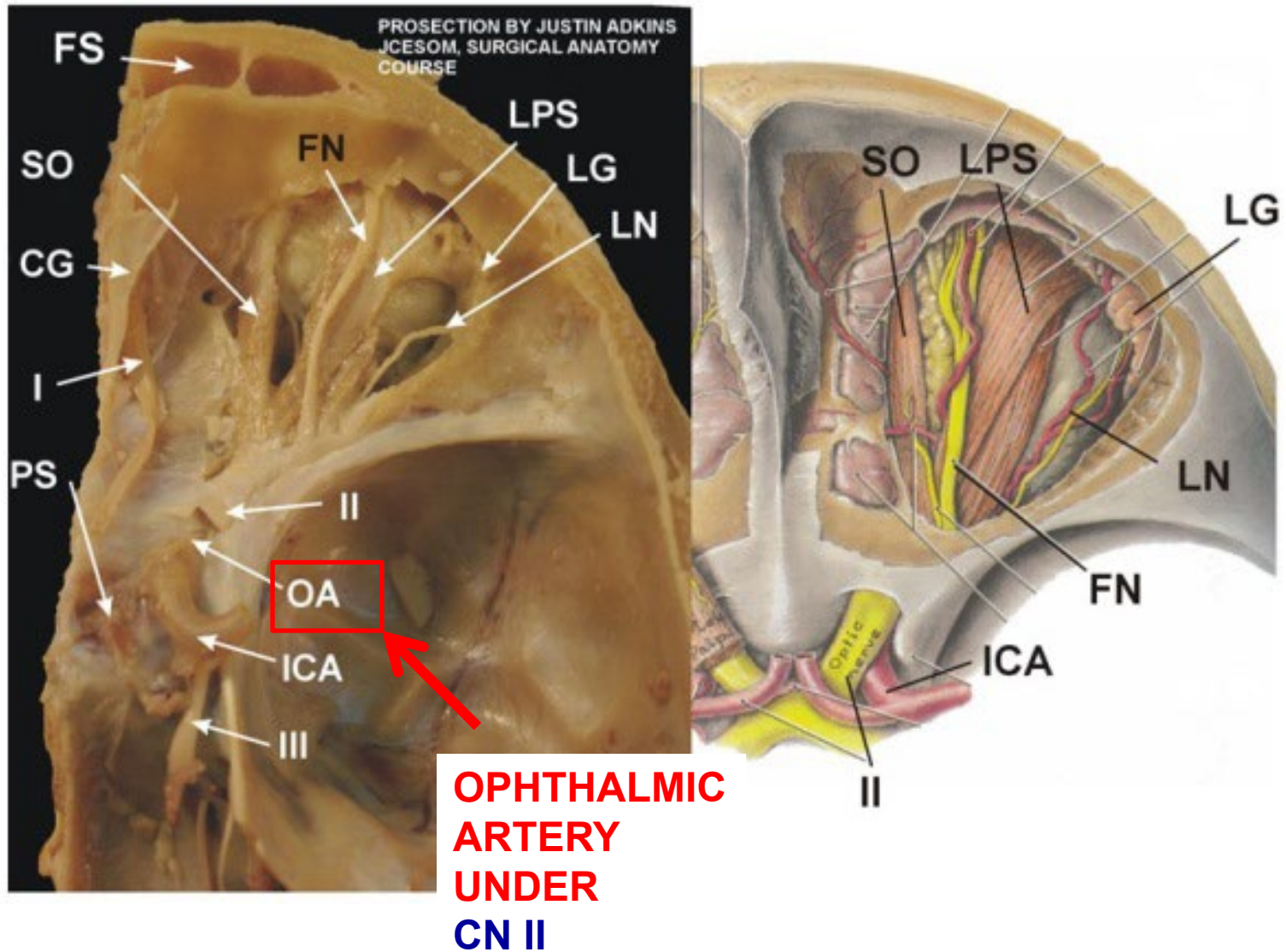


?
**WHAT NERVE
INNERVATES
THIS
MUSCLE?**



?
**WHAT
CRANIAL
NERVE
CAUSES
THIS GLAND
TO SECRETE**

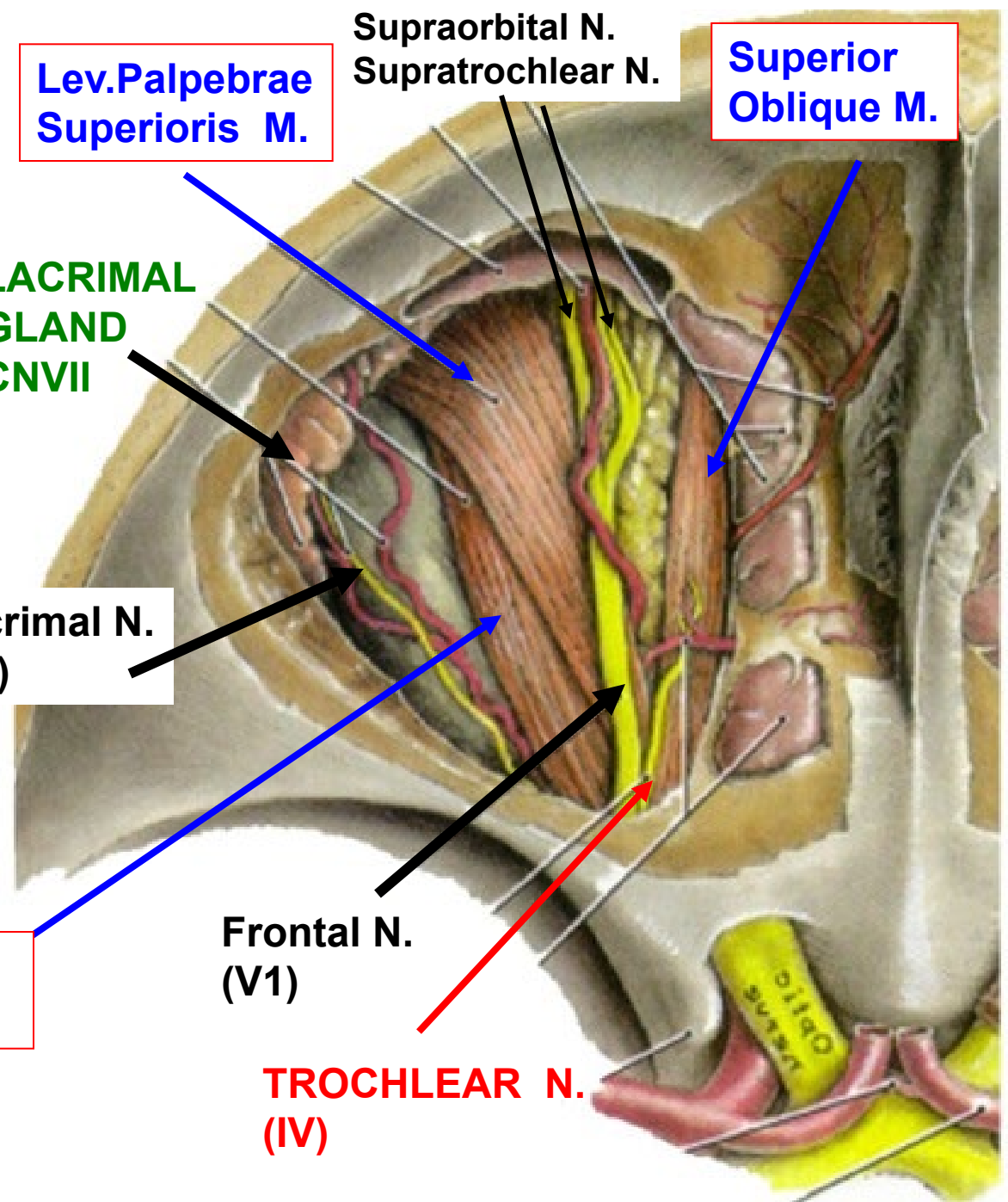
PROSECTION OF ORBIT - SUPERFICIAL DISSECTION



SUPERFICIAL ORBIT

see
NERVES (V1)
- V1 - Frontal n.: divides to form Supraorbital, Supratrochlear Nerves

Muscles - Lev.Palpebrae Superioris to Upper Eyelid



Lev.Palpebrae Superioris M.

Supraorbital N.
Supratrochlear N.

Superior Oblique M.

LACRIMAL GLAND CNVII

Lacrimal N. (V1)

Superior Rectus M

Frontal N. (V1)

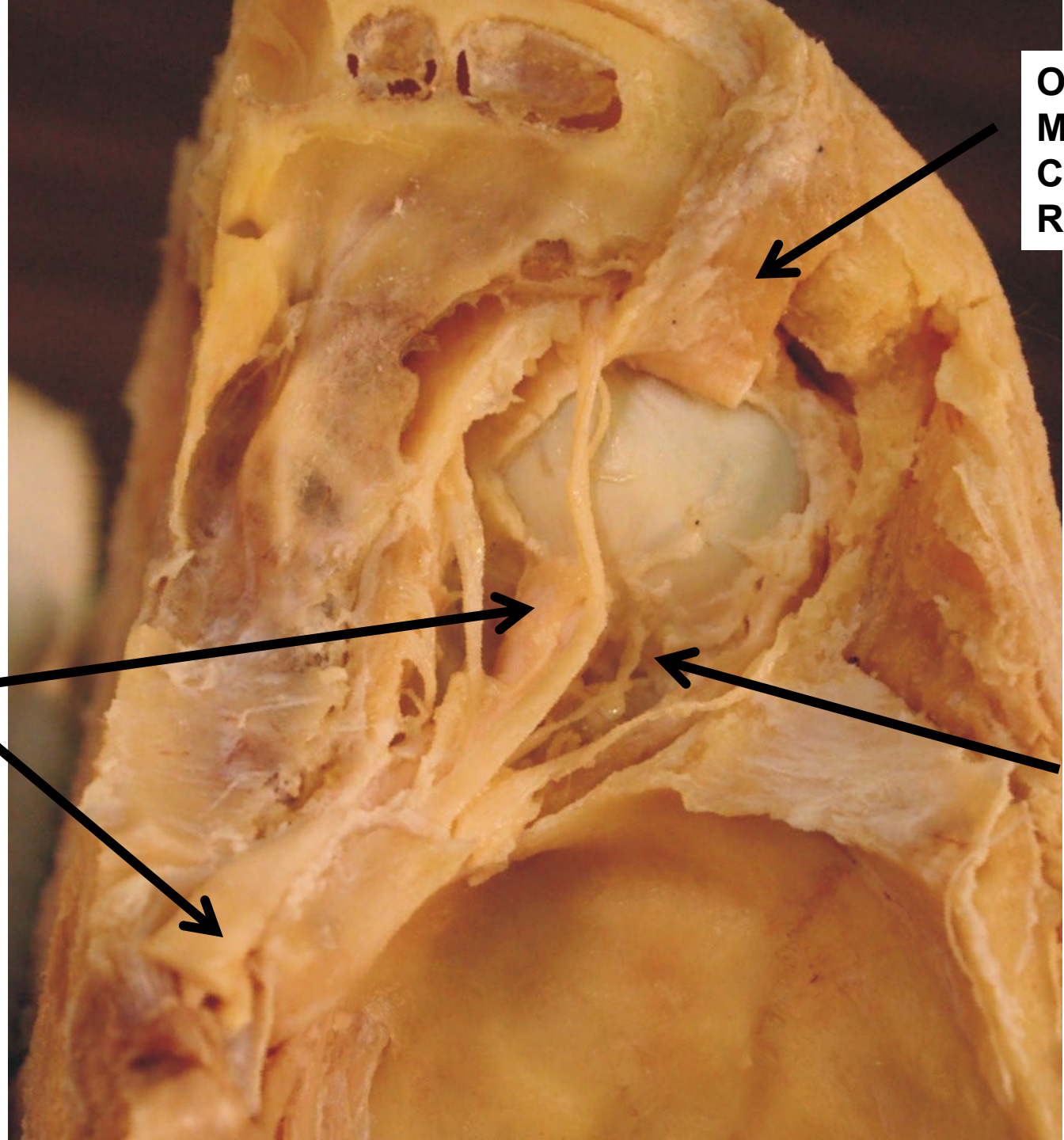
TROCHLEAR N. (IV)

↑
**N
O
S
E**

**ORIENT
MUSCLES
CUT AND
REFLECTED**

**?
IDENTIFY
LARGE
NERVE**

**?
IDENTIFY
NERVE(S)**



PROSECTION OF ORBIT - Deep Dissection

PROSECTION BY JOHN DAVIS
JCESOM; SUMMER 2006

LPS + SR

FN

SCN

CG

SO

IV

LN

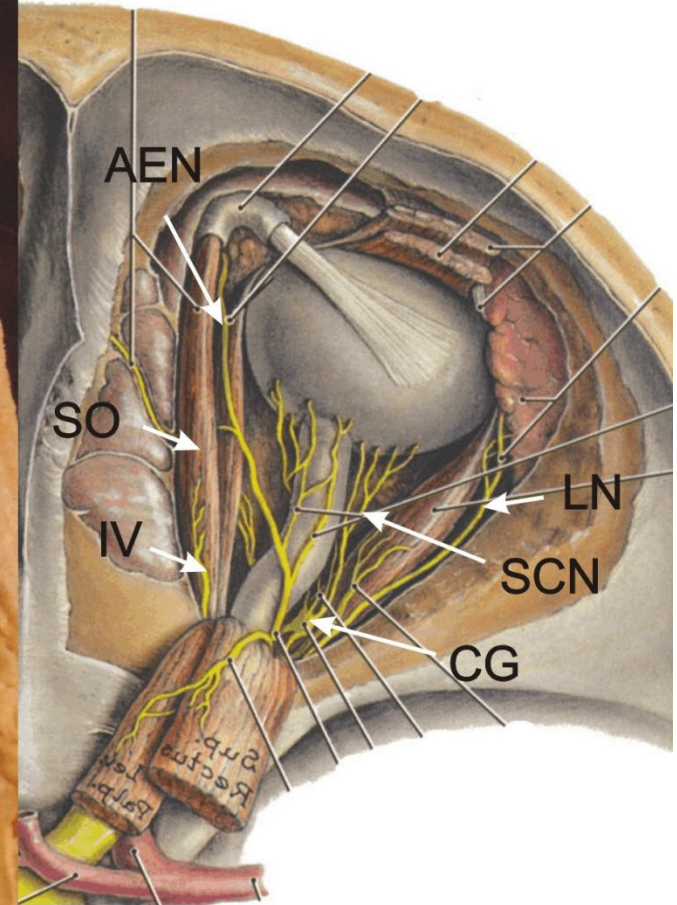
ON

ICA

ANTERIOR
ETHMOIDAL
NERVE (V1)

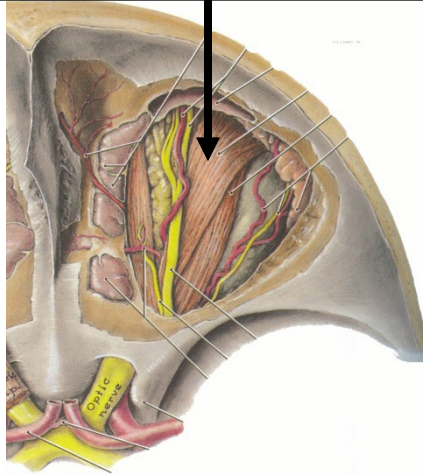
TROCHLEAR
NERVE (IV)

SHORT
CILIARY
NERVES,
CILIARY
GANGLION
(III)



DEEP ORBIT

**REFLECT LEV PALP SUP,
SUP. RECTUS.**



↑
N
O
S
E

TROCHLEA OF SUP. OBLIQUE

**LACRIMAL
GLAND**

**ANTERIOR AND POSTERIOR
ETHMOIDAL NERVES (V1)**

LONG CILIARY NERVES (V1)

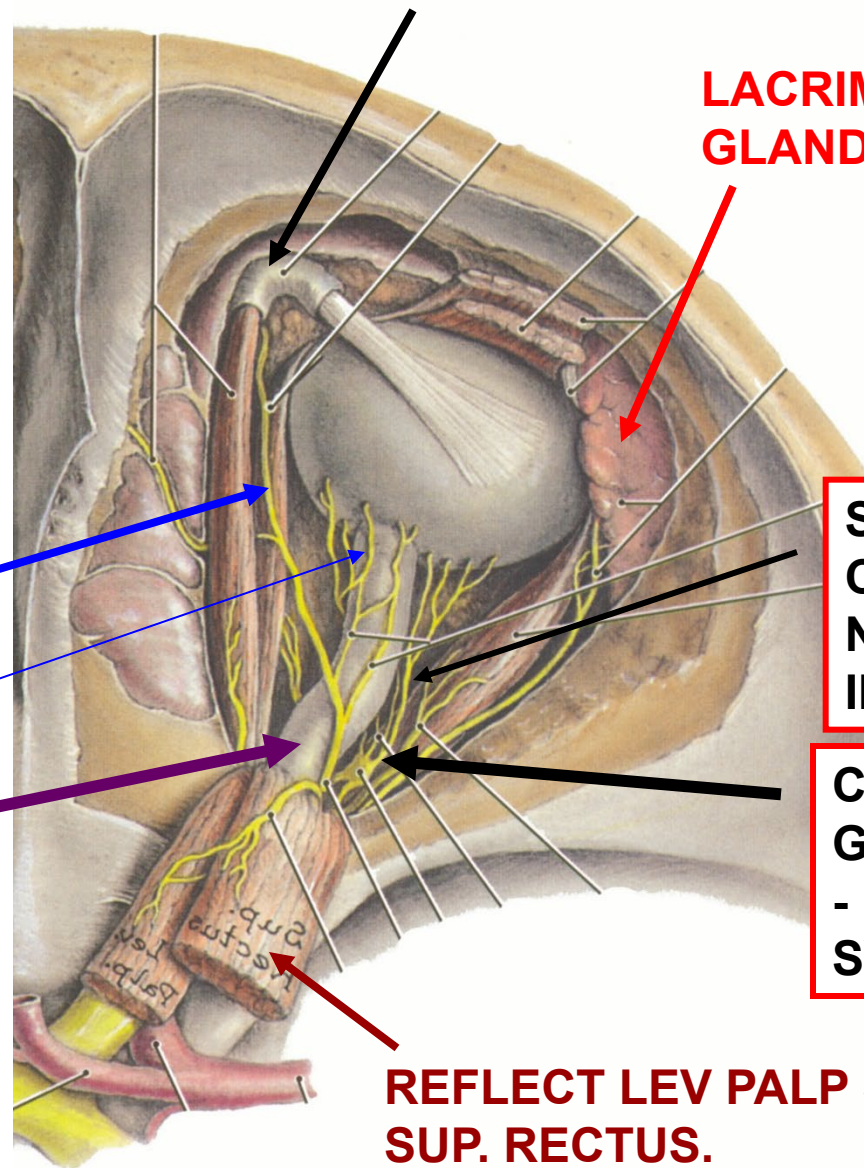
**SHORT
CILIARY
NERVES
III**

**CILIARY
GANGLION
- PARA-
SYMP. III**

OPTIC NERVE

**SENSORY - V1
branches - MEDIAL
PARASYMPATHETIC -
III - LATERAL**

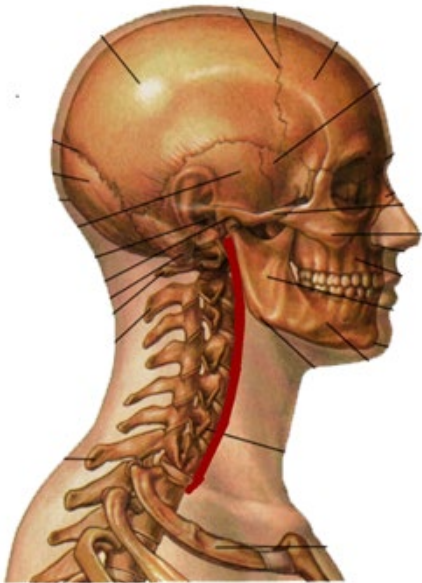
**REFLECT LEV PALP SUP,
SUP. RECTUS.**



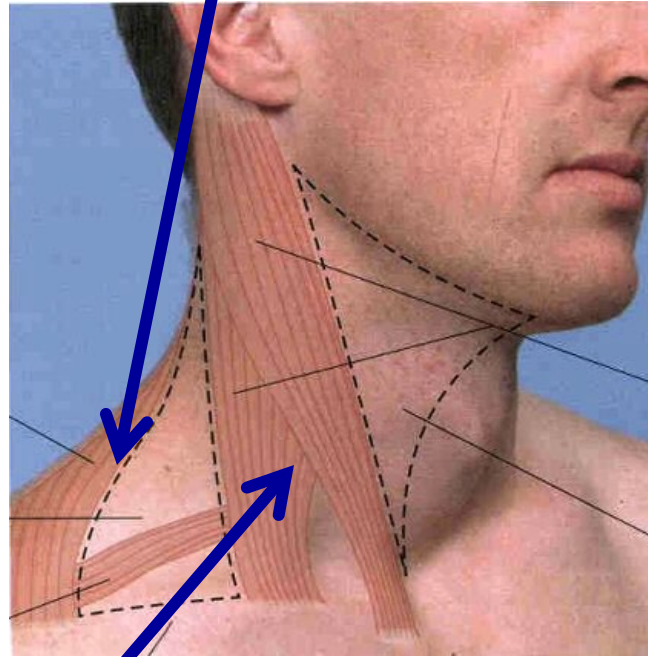
NECK

MUSCLES OF NECK - MAJOR LANDMARKS

NECK - VERTEBRA AND MUSCLES



TRAPEZIUS



STERNOCLEIDO- MASTOID

LATERAL NECK - POSTERIOR TRIANGLE

1) STERNOCLEIDO-
MASTOID

2) TRAPEZIUS

Innervation - CN XI -
Accessory Nerve

CLINICAL TEST OF ACCESSORY NERVE (CN XI) -

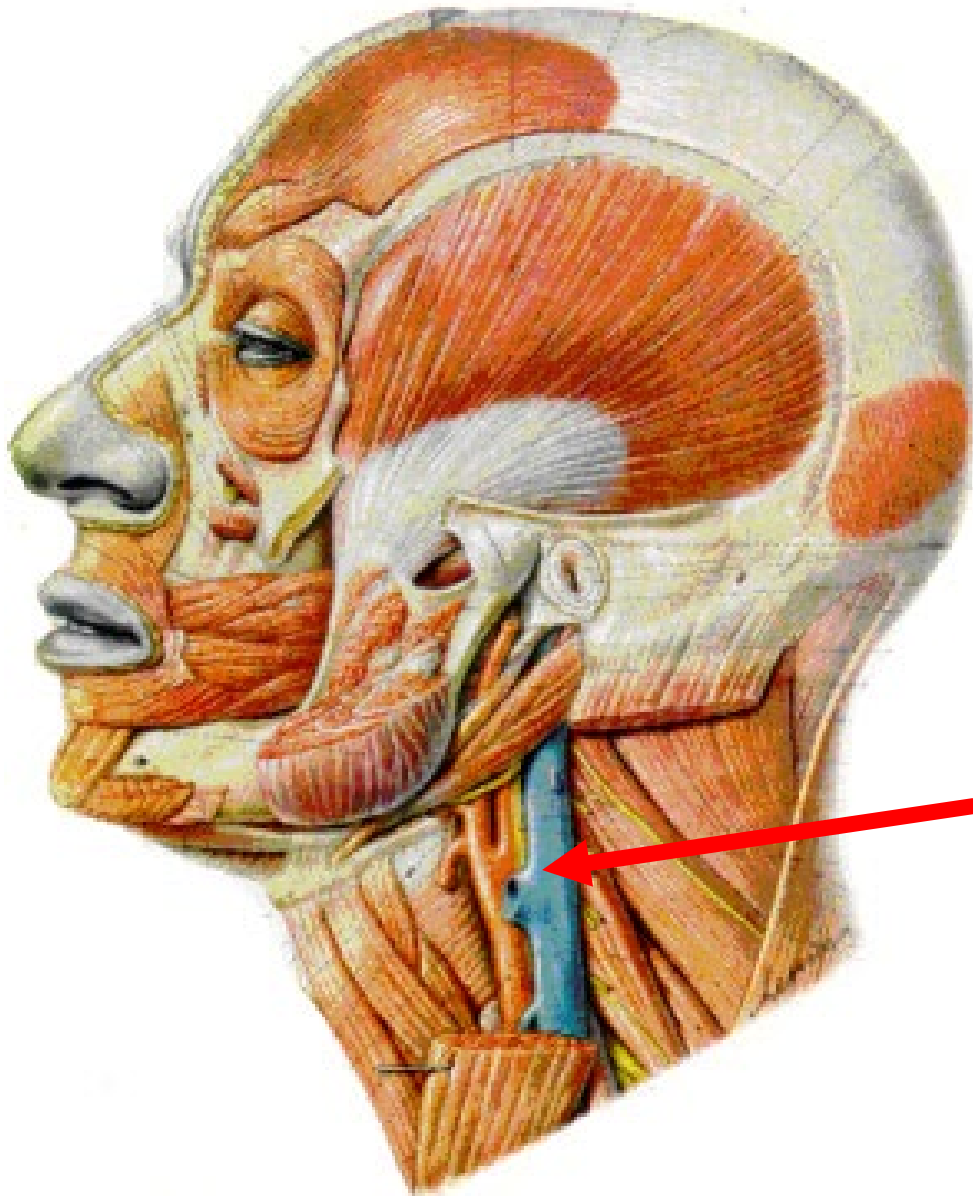
1) 'Shrug' shoulders
- tests Trapezius

2) Rotate (Flex) head
- tests

Sternocleidomastoid

3. LATERAL COMPARTMENT - CAROTID SHEATH

CLINICAL **



ORIENT
STERNOCLEIDOMASTOID
CUT (REFLECTED)

**Lateral Compartment-
lateral and posterior to
pharynx**

**Contained in Carotid
Sheath**

**ORIENT
NOSE**



**ORIENT
EAR**



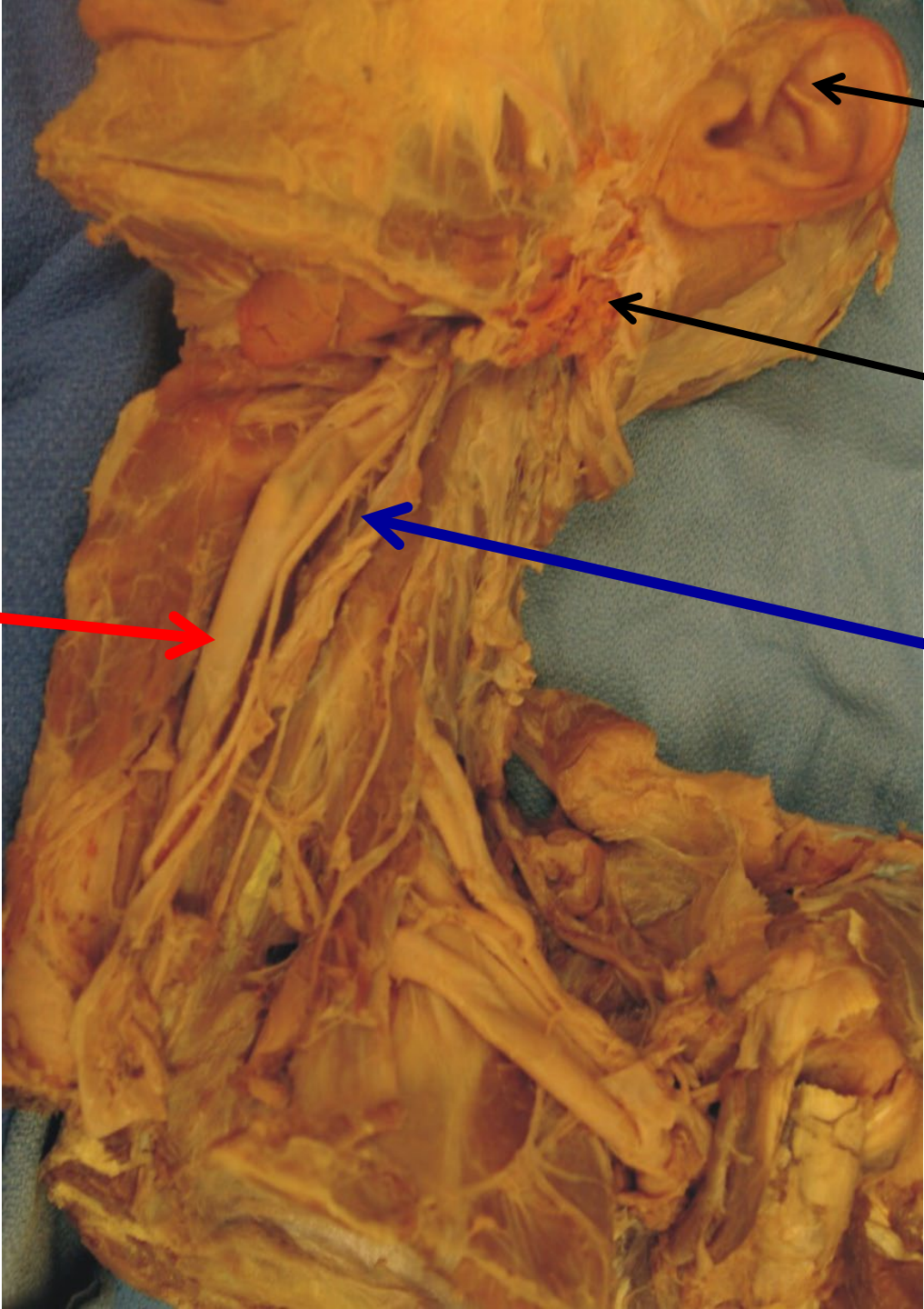
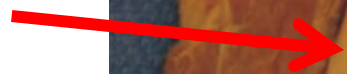
**ORIENT
STERNO-
CLEIDO-
MASTOID
REFLECT**



**IDENTIFY
VEIN**

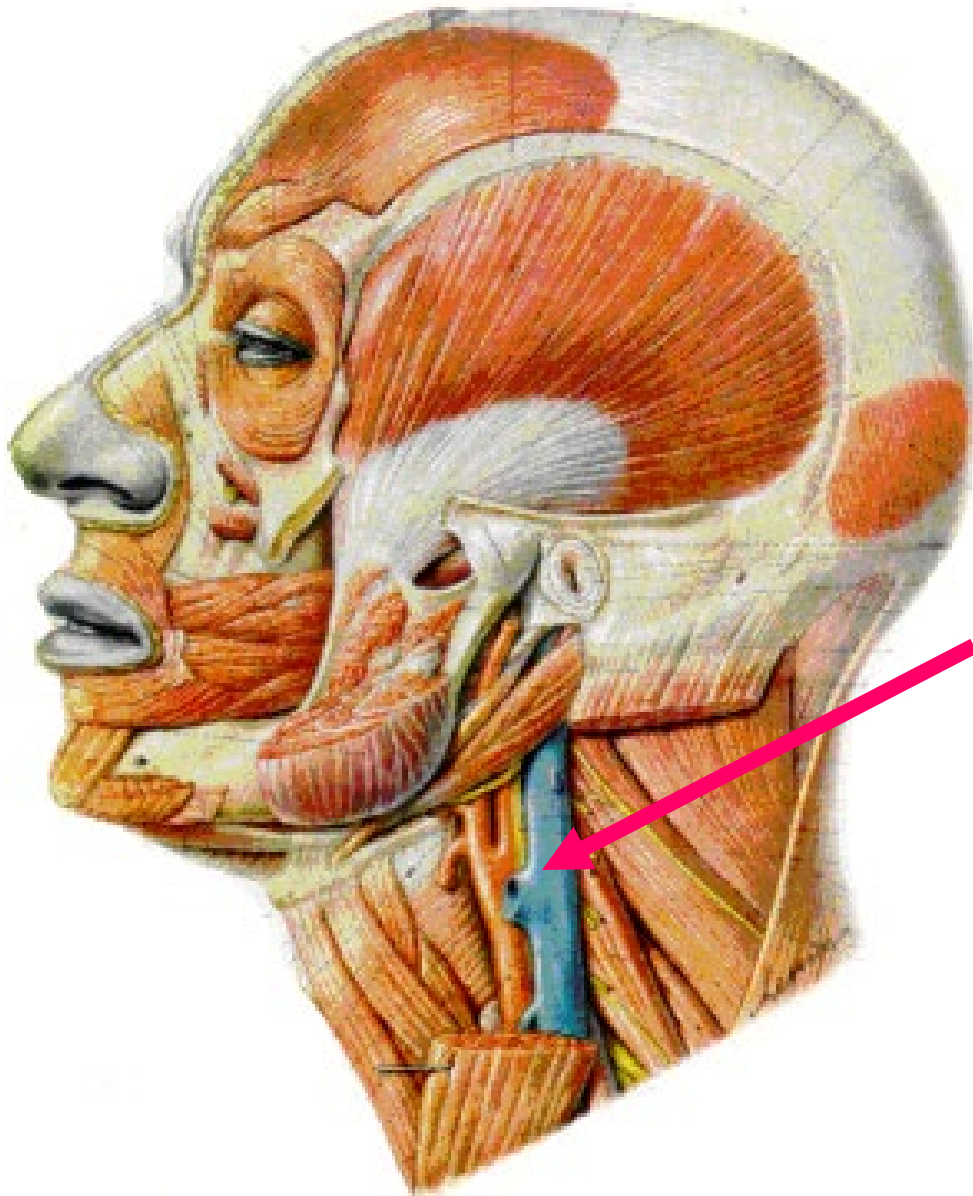


**IDENTIFY
ARTERY**



3. LATERAL COMPARTMENT - CAROTID SHEATH

CLINICAL **



**Lateral Compartment-
lateral and posterior to
pharynx**

**Contained in Carotid
Sheath**

**1) Common and Internal
Carotid arteries; 2)
Internal jugular vein, 3)
Vagus nerve**

**Note: Sympathetic chain
is posterior to (NOT IN)
Carotid Sheath**

SUPERFICIAL AND DEEP NECK

SUPERFICIAL VIEW

DEEP VIEW

16

16

