

DISCUSSION SESSION: GROSS ANATOMY

ONN BLOCK

Feb 3, 2021

Welcome to Head and Neck

DISCUSSION SESSIONS – will review clinically relevant material from lectures; next sessions start anatomy questions/clinical vignette questions

THIS SESSION –

- 1. Overview of next two weeks.**
- 2. Some things to get down in first lectures.**

OVER VIEW OF THIS BLOCK

**TOO MUCH
MATERIAL,
TOO
LITTLE
TIME**

- This year: very short duration to study Head and Neck (8 days + one later in ONN block)
- Problem: Cover large amount of material (text: Head and Neck ~300 pages; Upper Extremity ~100 pages);
- This material is needed for study of Neuroanatomy/Neurology, as well as questions on Step 1 Exam

Approach:

- Focus upon clinical anatomy and topics related to step one board exams, Neuroanatomy/Neurology

However, also need vocabulary and knowledge anatomy for Neuro and ENT.

Task: Lots of memorizing (particularly, if you have not had material before) but try to maintain clinical focus throughout.

Plan:

- 1) Lecture handouts – **have almost all relevant material (short) to answer quiz questions.**
- 2) Lecture PowerPoints – illustrate and elucidate material from handouts (plus some other)
- 3) Lecture Videos – Videos follow slides in PowerPoints. Note: watching lecture videos is dull. Posted edited videos from past years (live audience reactions).

Problem: watching all the videos takes time.
Unclear what is really essential.

Strategy – Discussion sessions – Go over material extracted from lectures Powerpoints/videos of (particularly things in red boxes, often with asterisks).

This will be strongly emphasized on quiz.

Videos and Powerpoints of Discussion sessions will be available on my website.

**EVERYONE STUDIES AT THEIR OWN PACE:
EITHER GO TO DISCUSSION SESSIONS OR
WATCH VIDEOS/READ POWERPOINTS OF
DISCUSSION SESSIONS.**

LABS

I am not allowed to go into the lab while you are there.

MS IV students will be available to help you.

All prosections are in lab with labeled photos (laminated) on tables.

All questions on lab exam will be on photos. Questions will be about labeled structures.

I am making videos of lab prosections and will have lab review next week.

PROSECTIONS

1- Some new and excellent –

75 - Bisected Head with Intact Falx Cerebri – great for orientation.

76 – Carotid Endarterectomy Surgical Prosection – One side is surgery to expose Carotid artery; other side is full dissection of neck to fully see structures exposed in surgery

2- Some old, very old but still usable – See what you can find; please let me know about broken structures (I will post file with list of structures at end and exclude anything broken).

75

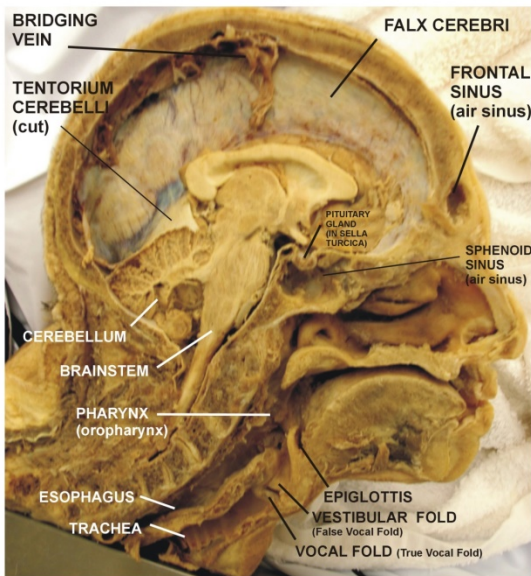
Good for overall orientation

76

One side surgical approach; other side Full Dissection

BISECTED HEAD WITH INTACT FALX CEREBRI

75

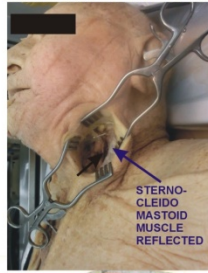


Note: Bridging Vein - cut when brain removed but still attached and entering Sup. Sagittal Sinus

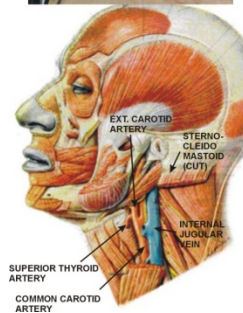
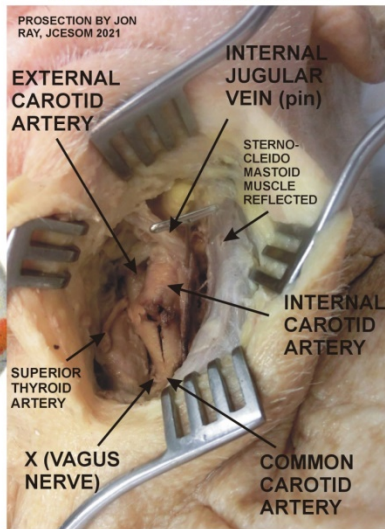
SURGICAL PROSECTION: CAROTID ENDARTERECTOMY

76

SKIN INCISION ANTERIOR TO STERNOCLEIDOMASTOID MUSCLE



CAROTID SHEATH INCISED TO EXPOSE CONTENTS; ARTERY INCISED FOR PLAQUE REMOVAL



DISSECTION OF ANTERIOR NECK

76

NECK DISSECTED ON RIGHT SIDE OF SURGICAL ANATOMY PROSECTION



LECTURES VIDEOS

This week heavily front loaded – lots of lectures; eases up somewhat next week.

Thursday (tomorrow) – Skull session video and live session; go through bones and openings in Skull.

Friday – Start Discuss Lectures – Areas emphasized and questions

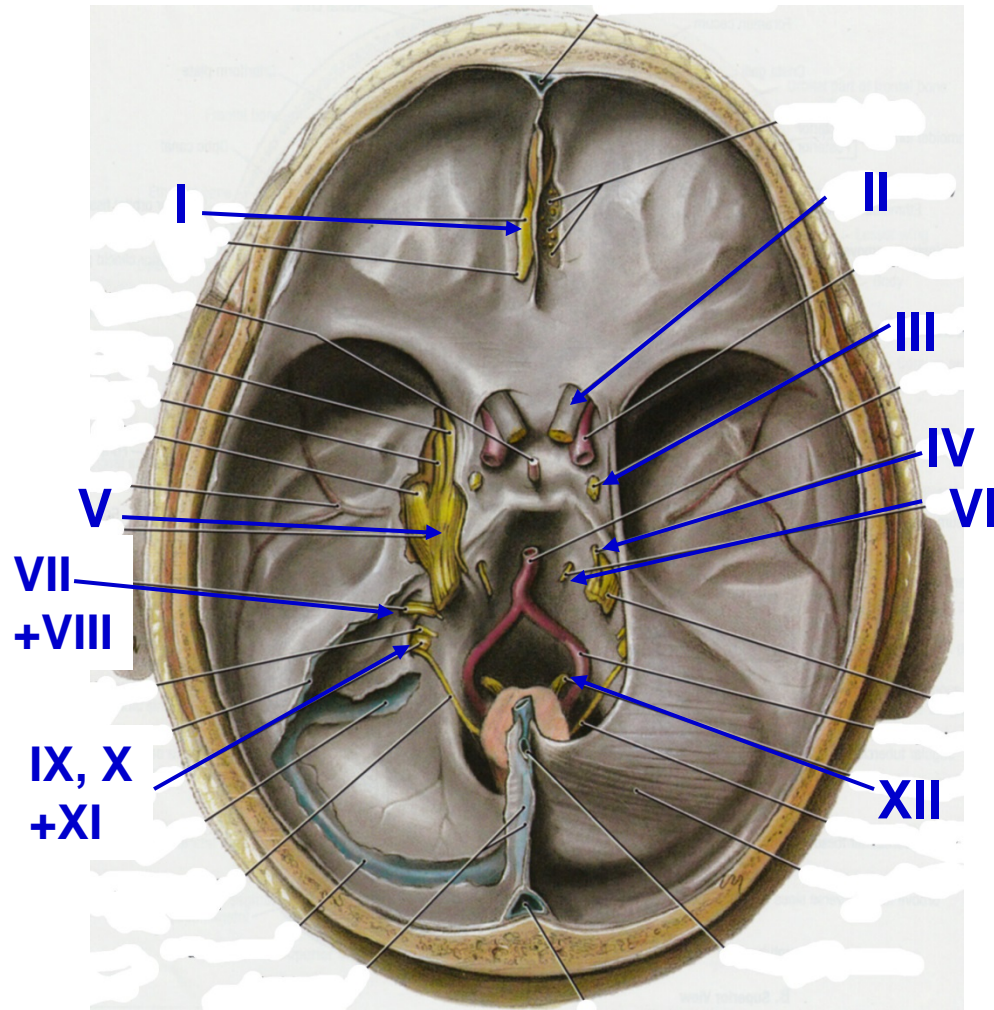
**Final Reviews Thursday Feb 11 and Friday Feb 12
– Will go over relevant material from lab (prosections) and Discussion sessions.**

THINGS TO GET DOWN RIGHT AWAY

FACE

- 1- **Bell's palsy** – Actions of some facial muscles important – Orbicularis Oculi (close eye – paralysis can damage cornea, Buccinator – board question difficulty eating (actually cheek keeping food between teeth))
- 2- **Arterial Supply and Venous Drainage of Face** – Branches of Carotid Artery (Pulses), infections, later Neck.
- 3- **Embryology – Cleft lip**; later Cleft palate; also formation nasolacrimal duct.

LEARN NAMES AND NUMBERS OF CRANIAL NERVES



- I. OLFACTORY - sense of smell
- II. OPTIC - vision
- III. OCULOMOTOR - eye movement
- IV. TROCHLEAR - eye movement
- V. TRIGEMINAL - touch, general sensation to skin, oral cavity, nasal cavity + more
- VI. ABDUCENS - eye movement
- VII. FACIAL - muscles of facial expression + lots more
- VIII. VESTIBULO-COCHLEAR - hearing and balance
- IX. GLOSSOPHARYNGEAL - sensory to pharynx + more
- X. VAGUS - larynx, pharynx + rest of body
- XI. ACCESSORY - sternocleidomastoid, trapezius
- XII. HYPOGLOSSAL - muscles of tongue

**SKULL SESSION -
TOMORROW -
FORAMINA
ASSOCIATED
WITH CRANIAL NERVES**

SELLA TURCICA

**CRIBRIFORM
PLATE ETHMOID - I**

OPTIC FORAMEN - II

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

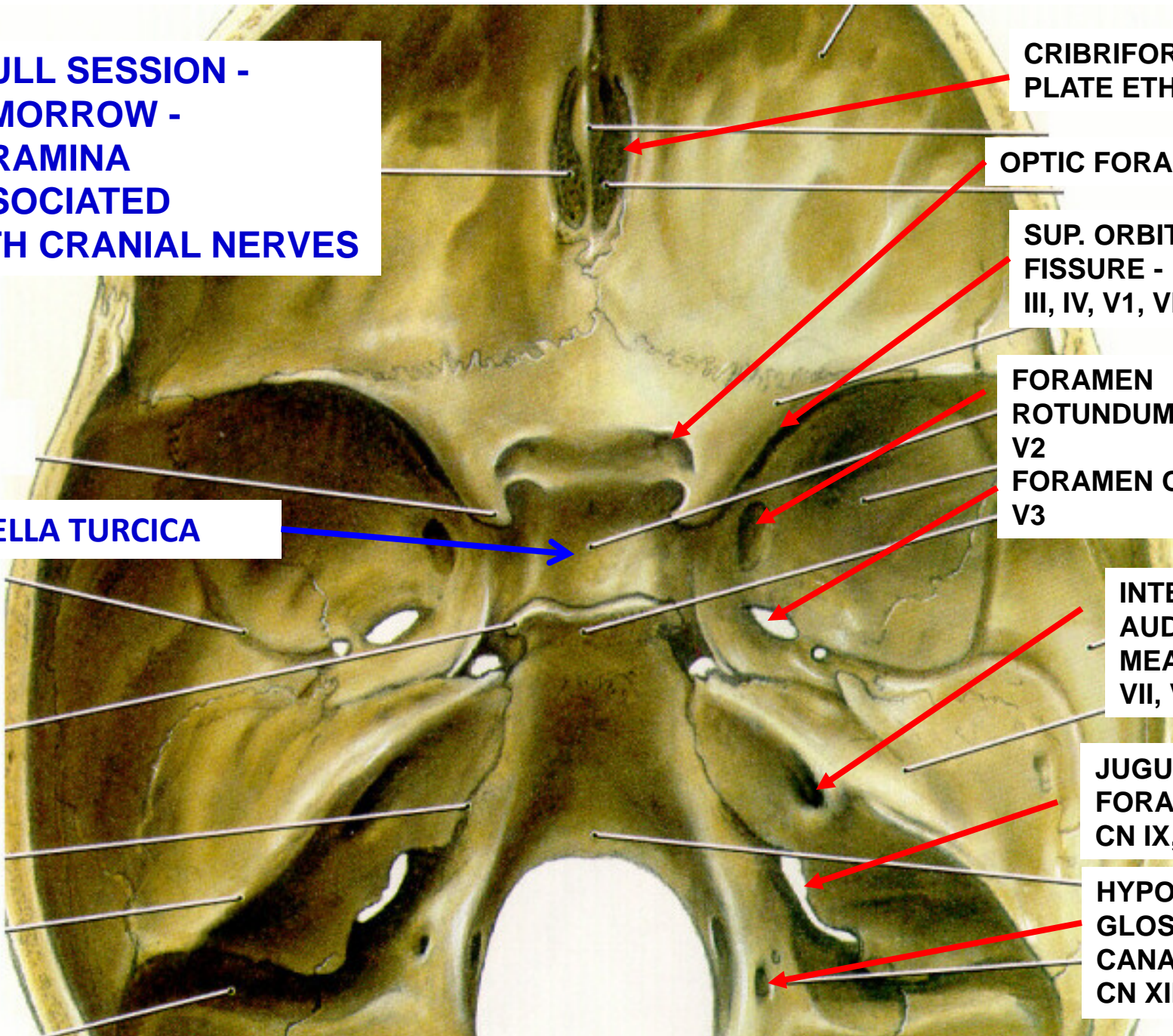
**FORAMEN
ROTUNDUM -
V2**

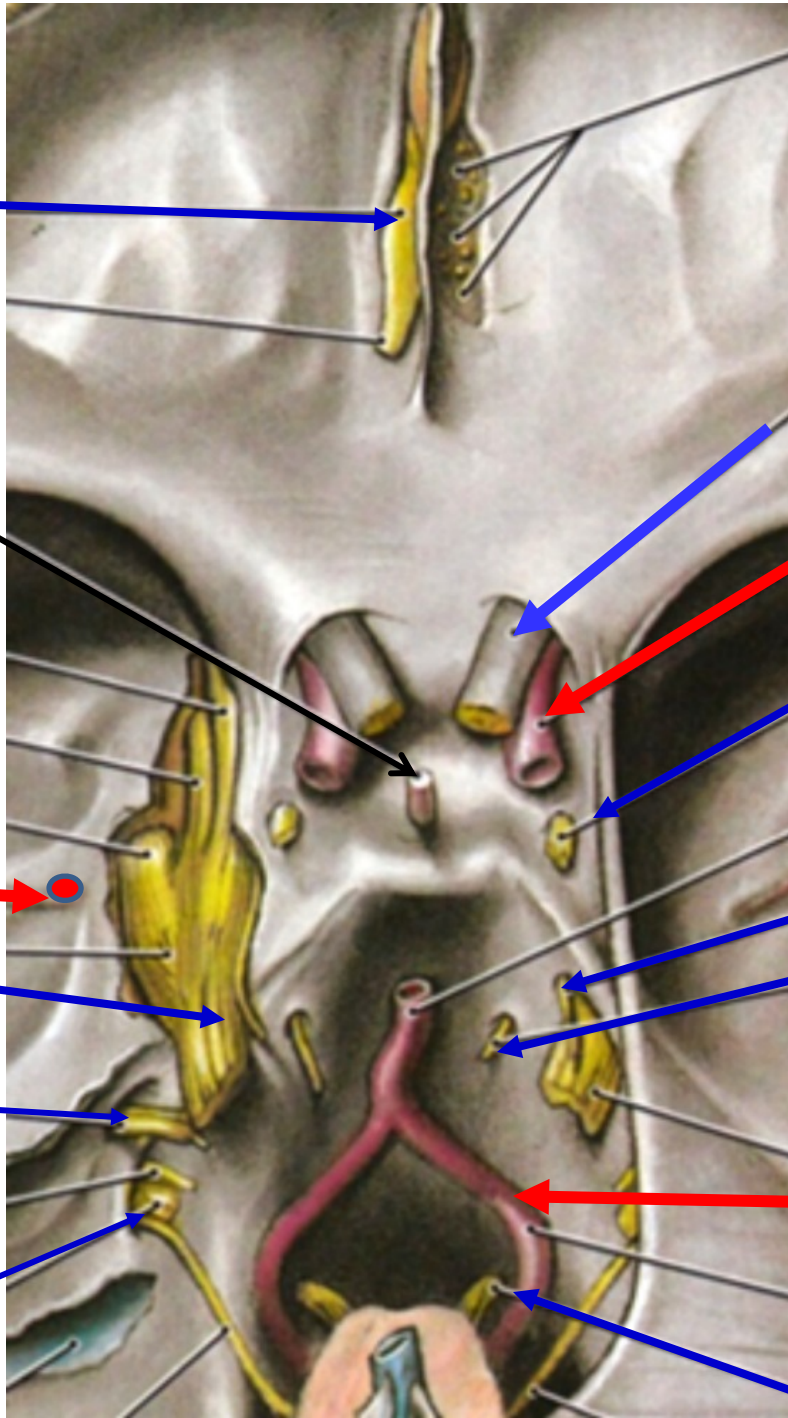
**FORAMEN OVALE -
V3**

**INTERNAL
AUDITORY
MEATUS -
VII, VIII**

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

**HYPG-
GLOSSAL
CANAL -
CN XII**





**BRAINSTEM
PROSECTIONS
IDENTIFY**

I

II

**PITUITARY
STALK**

INTERNAL CAROTID A.

V1

V2

V3

III

**MIDDLE
MENINGEAL A.**

V

IV

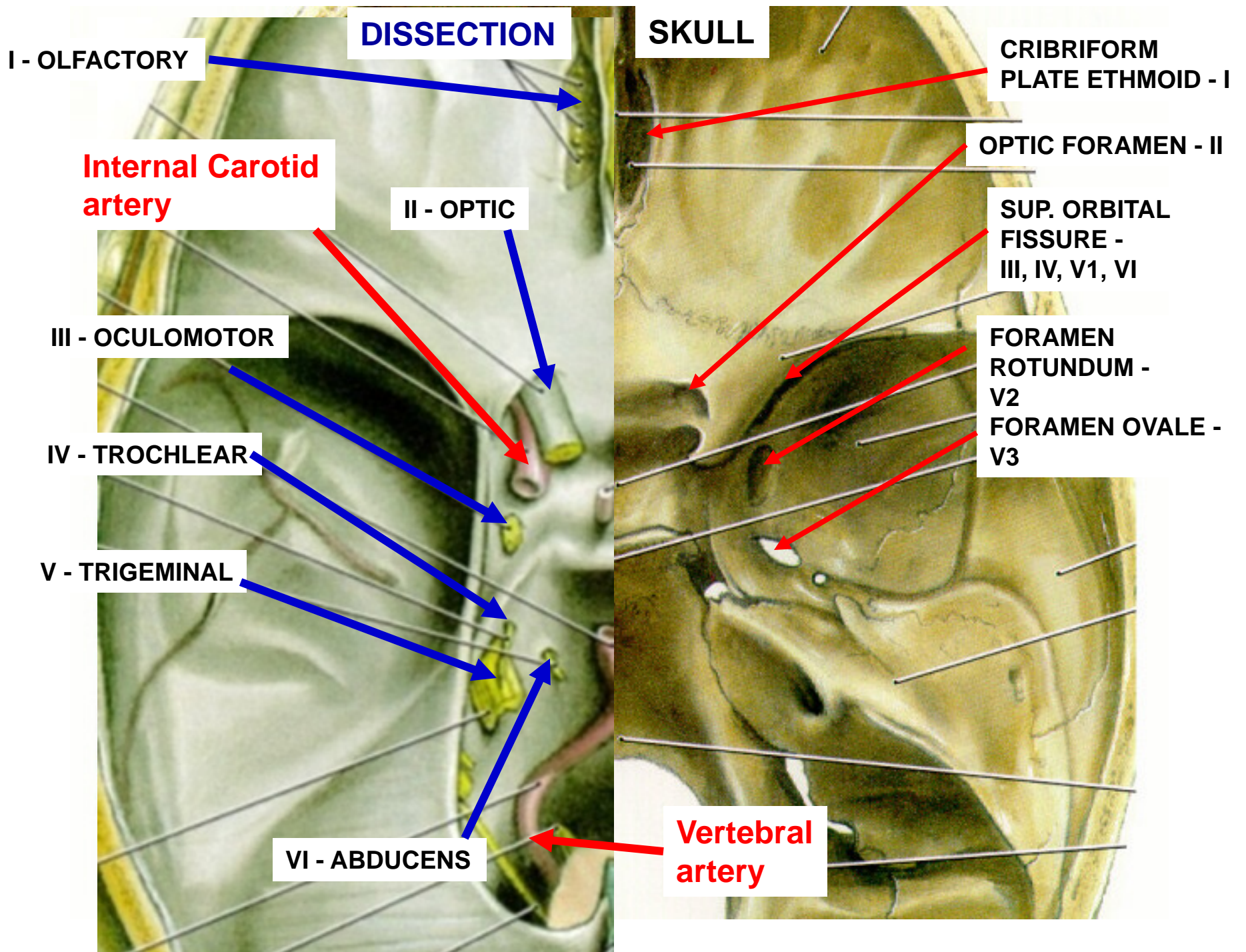
**VII
+VIII**

VI

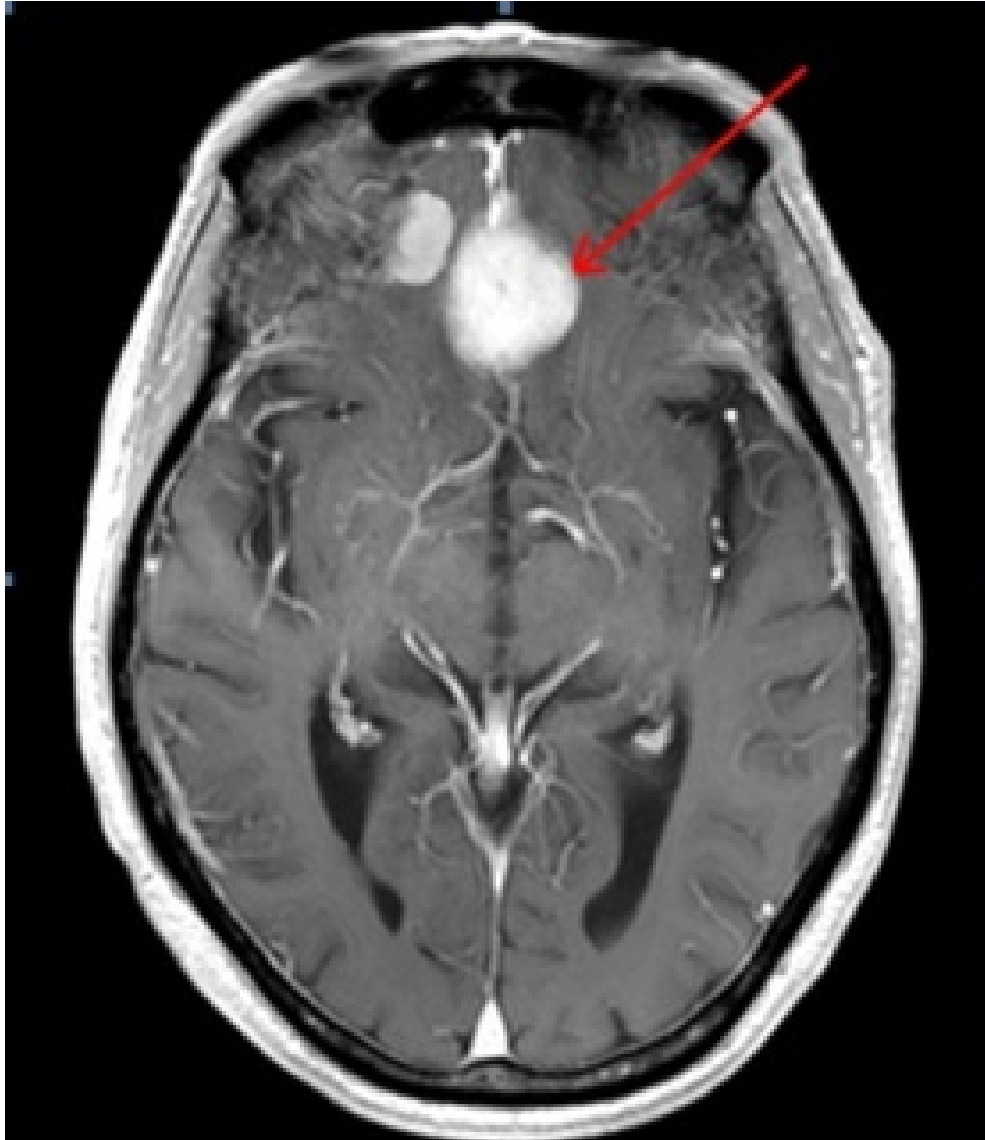
**IX, X
+XI**

VERTEBRAL A.

XII

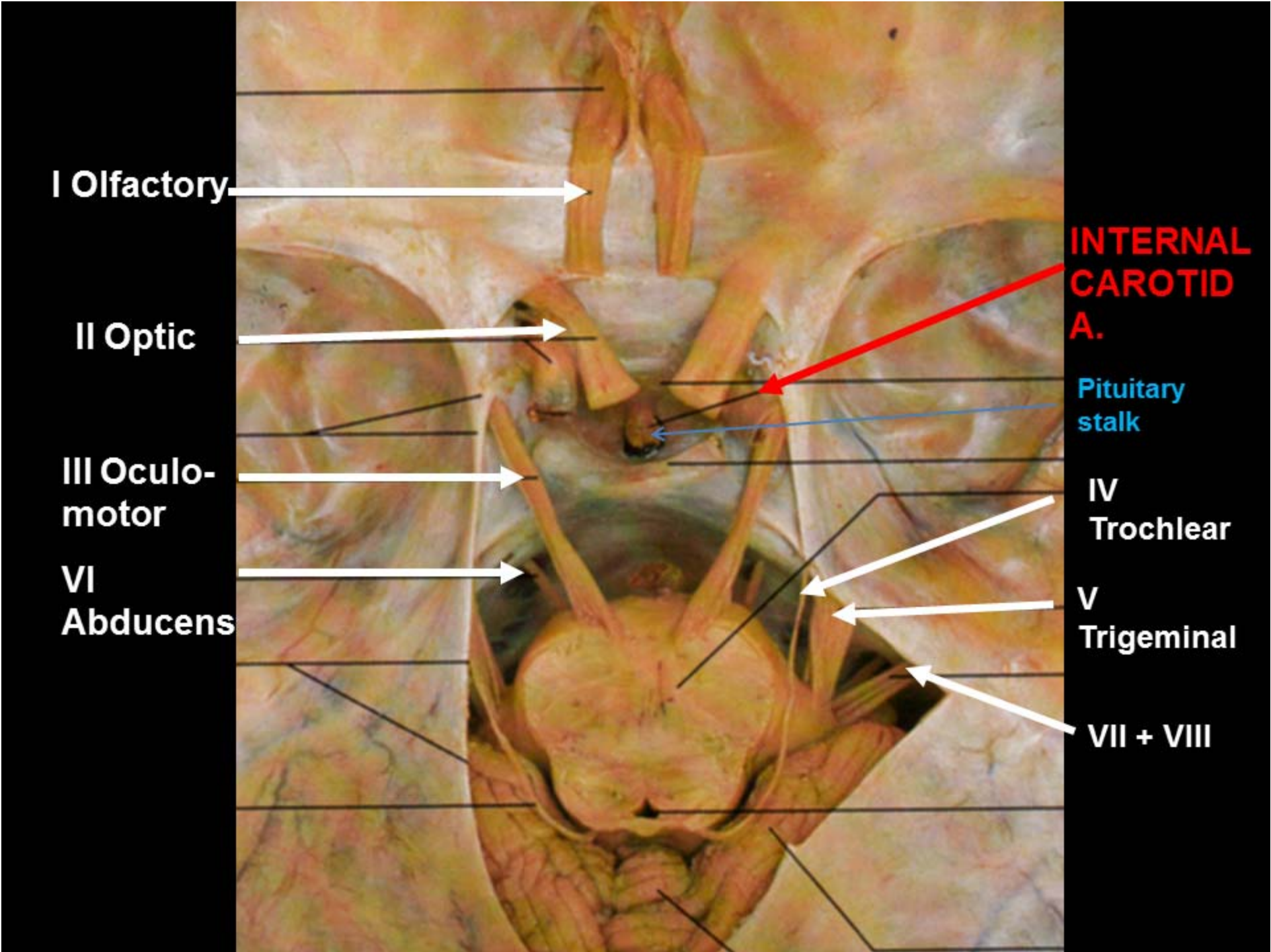


WHY STUDY THIS? DIAGNOSE LESIONS IN CRANIAL CAVITY



**MENINGIOMA IN
ANTERIOR
CRANIAL FOSSA.**

**WHICH CRANIAL
NERVE
AFFECTED?**



I Olfactory

II Optic

**III Oculo-
motor**

**VI
Abducens**

**INTERNAL
CAROTID
A.**

**Pituitary
stalk**

**IV
Trochlear**

**V
Trigeminal**

VII + VIII

IV
Trochlear

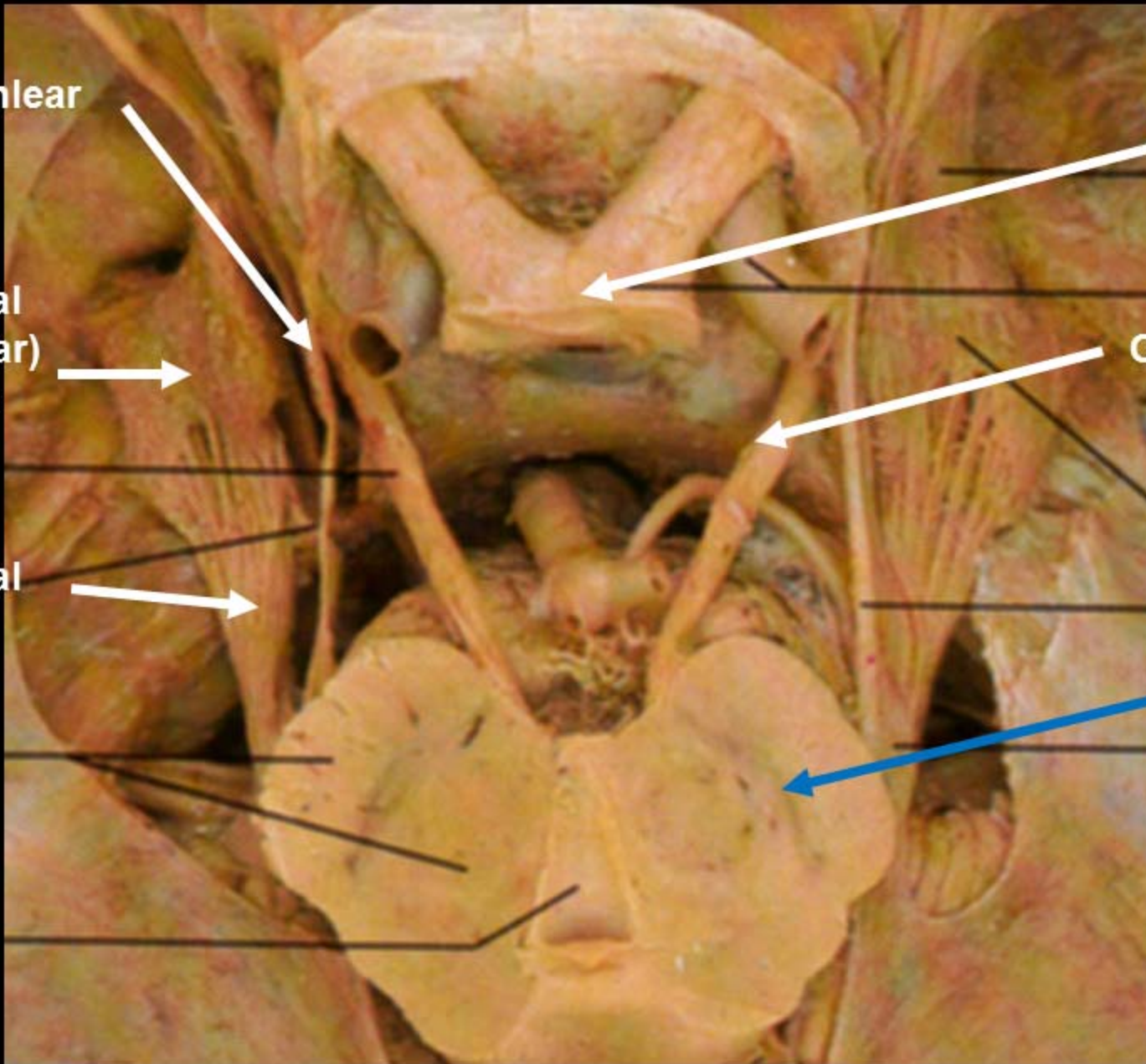
II Optic
Chiasm

Trigeminal
(Semilunar)
Ganglion

III
Oculomotor

V
Trigeminal

Substantia
Nigra
in
Midbrain
(Parkinson's
Disease)



LET ME KNOW IF YOU HAVE ANY QUESTIONS:

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fastest: sensillum@aol.com

ALSO AVAILABLE FOR CHAT ON ZOOM: I WILL LET YOU KNOW ABOUT HOURS AND LINKS.

PLEASE CHECK YOUR EMAIL IN THE NEXT TWO WEEKS.

THINGS POSTED TO MY WEBSITE BECAUSE DELAY IN GETTING POSTED TO MED HUB.

THANKS AND GOOD LUCK!