

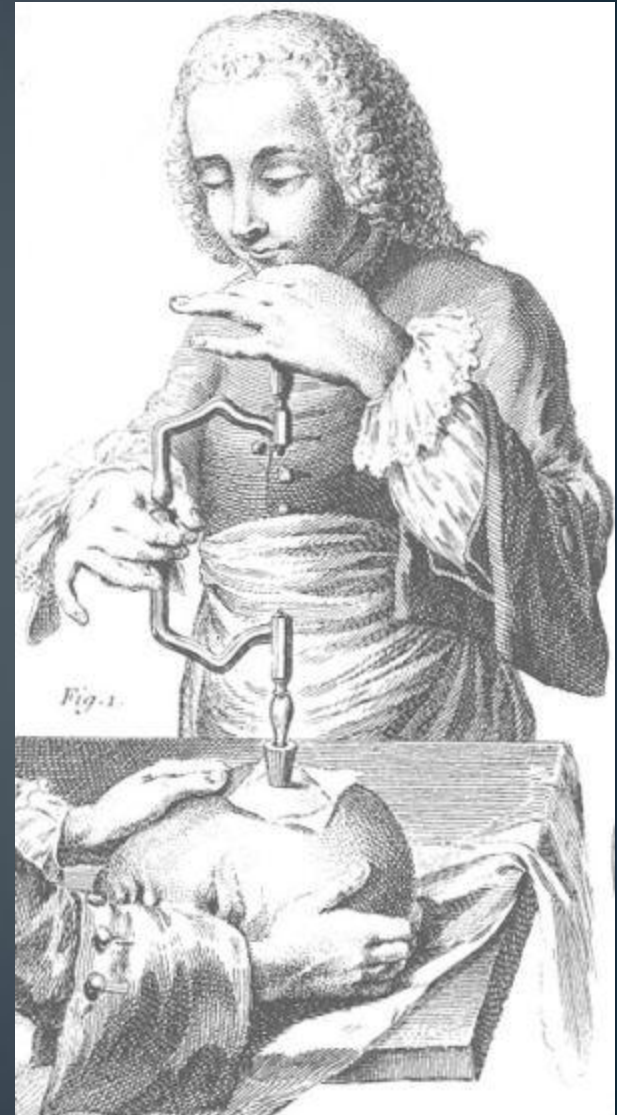


Headache

Dr. Hemang Shah

6-12-15

Trepanation



Science Museum, London, Wellcome Images.

*Chirurgia
quam citissime
administranda*





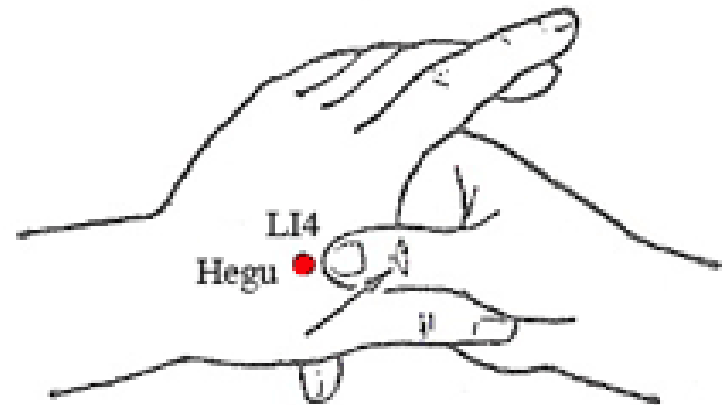
**Ancient
Remedies**

D
FILMS IDWANA

Mudra

Treatment for:
Headache

This video is
produced by



Classification

Part 1:

Primary headache disorders

Part 2:

Secondary headache disorders

Part 3:

Cranial neuralgias, central and primary facial pain and other headaches

Primary or secondary headache?

Primary:

- no other causative disorder

Primary or secondary headache?

Secondary

(ie, caused by another disorder):

- new headache occurring in close temporal relation to another disorder that is a known cause of headache
- coded as *attributed to* that disorder
(in place of previously used term *associated with*)

Classification

Part 1: The primary headaches

1. Migraine
2. Tension-type headache
3. Cluster headache
and other trigeminal autonomic cephalalgias
4. Other primary headaches

Classification

Part 2: The secondary headaches

5. Headache attributed to head and/or neck trauma
6. Headache attributed to cranial or cervical vascular disorder
7. Headache attributed to non-vascular intracranial disorder
8. Headache attributed to a substance or its withdrawal
9. Headache attributed to infection

Classification

Part 2: The secondary headaches

10. Headache attributed to disorder of homoeostasis
11. Headache or facial pain attributed to disorder of cranium, neck, eyes, ears, nose, sinuses, teeth, mouth or other facial or cranial structures
12. Headache attributed to psychiatric disorder

Classification

Part 3: Cranial neuralgias, central and primary facial pain and other headaches

13. Cranial neuralgias and central causes of facial pain

14. Other headache, cranial neuralgia, central or primary facial pain

A) $n \geq 5$



B) 4 - 72 h

C) $2/4$



++ / ++++



D)

$1/2$



E)



1.1 Migraine without aura

A. At least 5 attacks fulfilling criteria B-D

B. Headache attacks lasting 4-72 h (untreated or unsuccessfully treated)

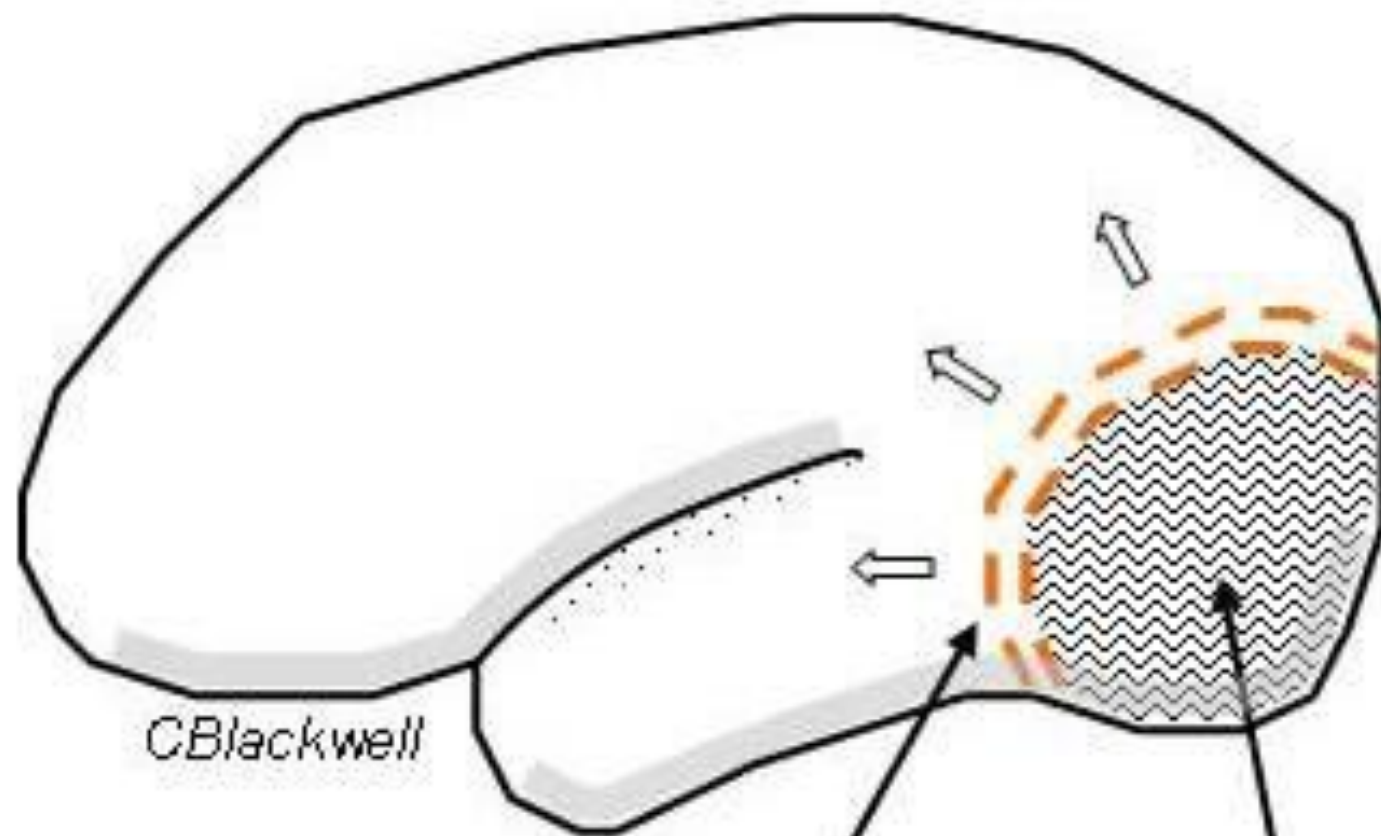
C. Headache has ≥ 2 of the following characteristics:

1. unilateral location
2. pulsating quality
3. moderate or severe pain intensity
4. aggravation by or causing avoidance of routine physical activity (eg, walking, climbing stairs)

D. During headache ≥ 1 of the following:

1. nausea and/or vomiting
2. photophobia and phonophobia

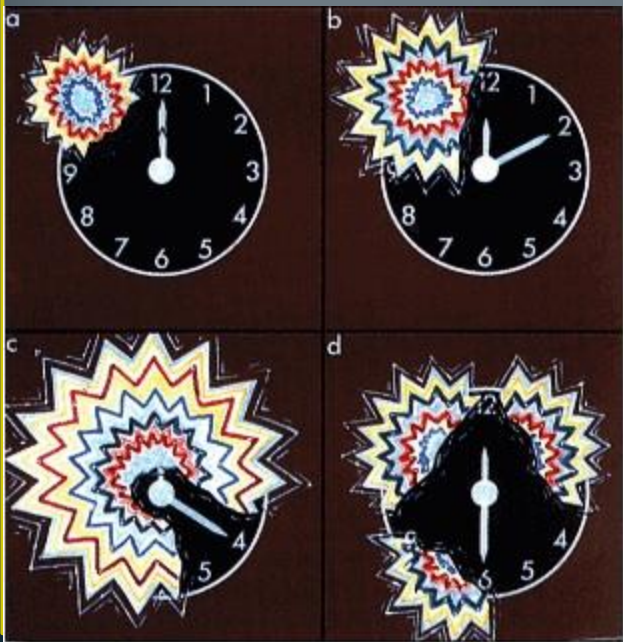
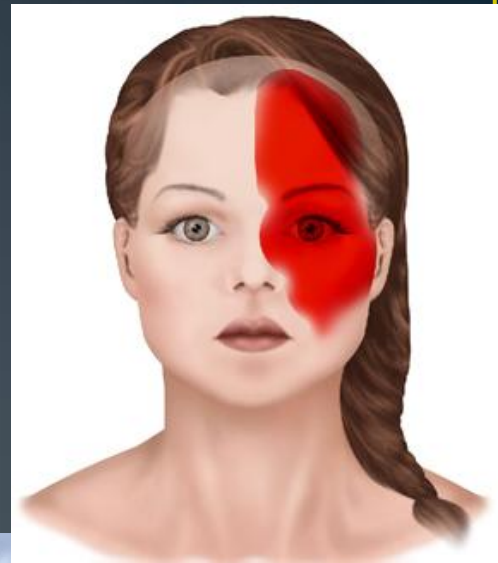
E. Not attributed to another disorder

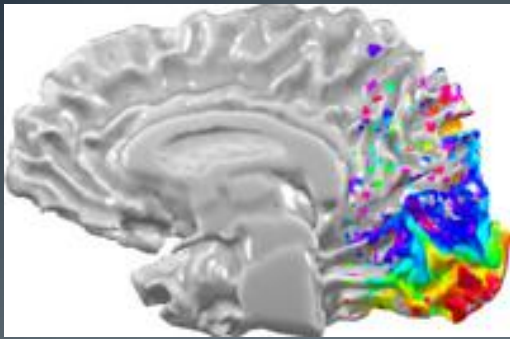


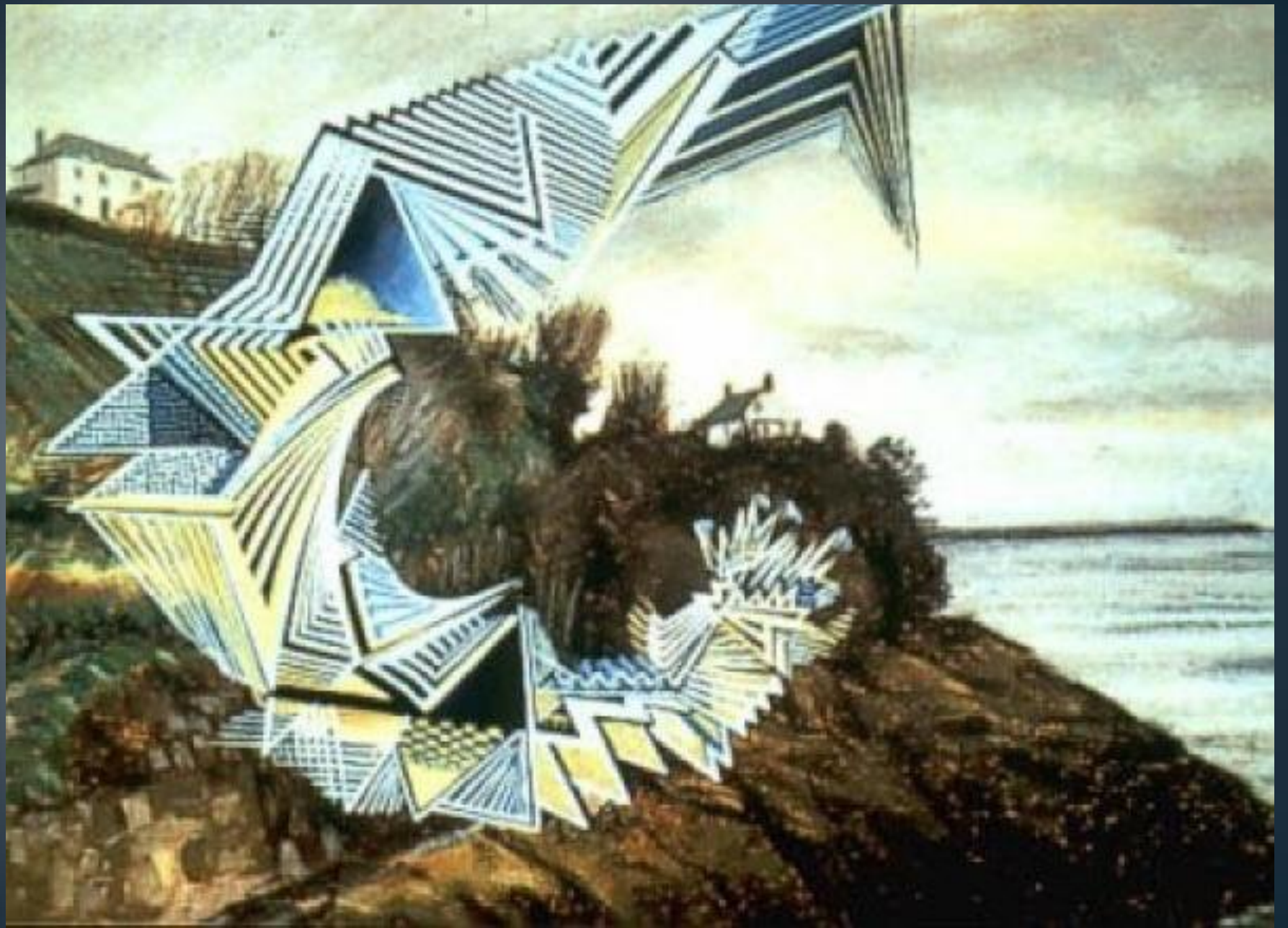
CBlackwell

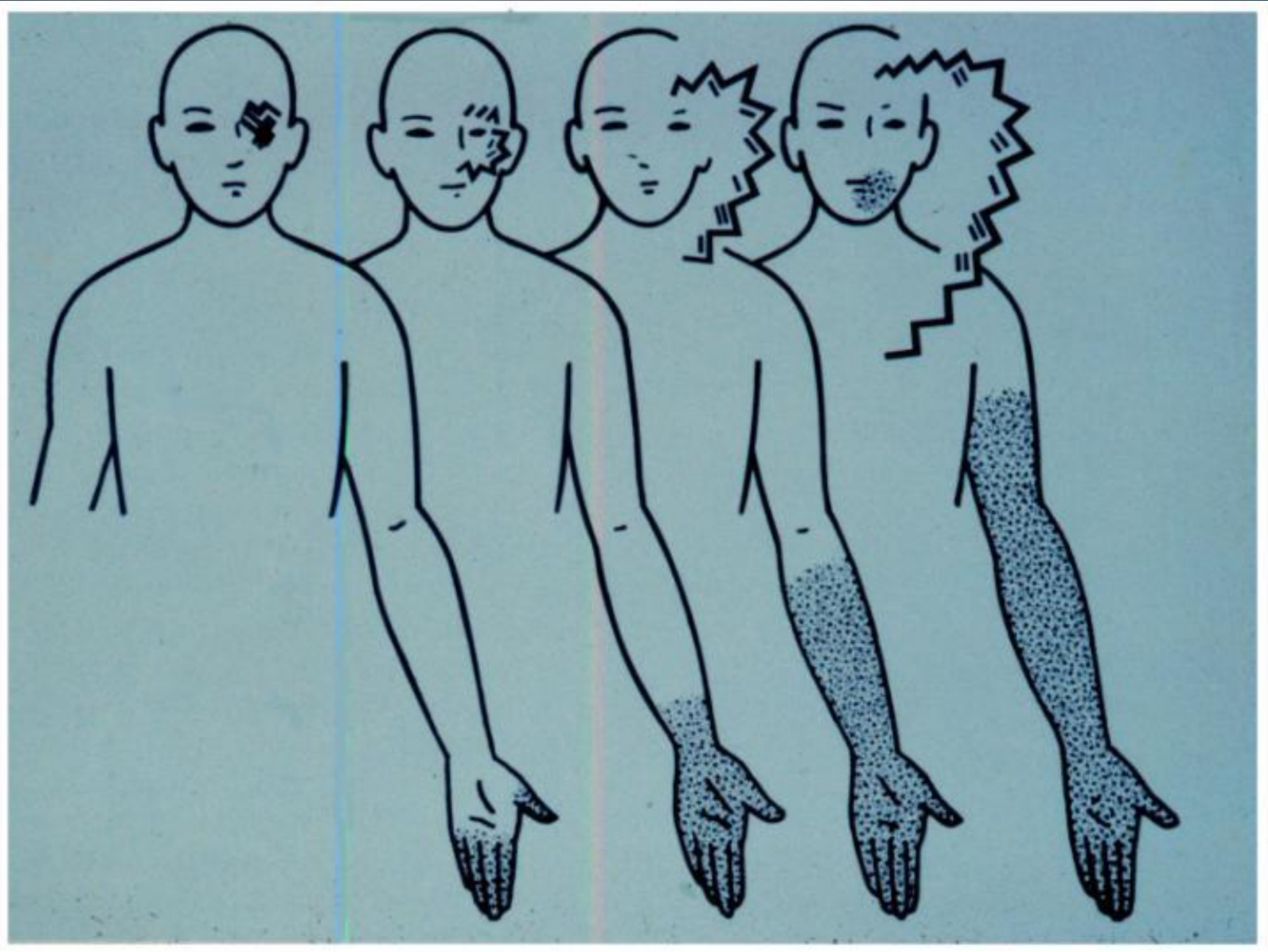
Depolarization
→ *Scintillations*

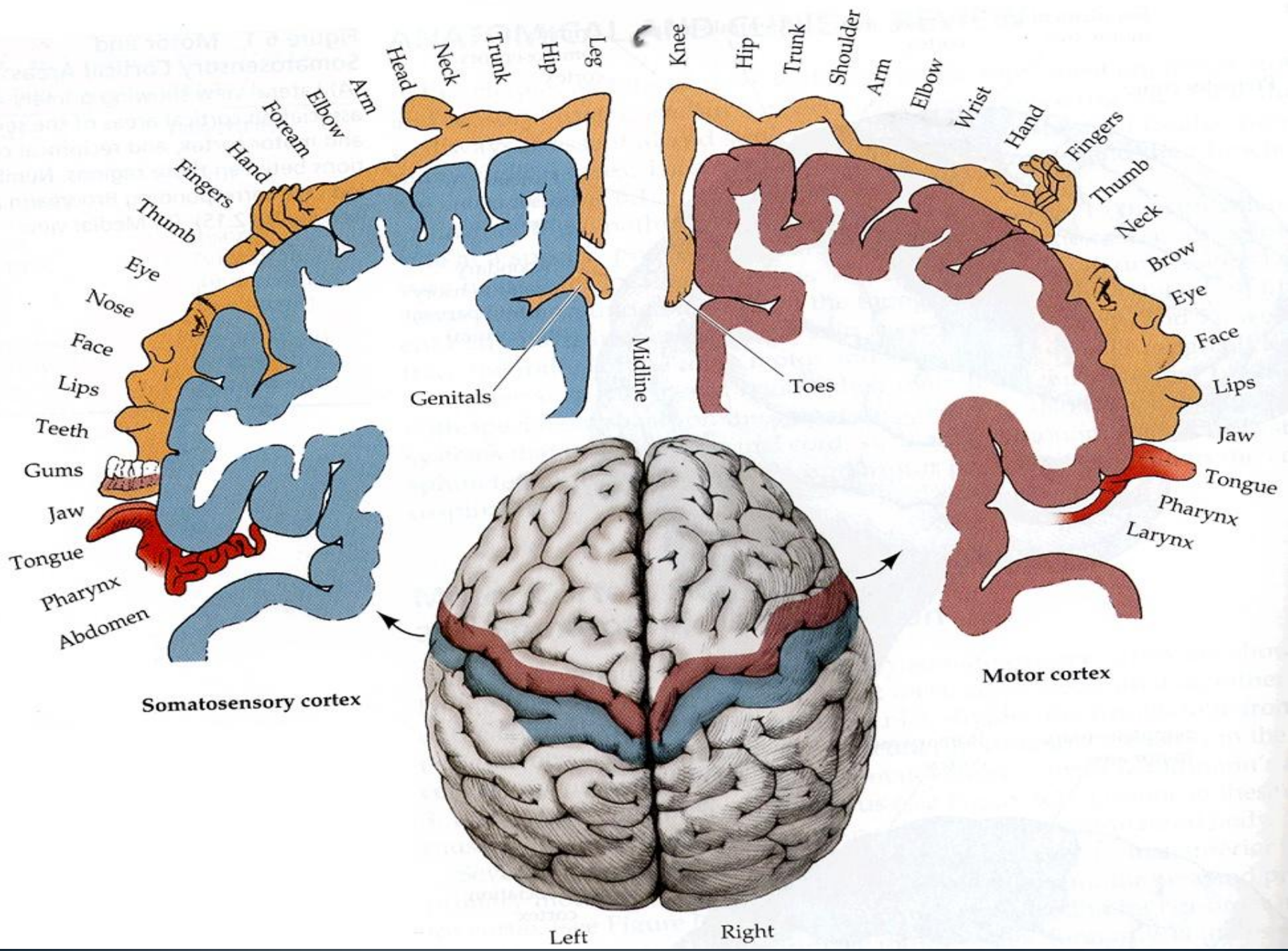
Depression
→ *Scotoma*













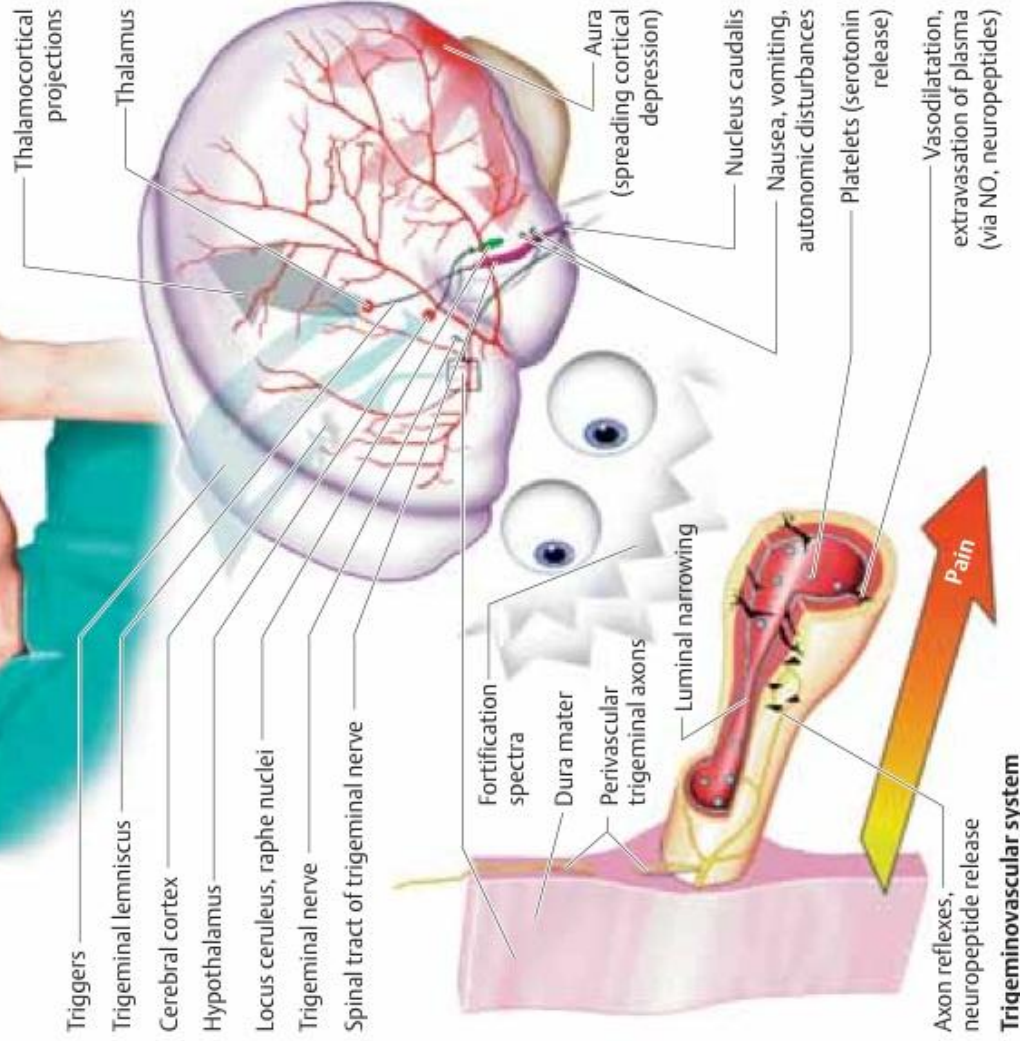
Migraine attacks

Headache phase

Prodrromal phase

Aura

Resolution phase



MIGRAINE TRIGGERS

For more than 20 million Americans, painful migraines can be triggered by common food items, environmental factors, and aspects of behavior.





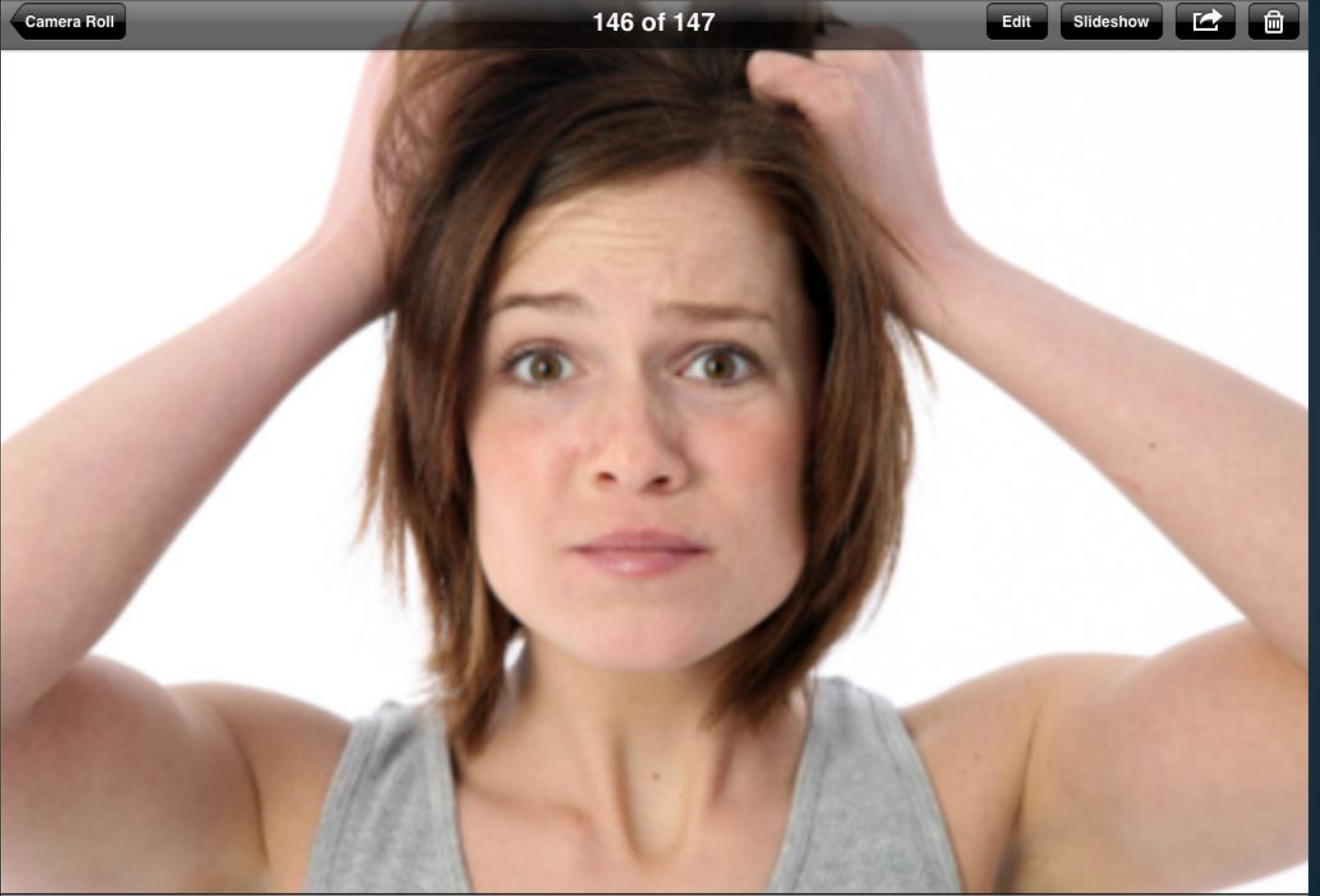


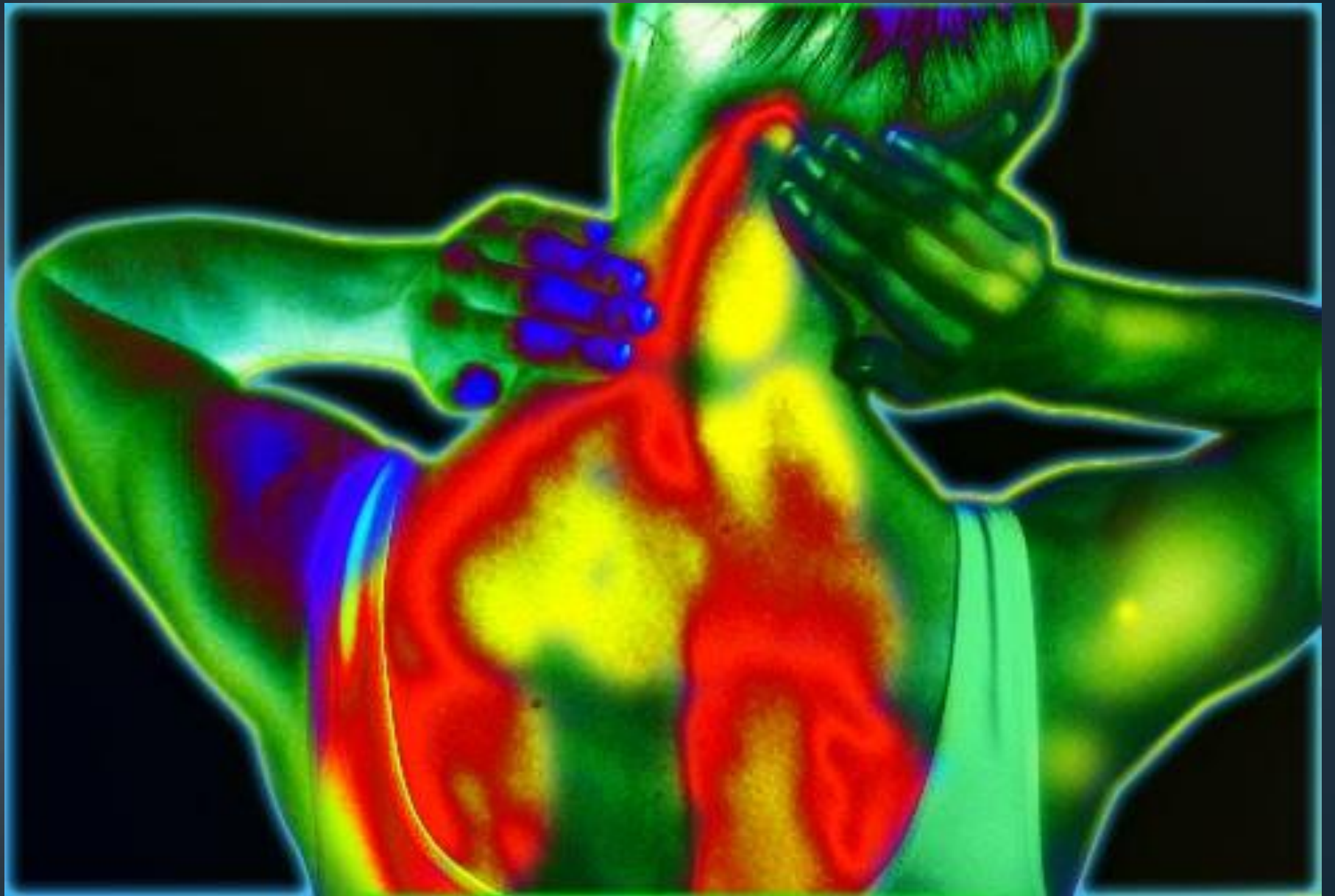
Camera Roll

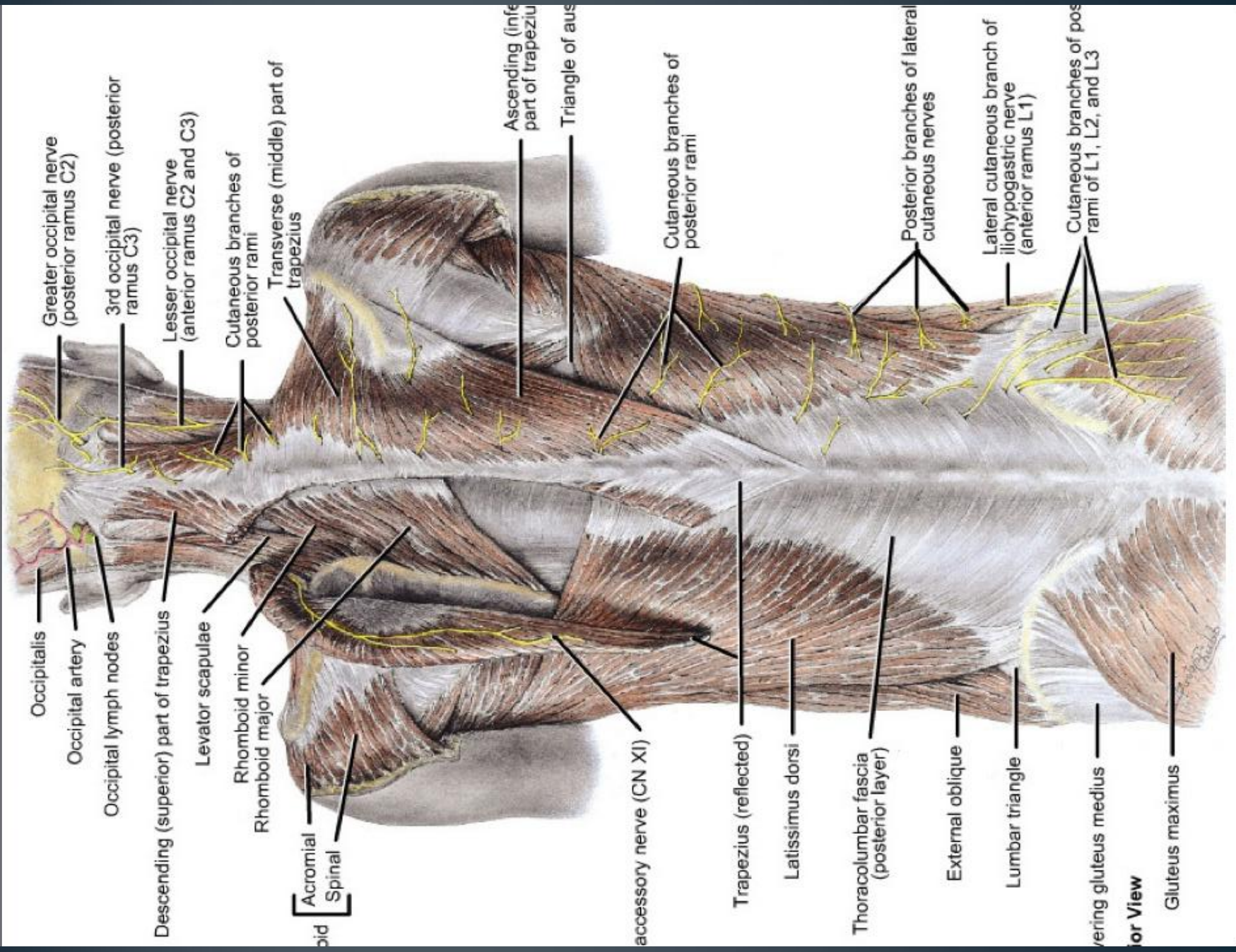
146 of 147

Edit

Slideshow







Occipitalis

Occipital artery

Occipital lymph nodes

Descending (superior) part of trapezius

Levator scapulae

Rhomboid minor

Rhomboid major

Acromial

Spinal

oid

Greater occipital nerve (posterior ramus C2)

3rd occipital nerve (posterior ramus C3)

Lesser occipital nerve (anterior ramus C2 and C3)

Cutaneous branches of posterior rami

Transverse (middle) part of trapezius

Ascending (inferior) part of trapezius

Triangle of aus

accessory nerve (CN XI)

Trapezius (reflected)

Latissimus dorsi

Thoracolumbar fascia (posterior layer)

External oblique

Lumbar triangle

Covering gluteus medius

Anterior View

Gluteus maximus

Cutaneous branches of posterior rami

Posterior branches of lateral cutaneous nerves

Lateral cutaneous branch of iliohypogastric nerve (anterior ramus L1)

Cutaneous branches of posterior rami of L1, L2, and L3

© 2011 Thieme





SYS
mmHg

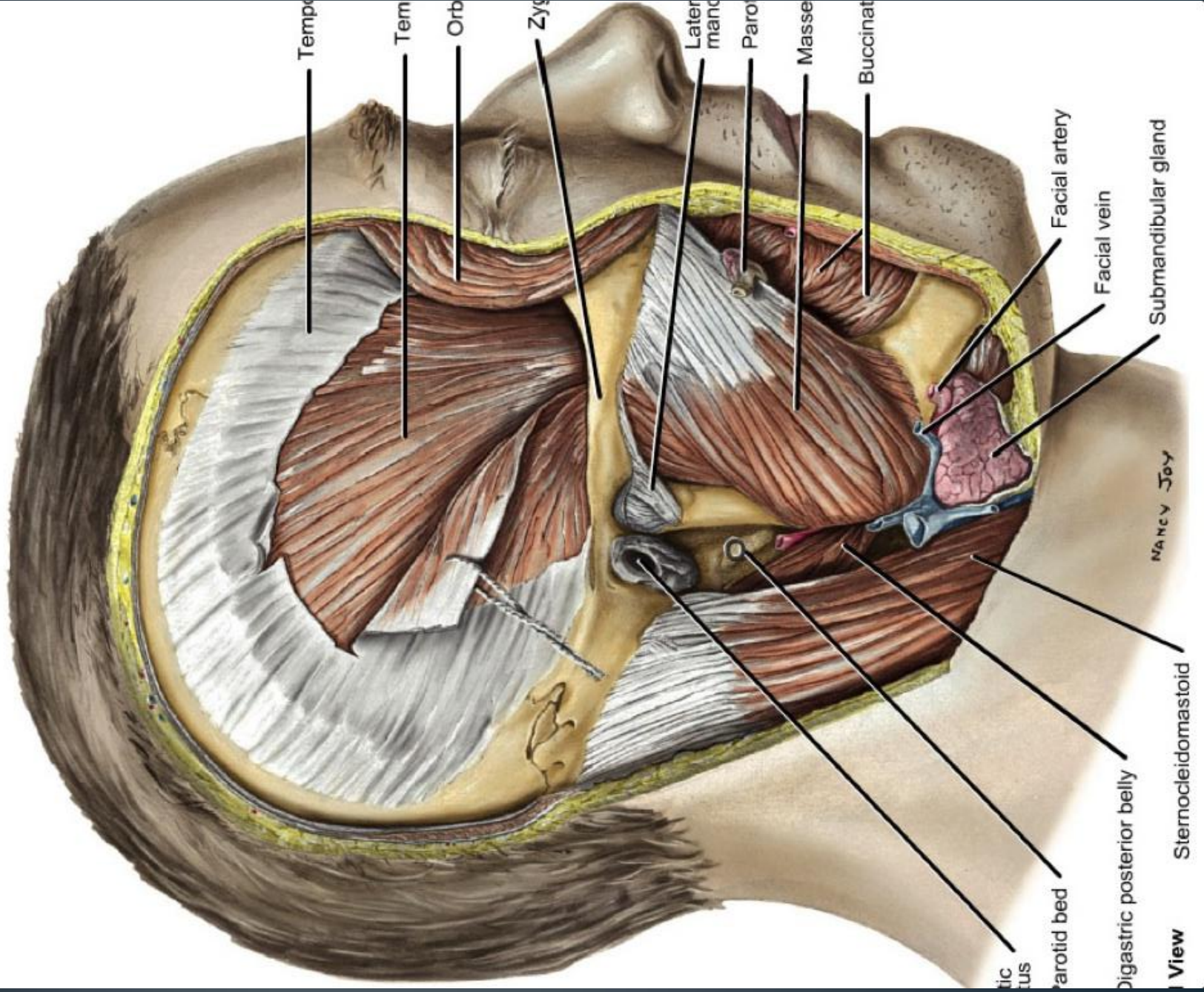
DIA
mmHg

PULSE
/min

145
84
82
AM
8:24

START
STOP

MEMORY



Tempo

Tem

Orb

Zys

Lateral mand

Parot

Masse

Buccinat

Facial artery

Facial vein

Submandibular gland

NANCY JOY

Sternocleidomastoid

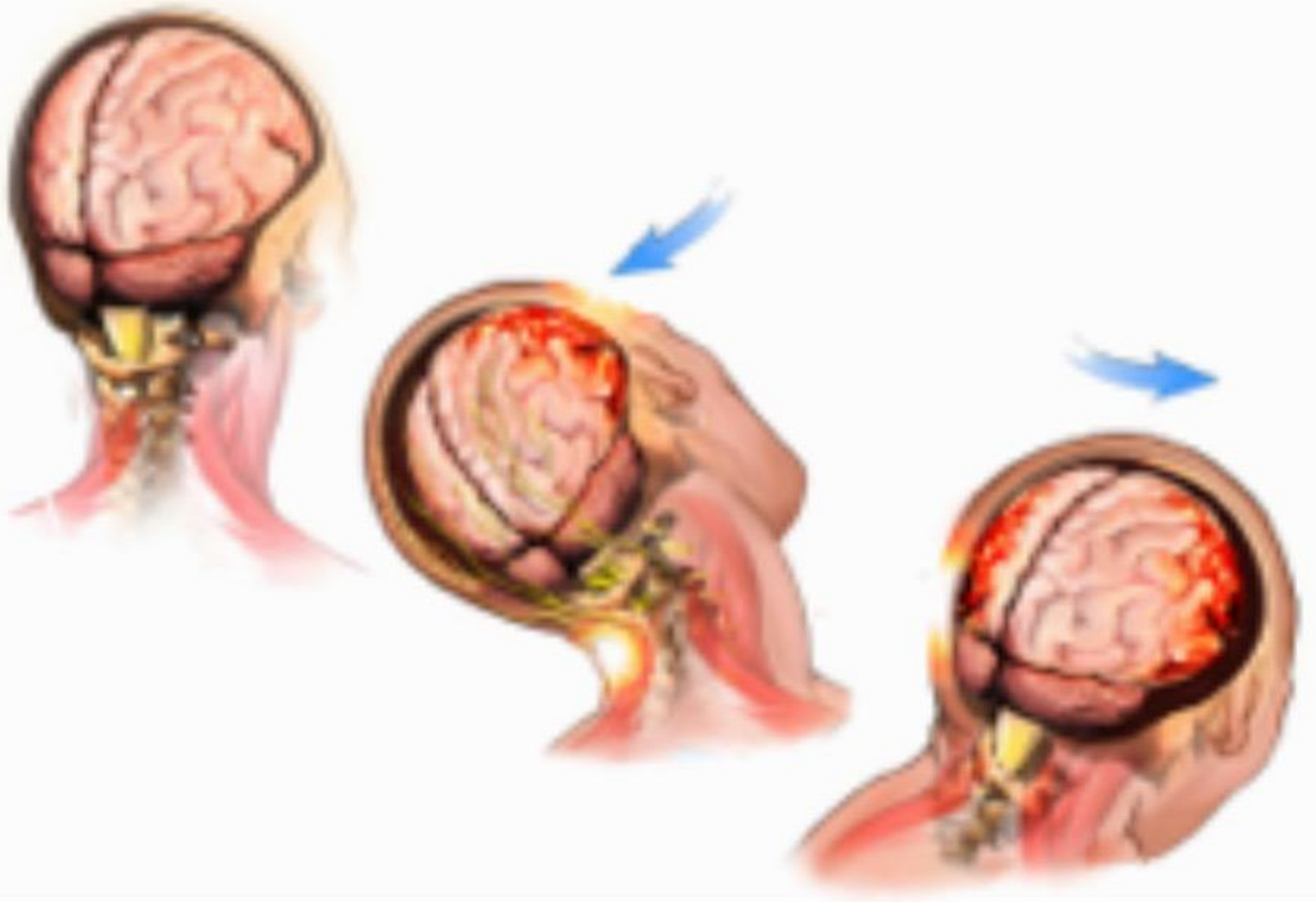
Digastric posterior belly

View

Digastric anterior belly

Carotid bed







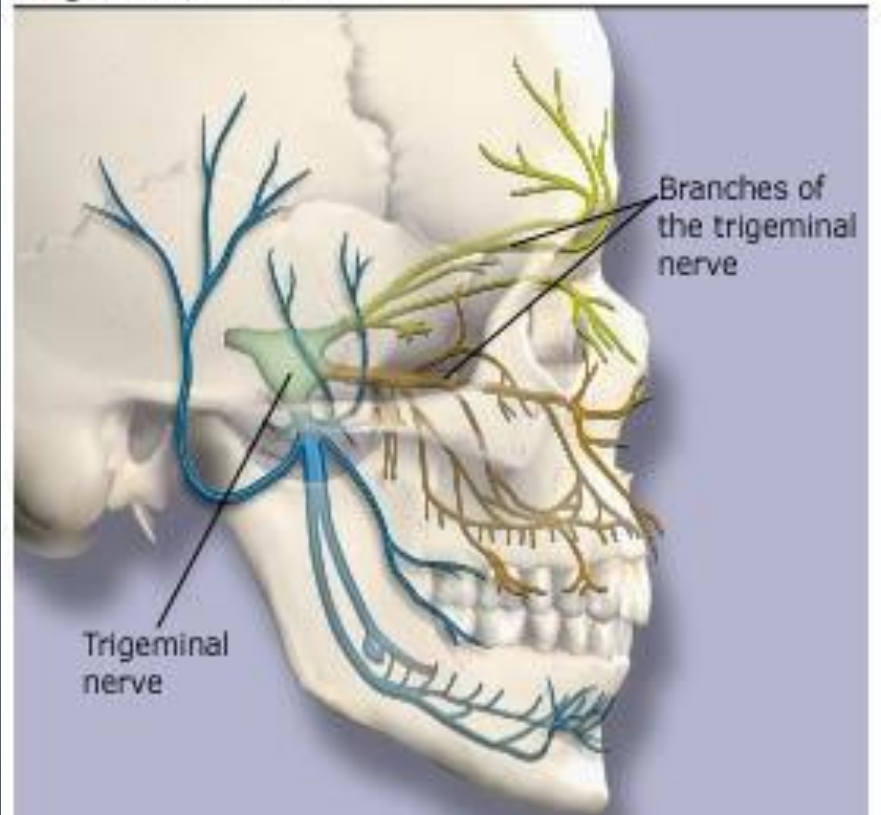






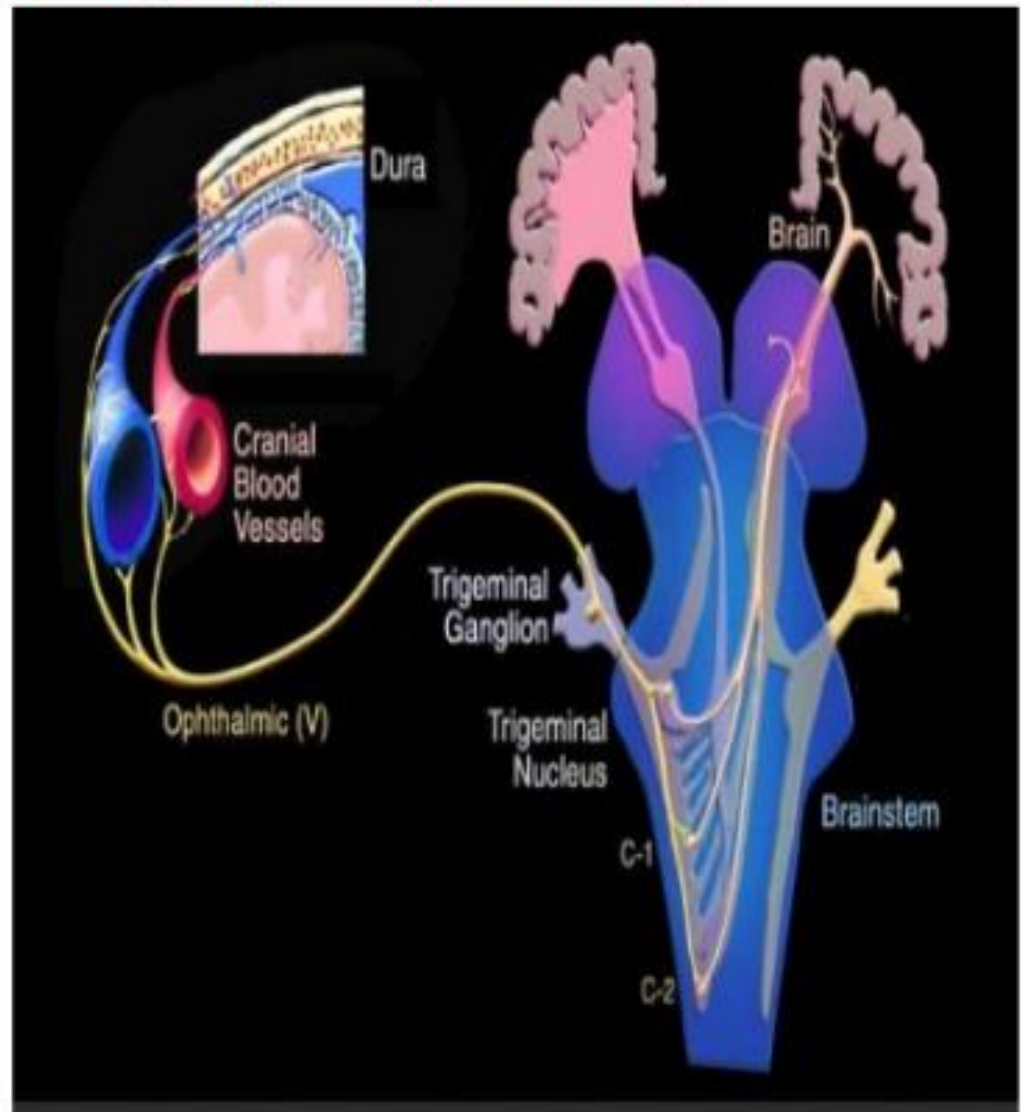


Trigeminal Nerve



Central projections of meningeal primary afferents

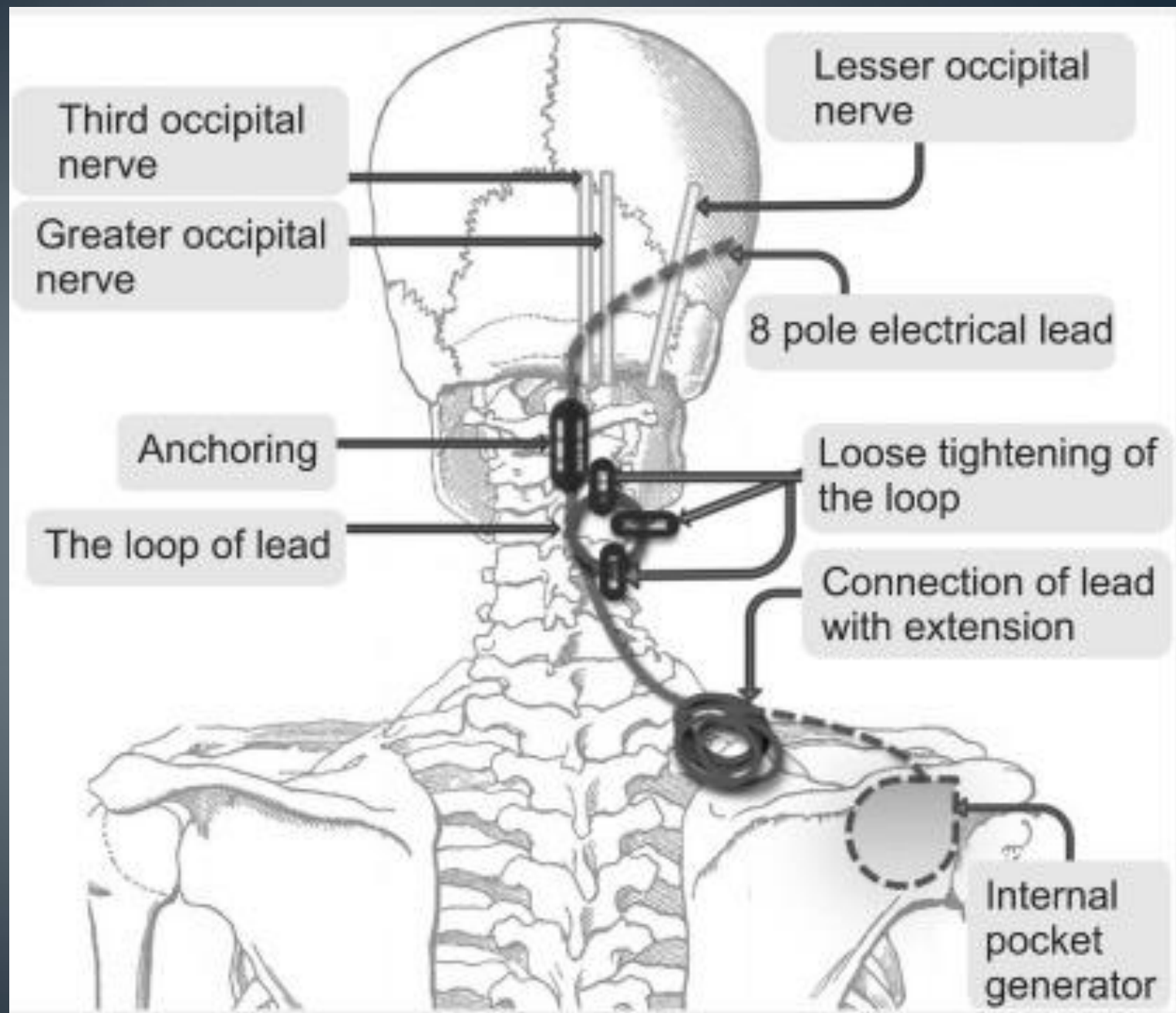
- Central processes of meningeal sensory afferents enter the brainstem via the trigeminal tract
- They pass caudally giving off collaterals that terminate in the spinal trigeminal nucleus (SpVC) and upper cervical spinal cord (C1–C3).

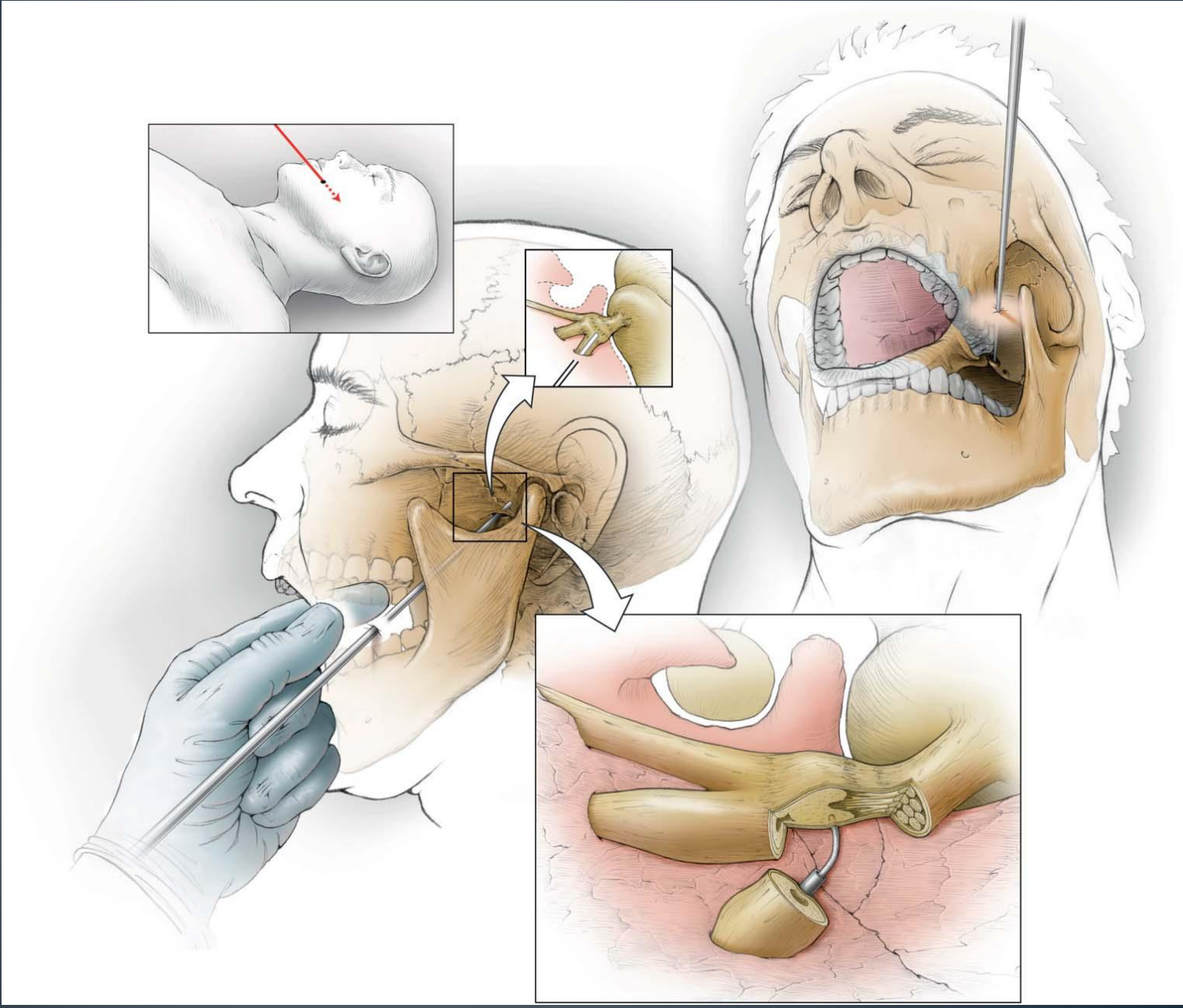




eNeura
THERAPEUTICS®







Good

Old

STRETCH



TYPES OF HEADACHES

Sinus:

pain is usually behind the forehead and/or cheekbones



Cluster:

pain is in



Tension:

pain is like a band squeezing the head

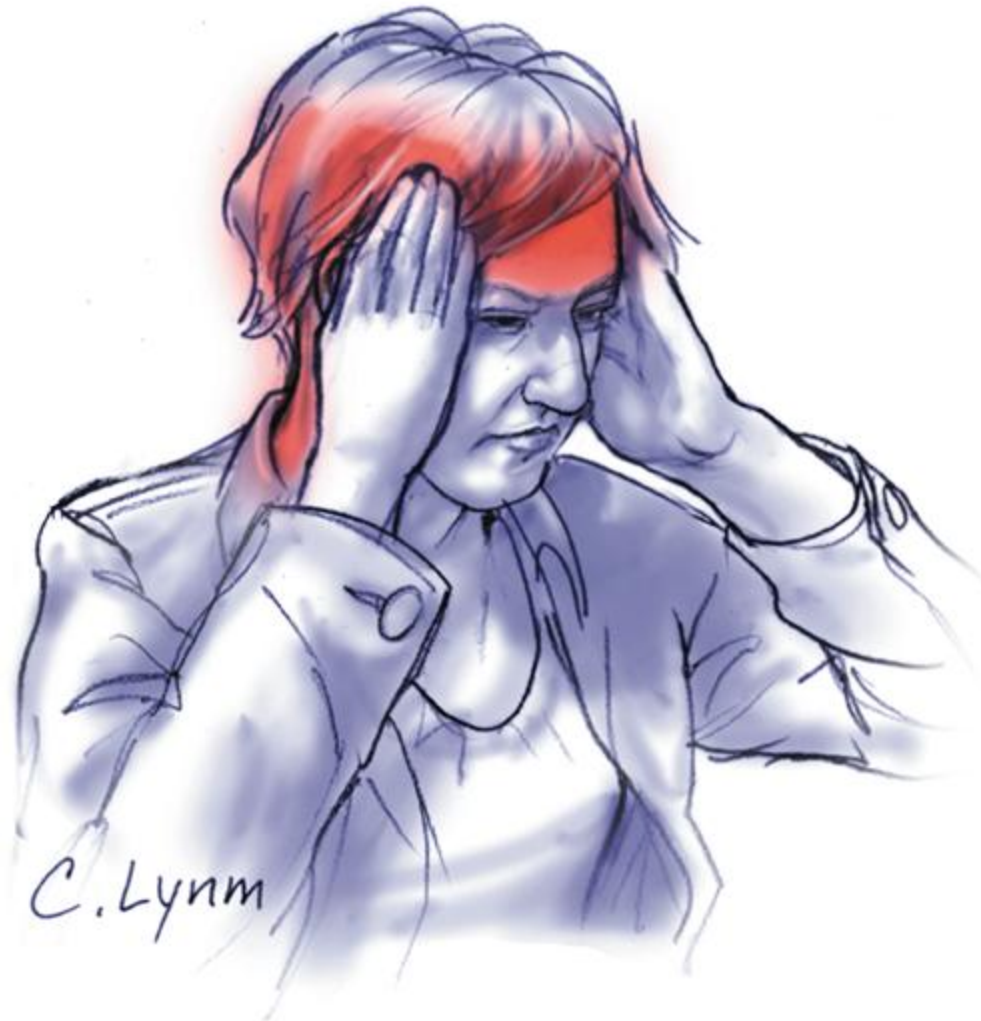


Migraine:

pain, nausea & visual changes are typical of classic form



Tension-type headache





Cluster

May be precipitated by triggers



Prominent temporal artery

Ptosis, miosis, reddening of eyes

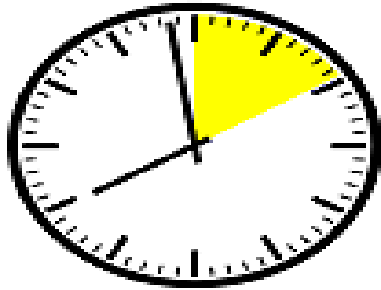
Lacrimation

Rhinorrhea

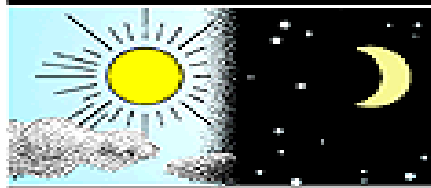
Cluster headache



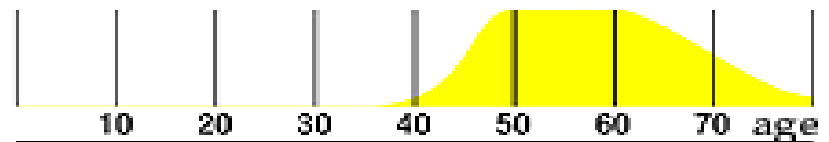
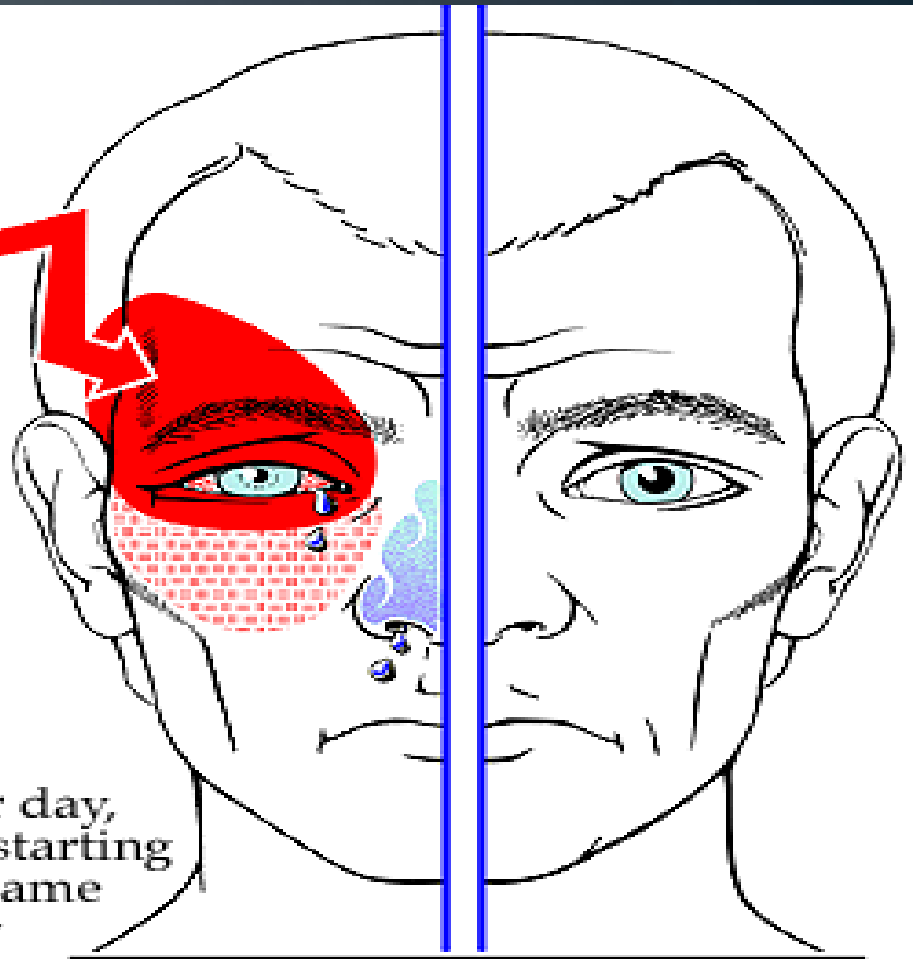
Maximum in 20 minutes



Lasting for 1 to 2 hrs,
of extreme intensity



1 to 3 times per day,
often at night, starting
usually at the same
hours each day





3. Cluster headache and other trigeminal autonomic cephalalgias

3.1 Cluster headache

3.2 Paroxysmal hemicrania

3.3 Short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT)

3.4 Probable trigeminal autonomic cephalalgia

4. Other primary headaches

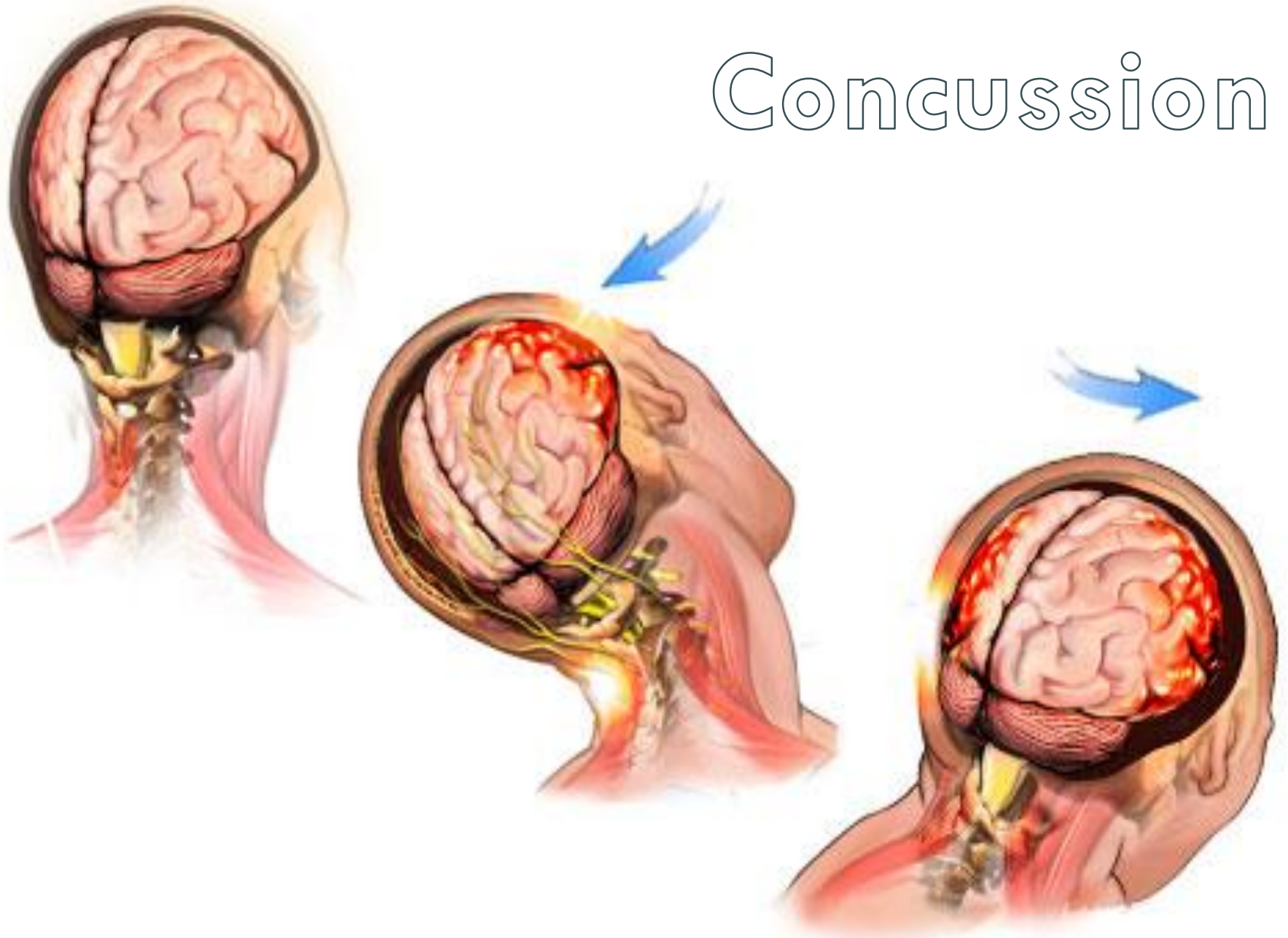
- 4.1 Primary stabbing headache
- 4.2 Primary cough headache
- 4.3 Primary exertional headache
- 4.4 Primary headache associated with sexual activity
- 4.5 Hypnic headache
- 4.6 Primary thunderclap headache
- 4.7 Hemicrania continua
- 4.8 New daily-persistent headache (NDPH)

Part 2:

The secondary headaches

5. Headache attributed to head and/or neck trauma
6. Headache attributed to cranial or cervical vascular disorder
7. Headache attributed to non-vascular intracranial disorder
8. Headache attributed to a substance or its withdrawal
9. Headache attributed to infection
10. Headache attributed to disorder of homeostasis
11. Headache or facial pain attributed to disorder of cranium, neck, eyes, ears, nose, sinuses, teeth, mouth or other facial or cranial structures
12. Headache attributed to psychiatric disorder

Concussion

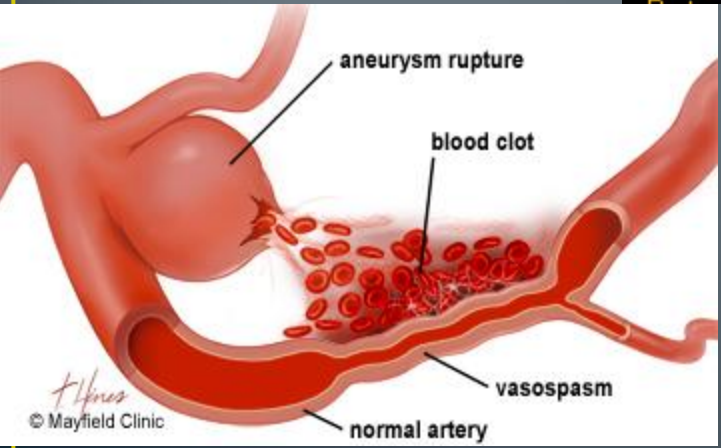
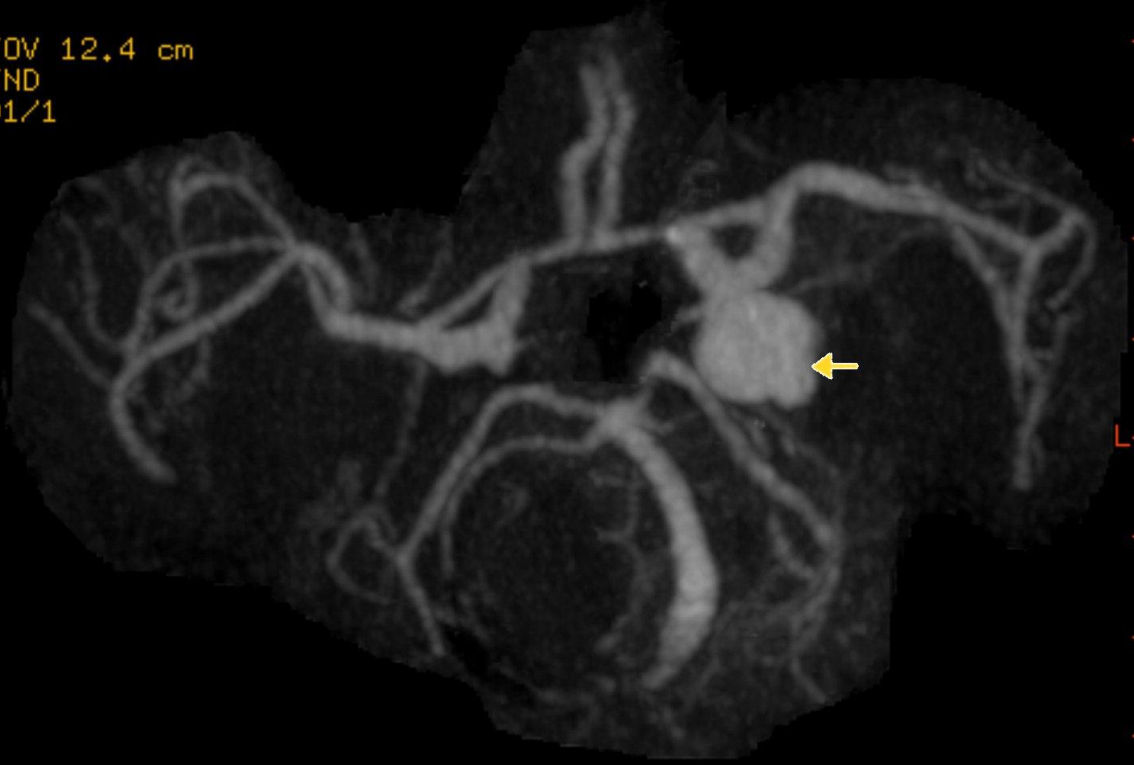


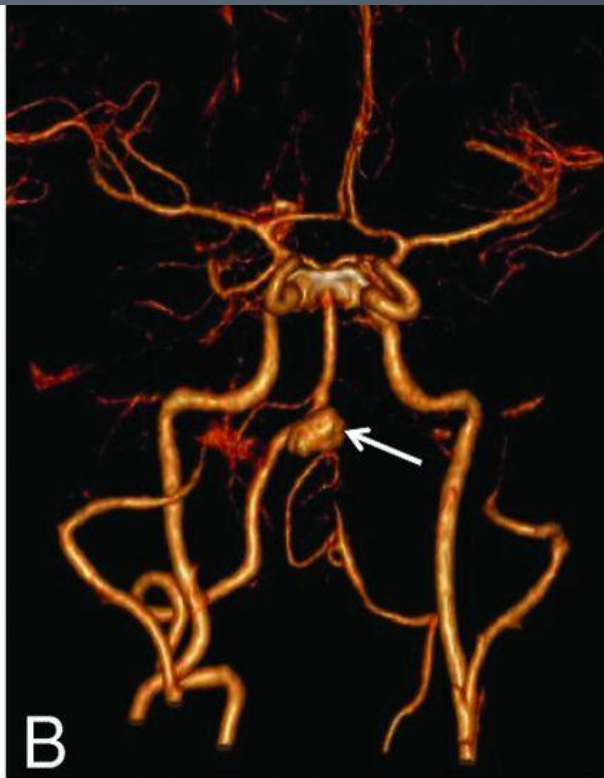
DFOV 12.4 cm
STND
401/1

R

No V01
kv 140
mA 240

Dist 0.00 Wt 1.5



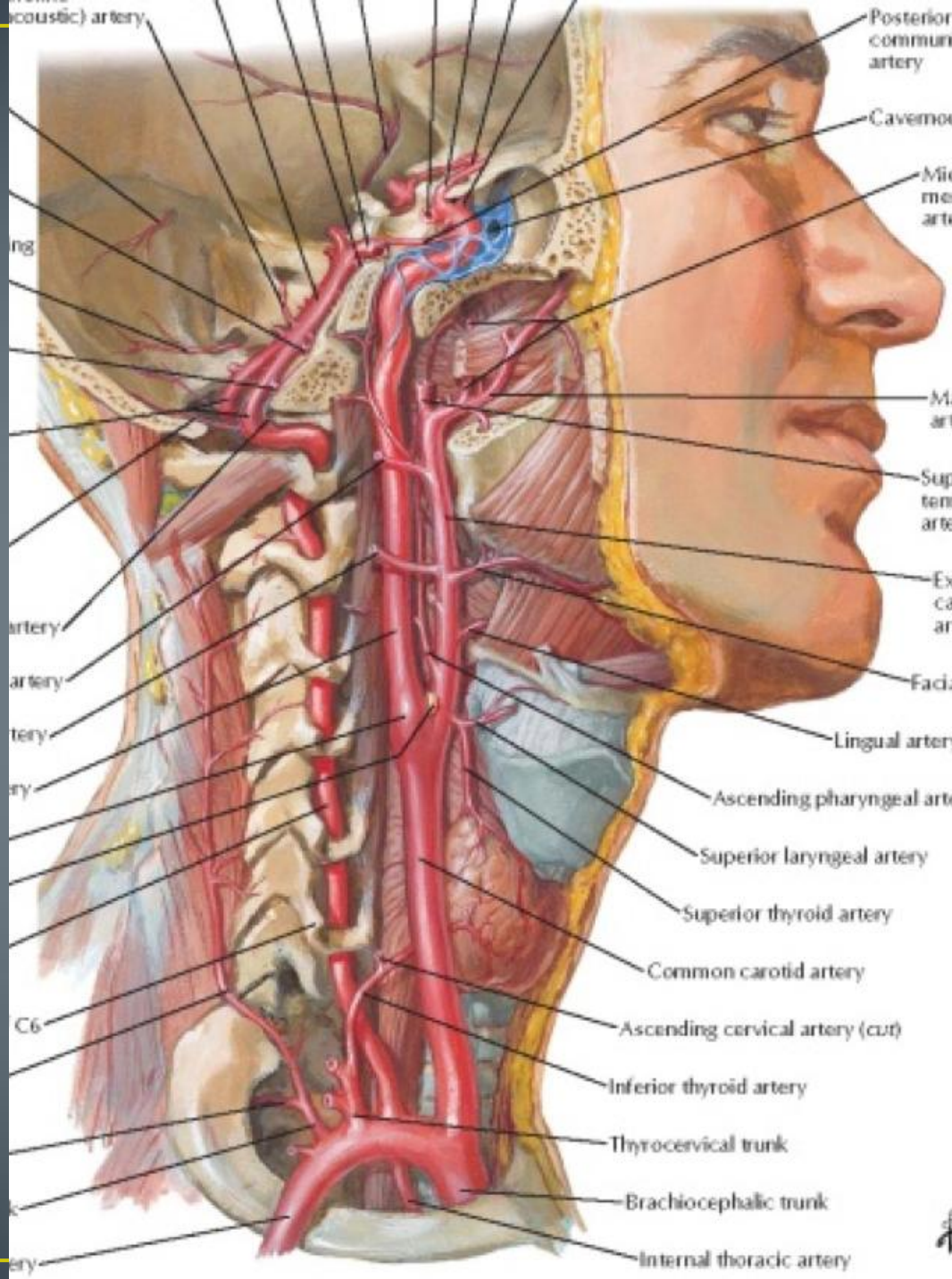


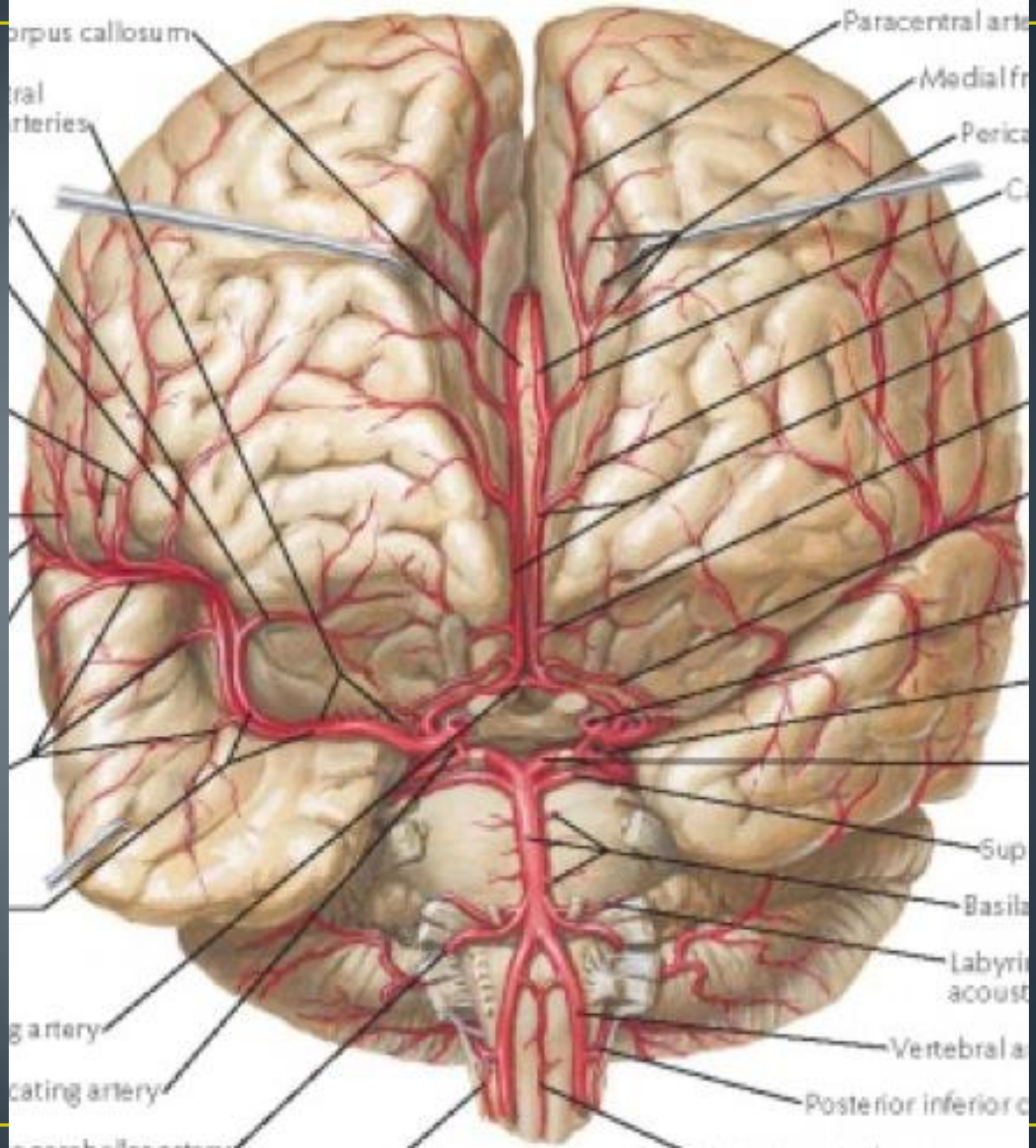


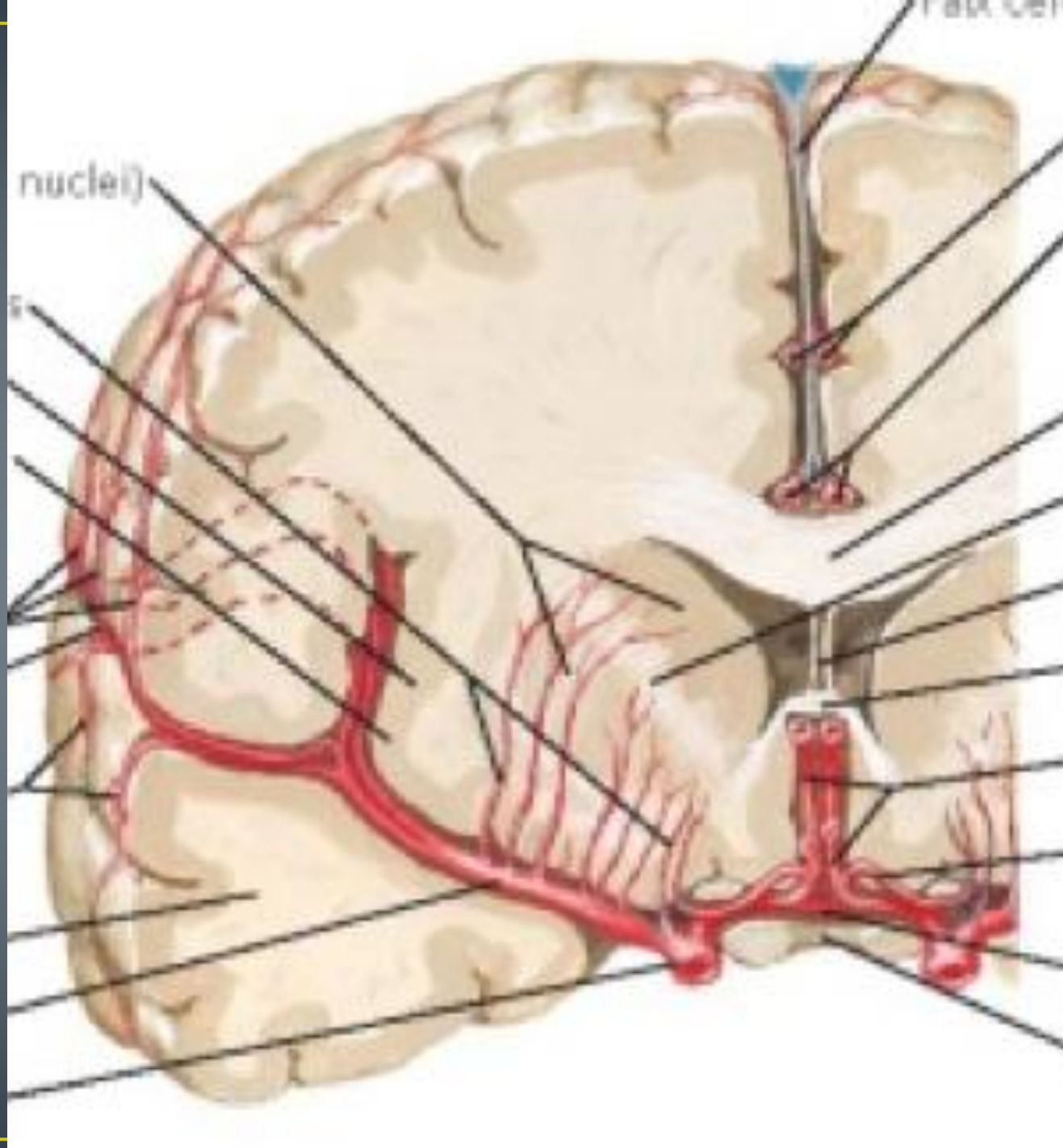
Baseline CT
INR 3.6
Total hematoma volume 15.3 mL

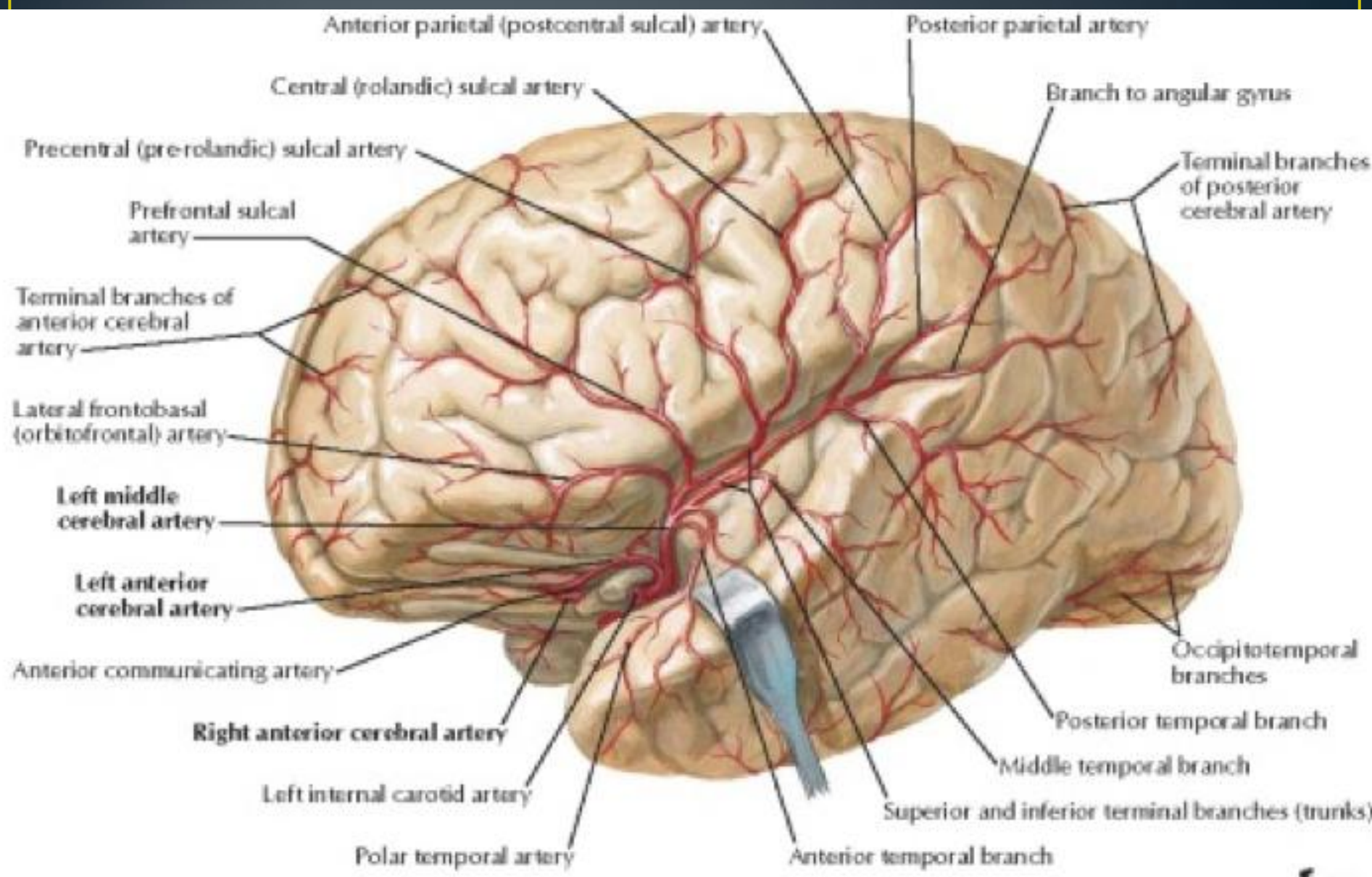


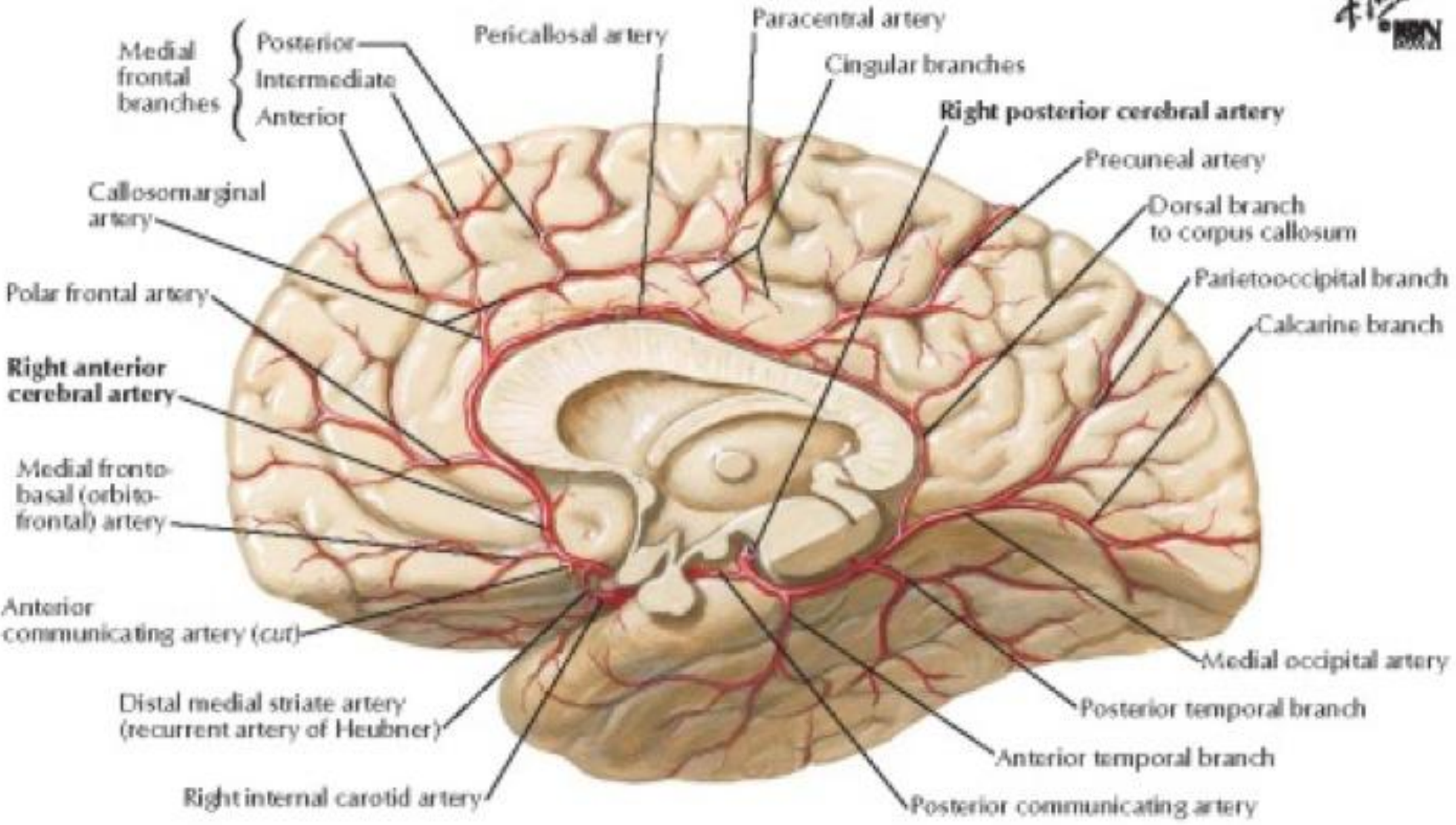
Follow-up CT (19 hours)
INR 1.2
Total hematoma volume 67.6 mL



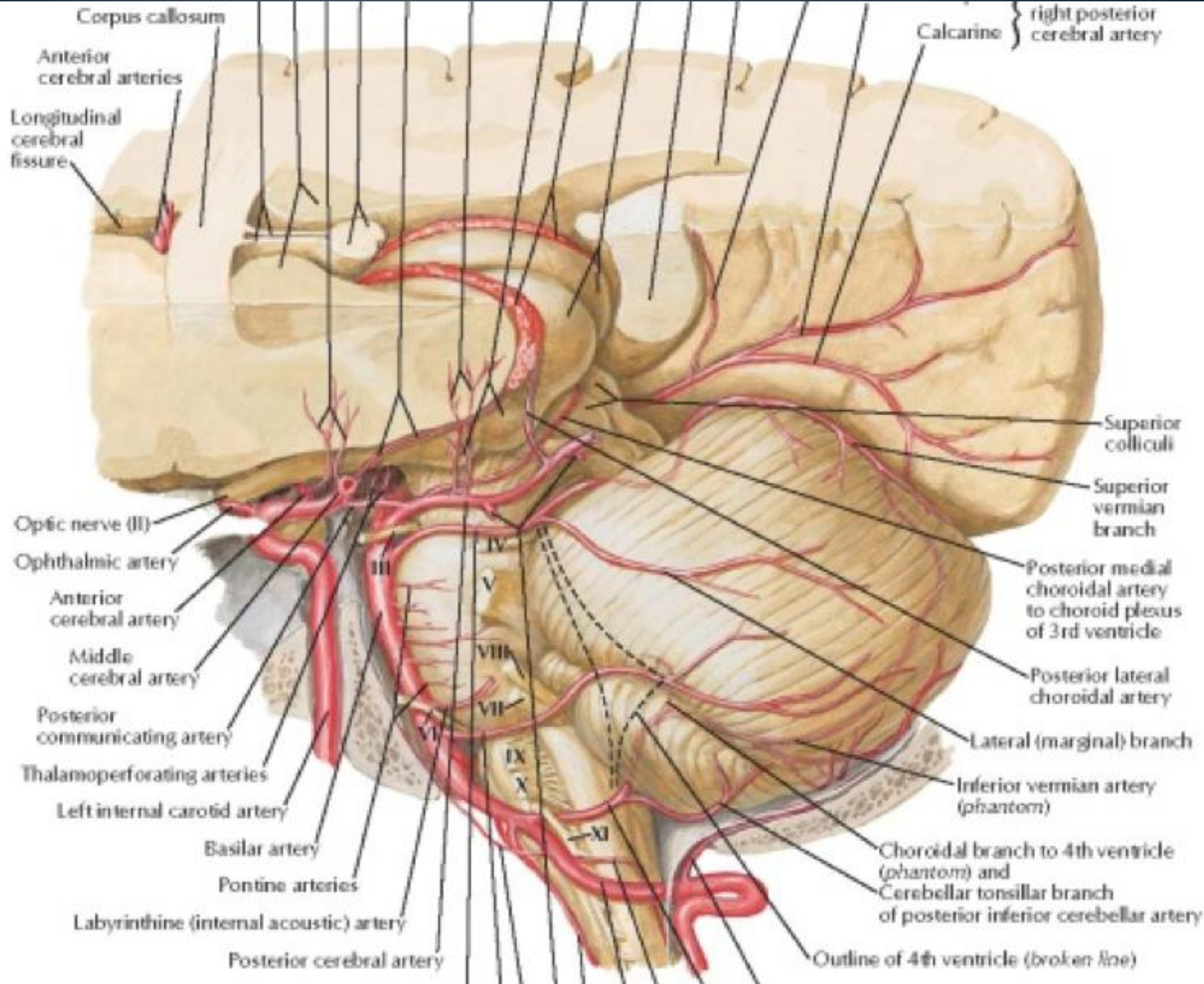


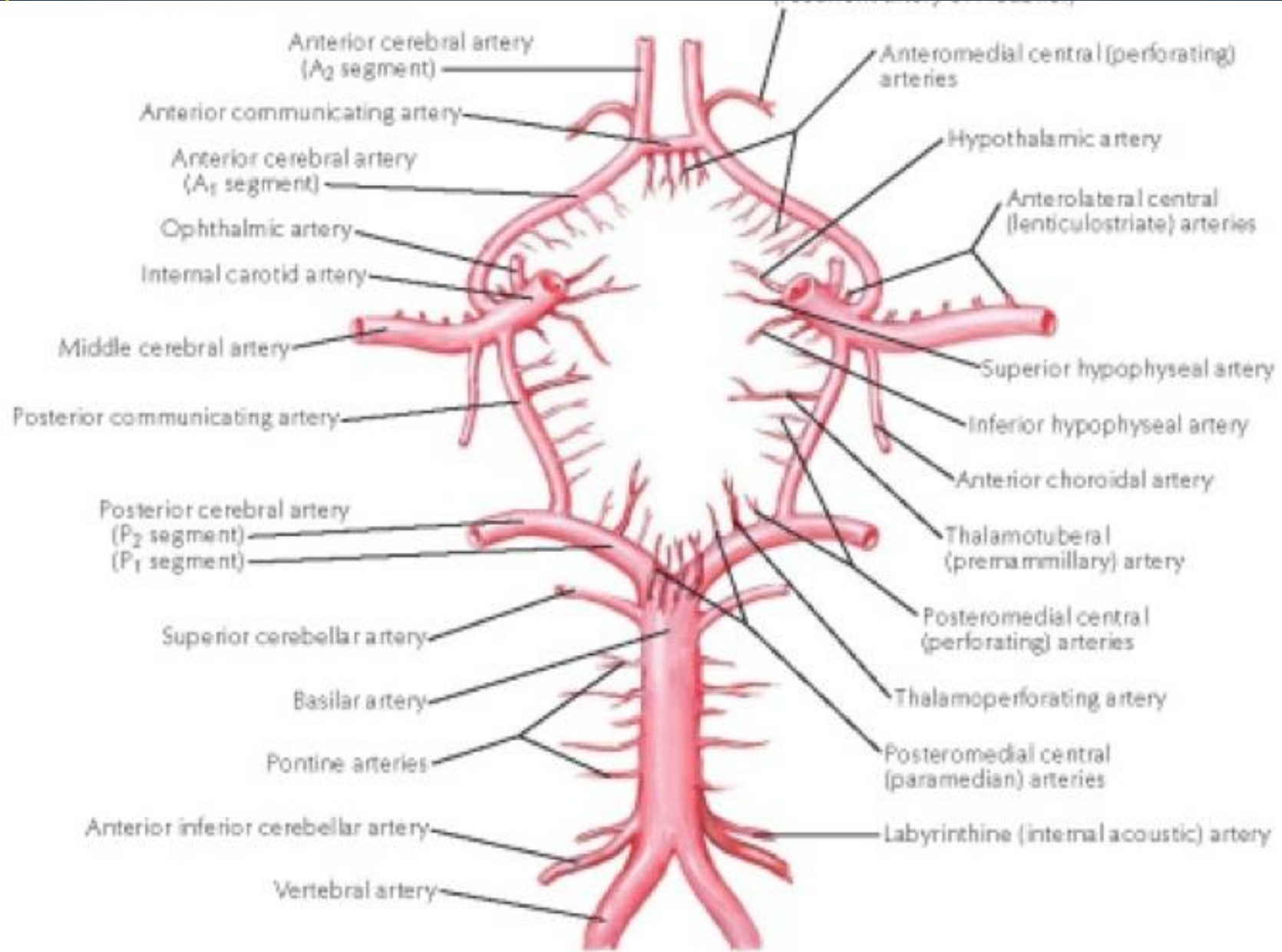




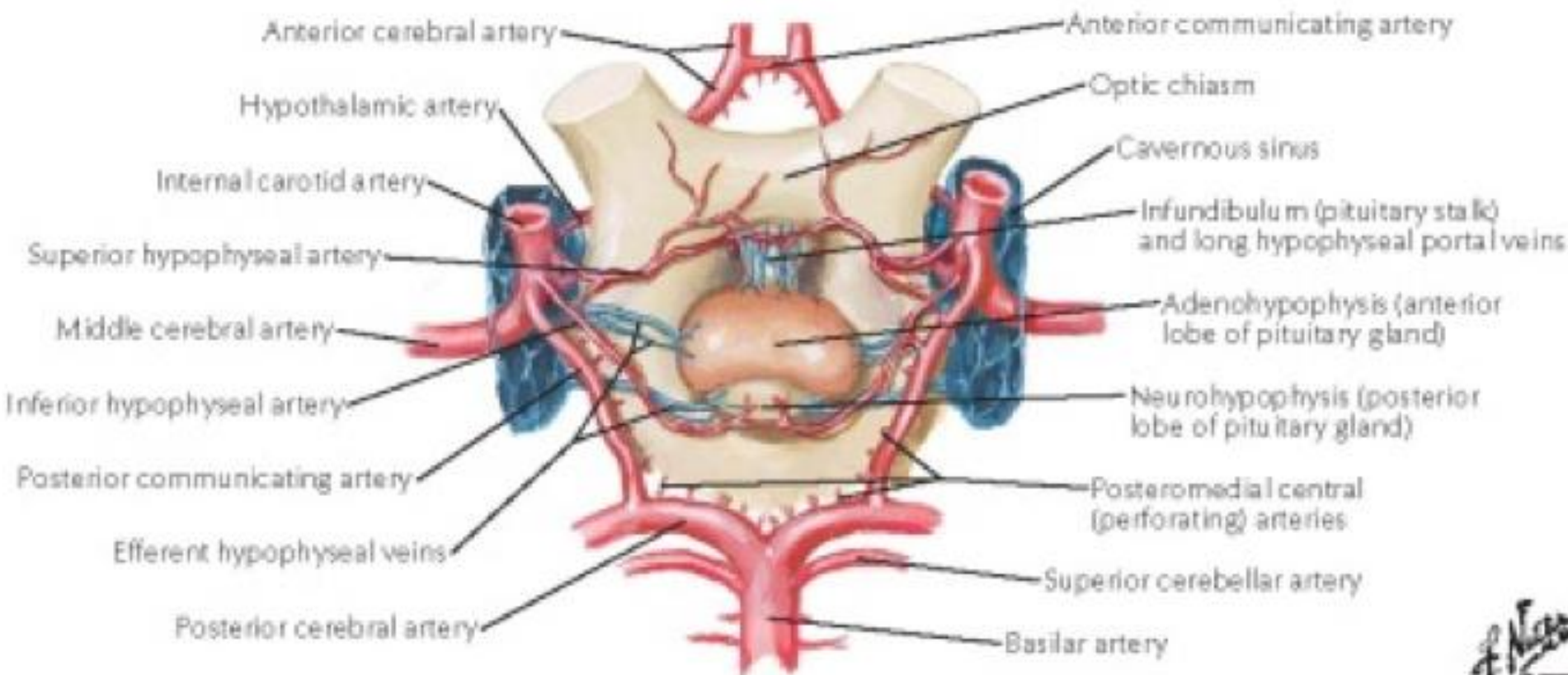


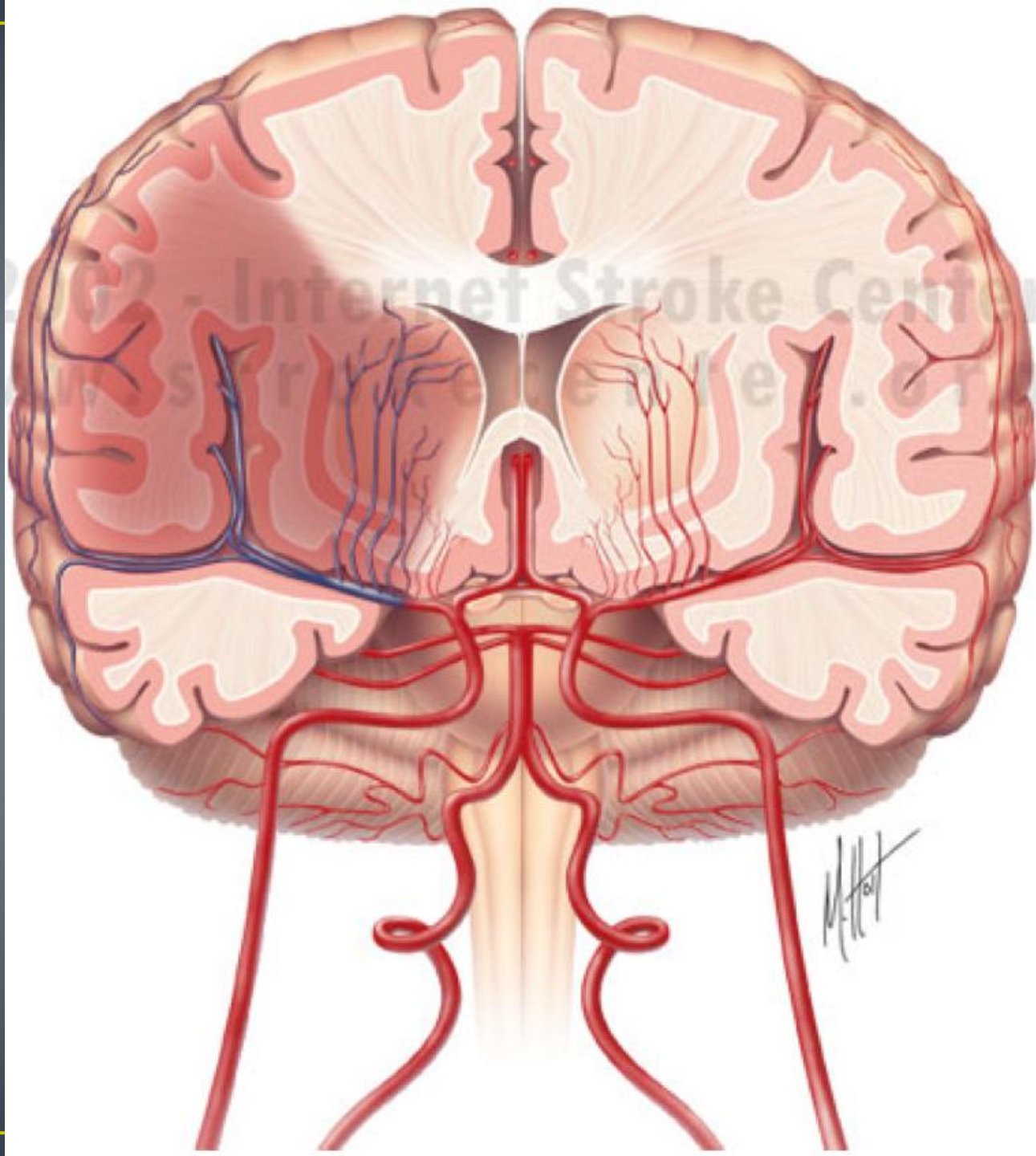
Note: Anterior parietal (postcentral sulcal) artery also occurs as separate anterior parietal and postcentral sulcal arteries

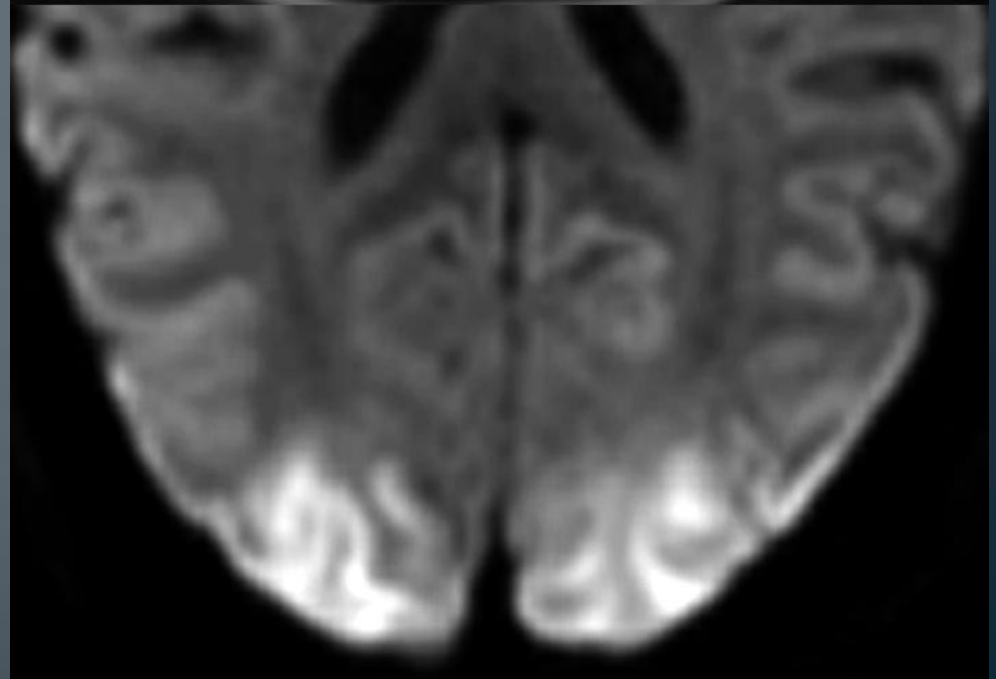
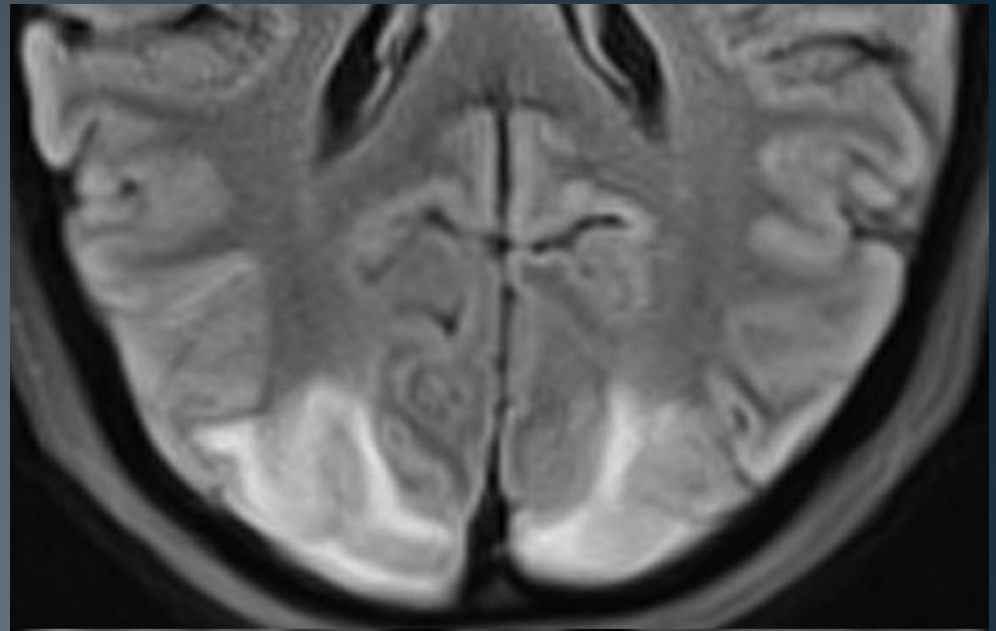
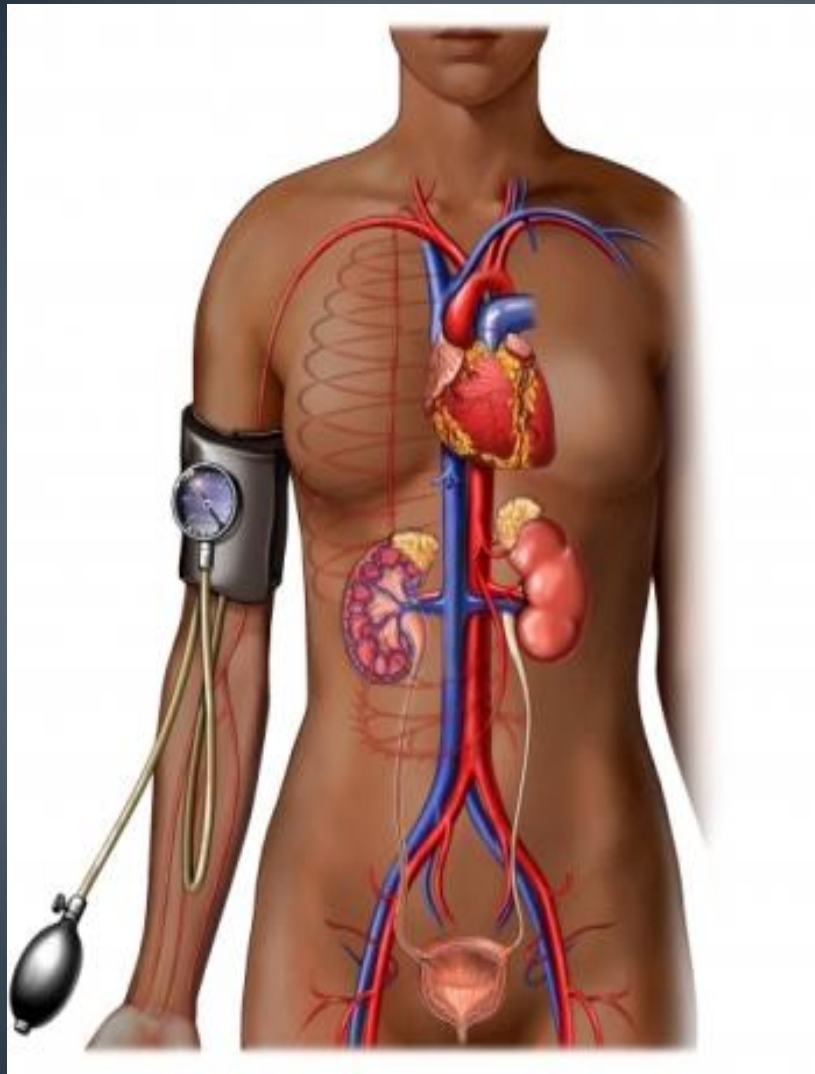




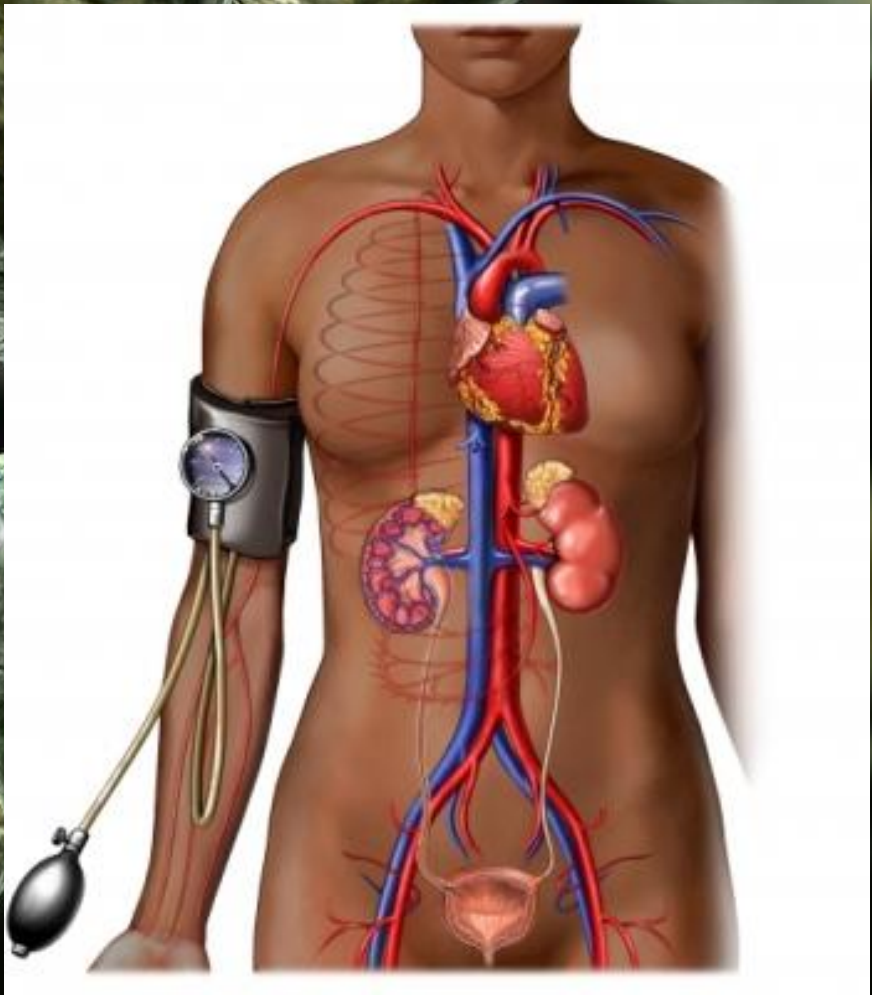
Vessels in situ: inferior view

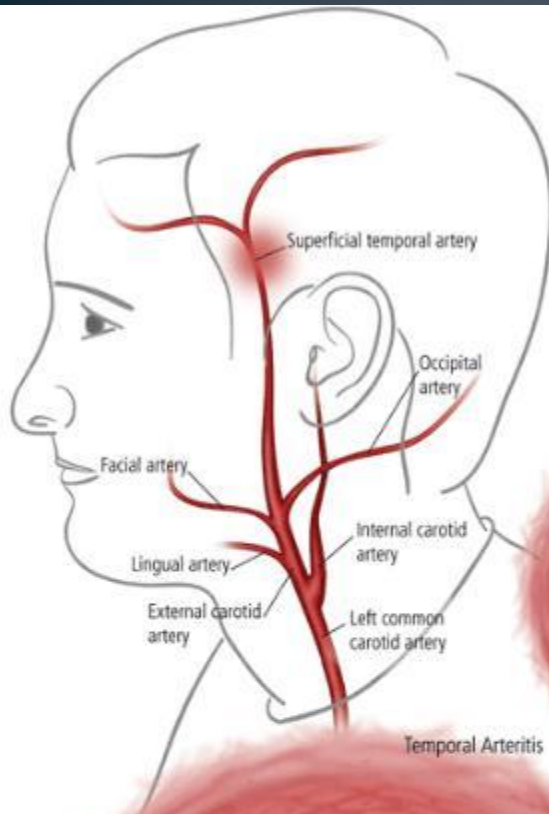








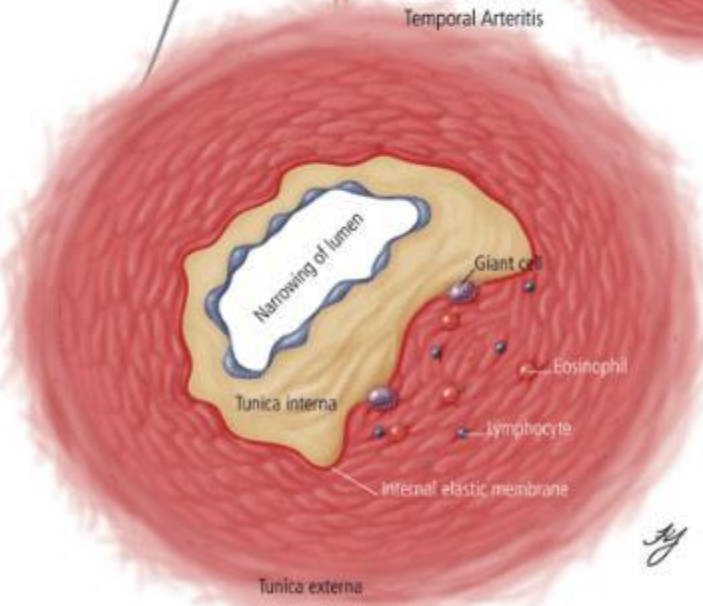
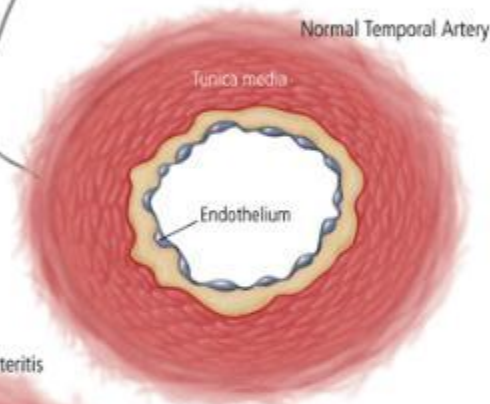




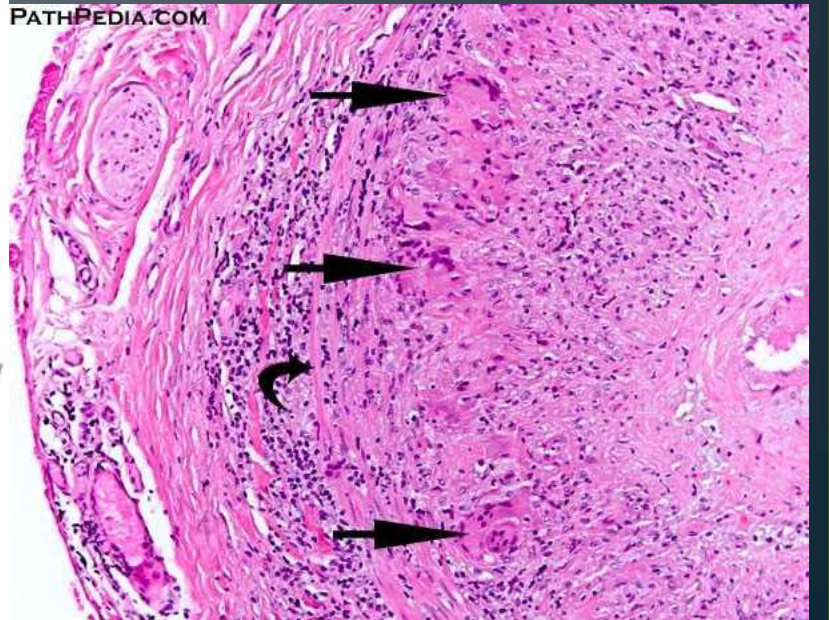
Giant cell arteritis (GCA) can alternatively be called cranial arteritis or temporal arteritis, reflecting the most commonly affected vessels.

GCA is the inflammation of the lining of the arteries and is a relatively common vasculitis among older adults.


Common symptoms of GCA include blurring or loss of vision, headaches, and jaw pain. Other areas such as the head and neck can also be affected by GCA.



Histologically, the tunica media thickens and the lumen narrows due to tunica interna fibrosis. Inflammatory cells can be seen invading the tunica media, especially lymphocytes and eosinophils. Giant cells can occasionally be seen populating areas around the internal elastic membrane.



PATHPEDIA.COM



Signs and symptoms of polymyalgia rheumatica

- Aches or pain in your shoulders
- Aches or pain in your neck, lower back, buttocks, hips or thighs
- Stiffness, especially in the morning
- Limited range of motion in affected joints
- Upper arm tenderness
- Less commonly, pain or stiffness in your wrists or knees
- Possible low-grade fever early on, as well as fatigue, appetite loss, weight loss, depression

JANE DOE

C6 Left Transverse Process Fracture with Left Vertebral Artery Dissection

1. Normal Vertebral Artery



Normal blood flow through vertebral artery

2. Vertebral Artery Trauma with Blockage



Endothelial and muscular layer tearing from C6 transverse process fracture
Thrombus
Cessation of blood flow through artery

3. Reduction of Vertebral Artery Blood Flow



Tear causing lumen stenosis

Normal Anatomy



Coronal MRI of the Cervical Spine



Post-Accident Condition



PCAs

Basilar

V4

V3

V2

V1

Subclav



1

S

R

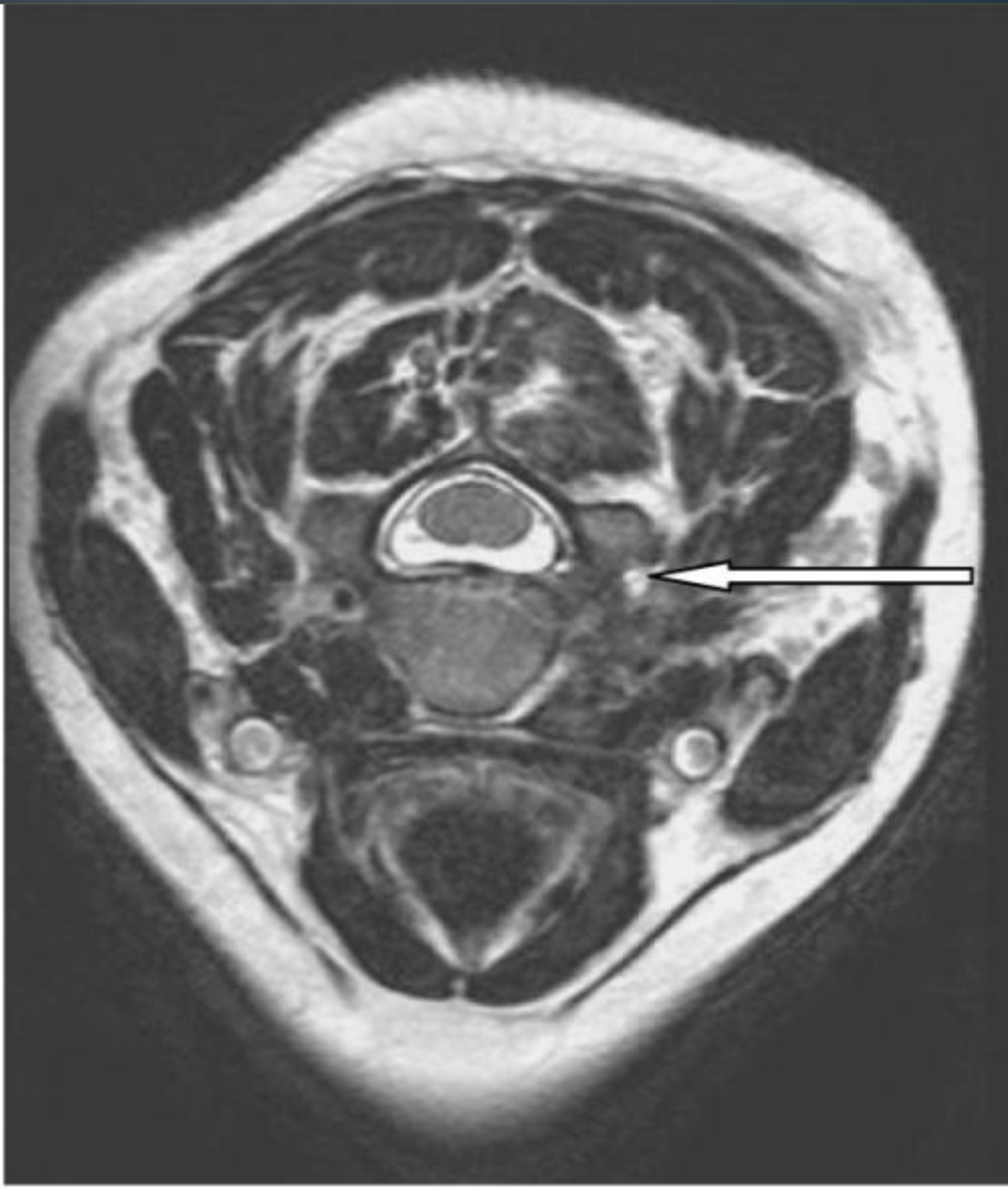
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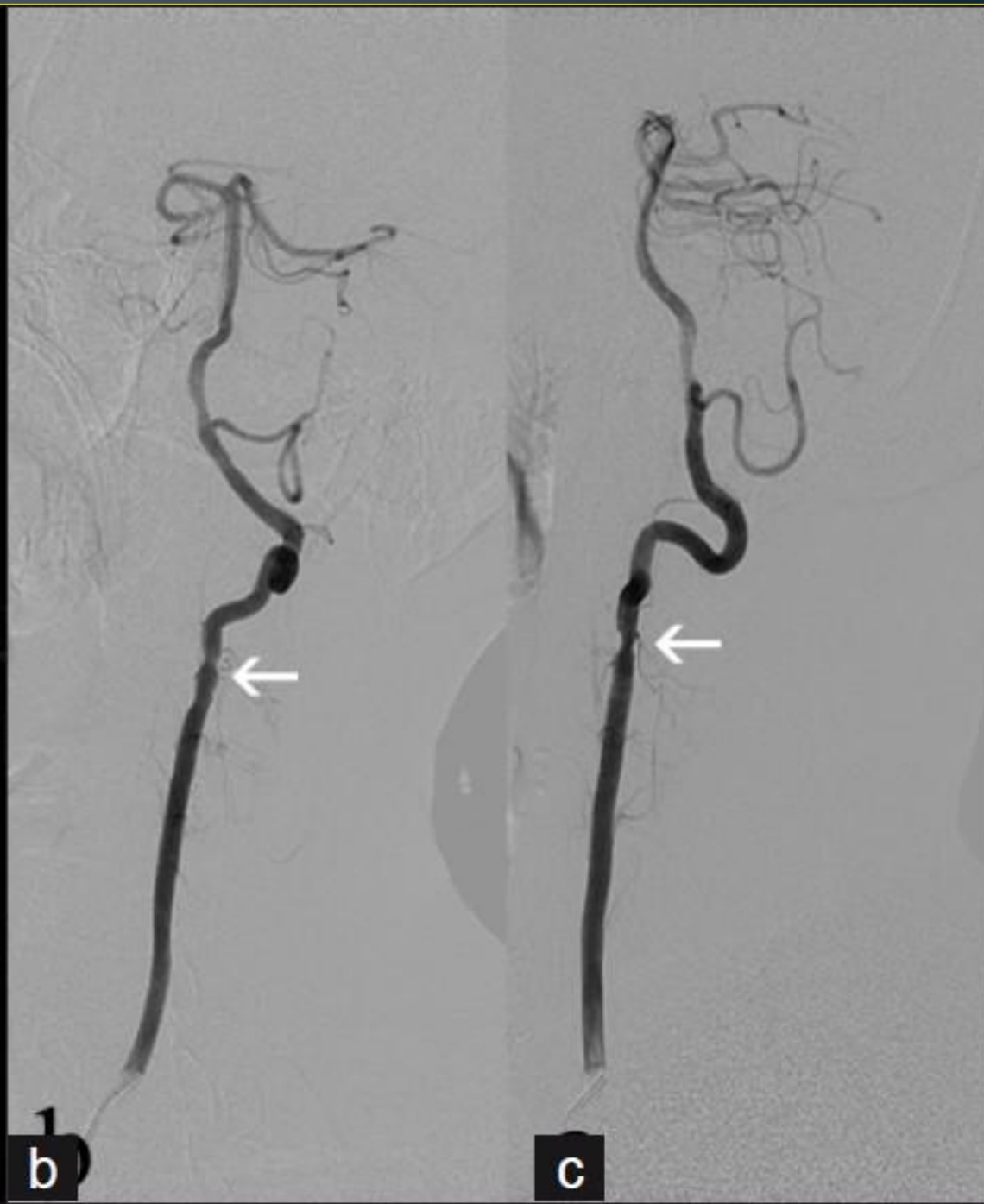
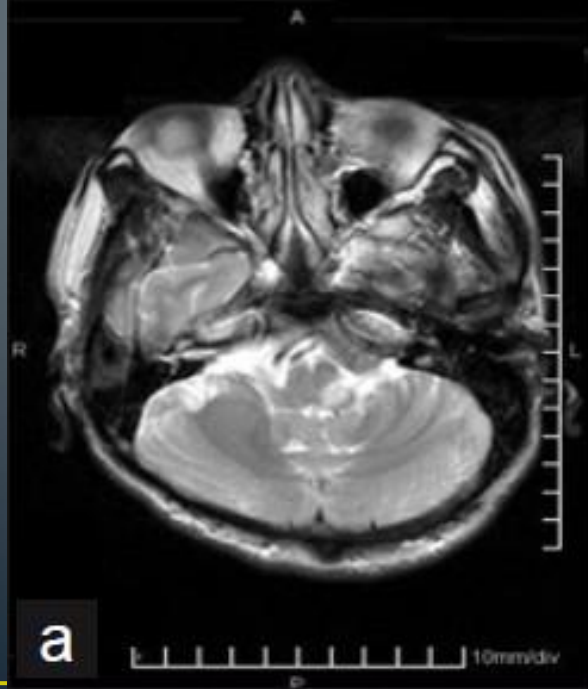
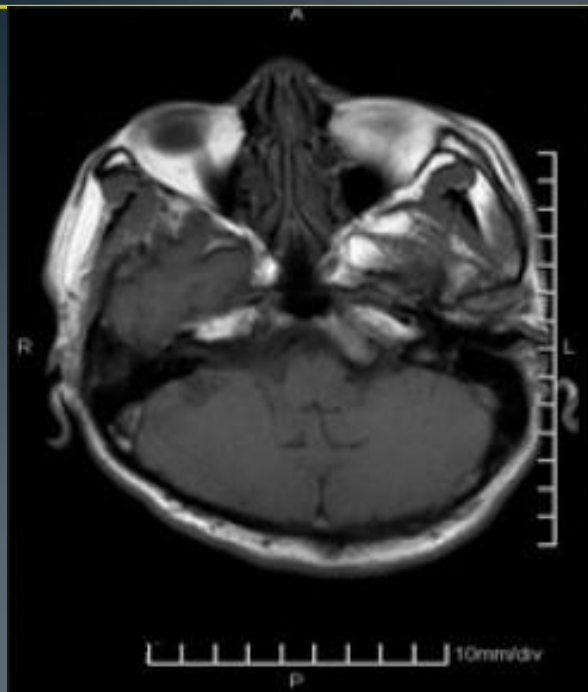
W 255 L 127

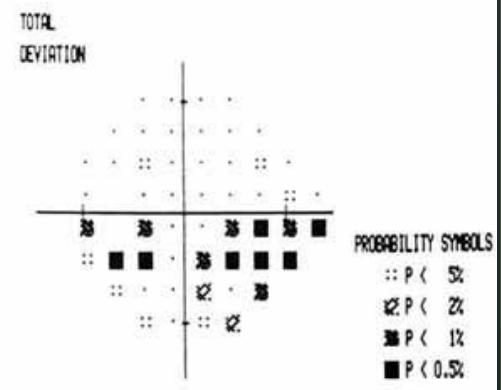
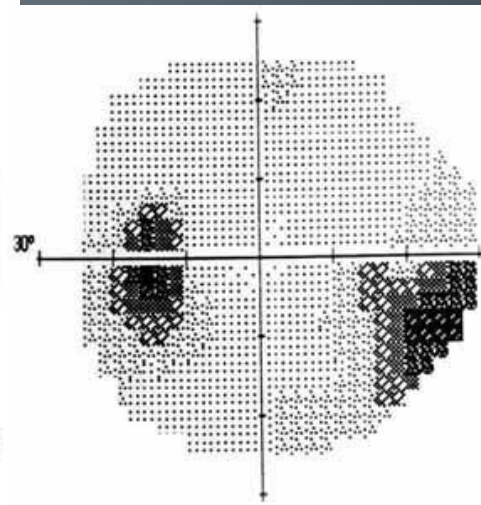
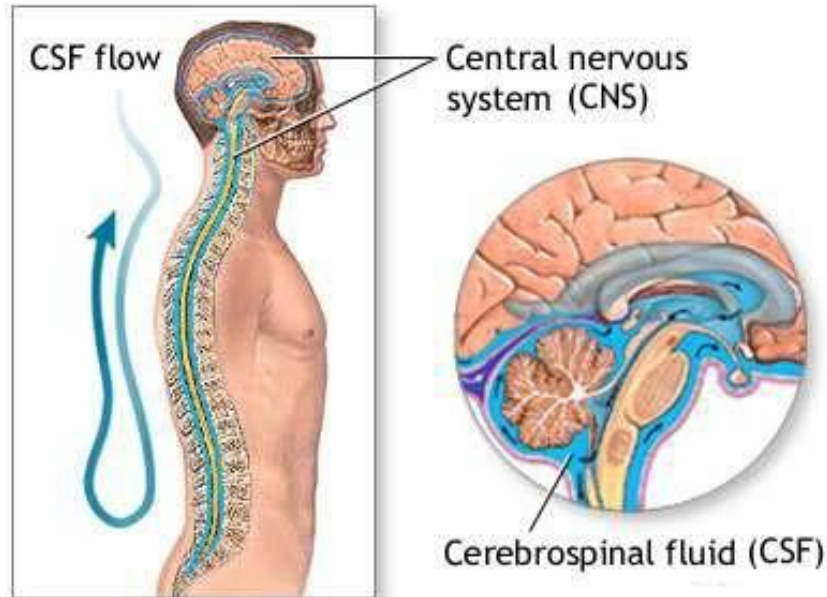
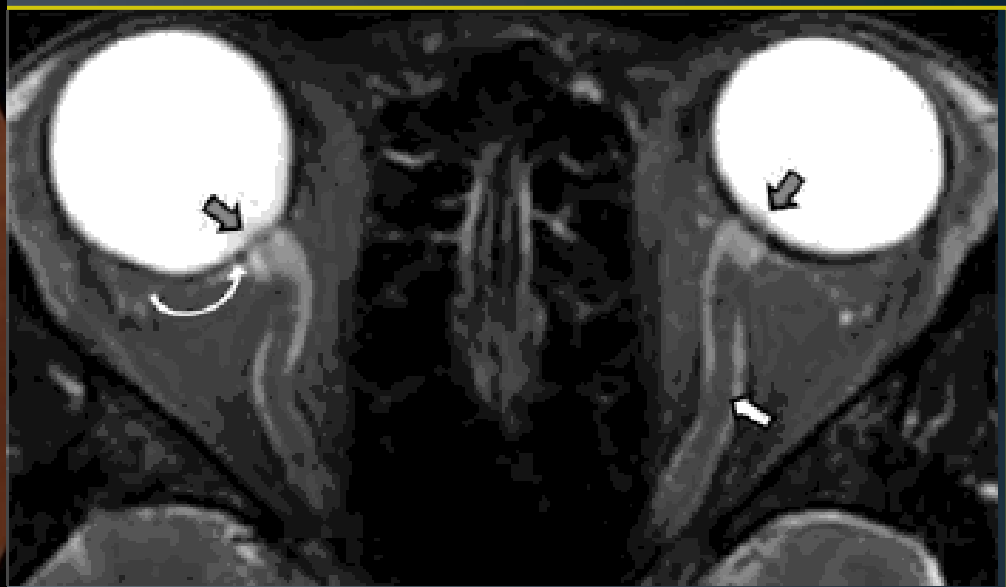
Vitrea®
W/L:719/368
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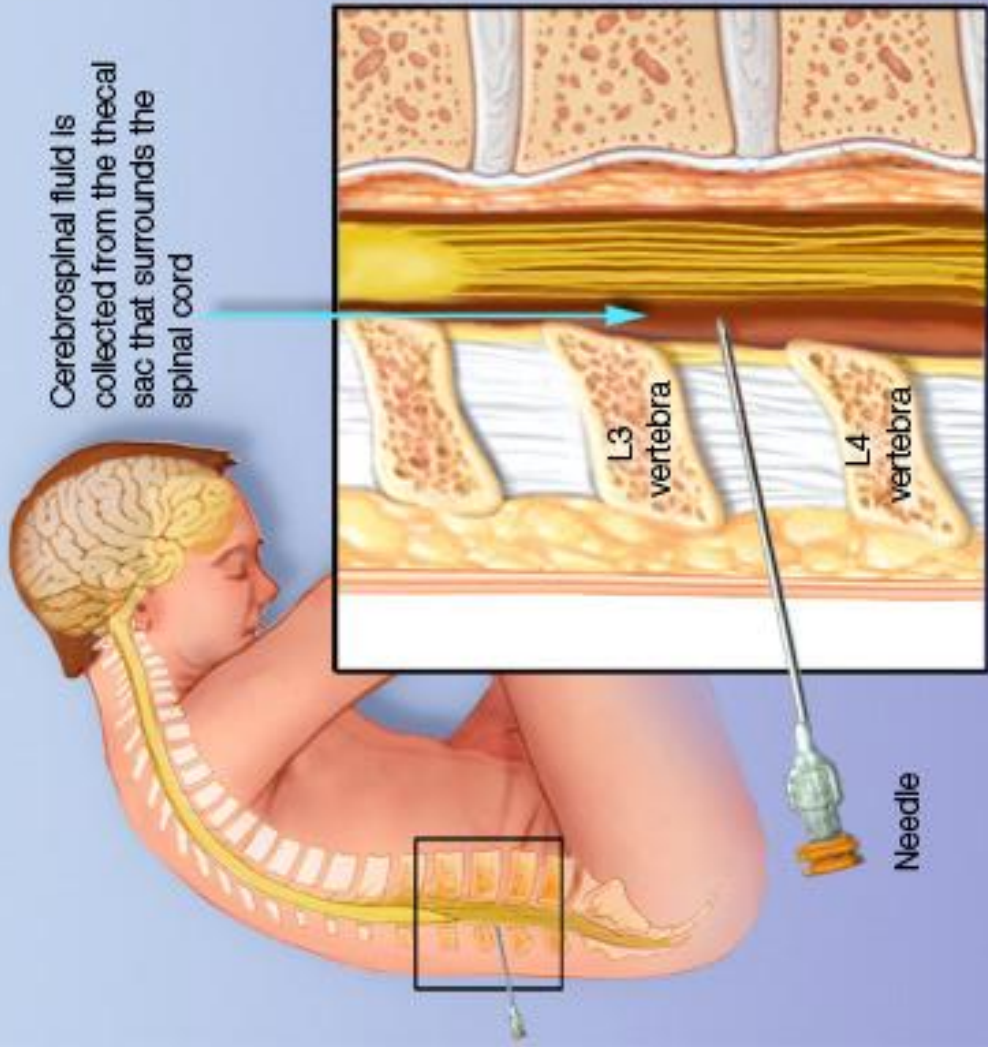
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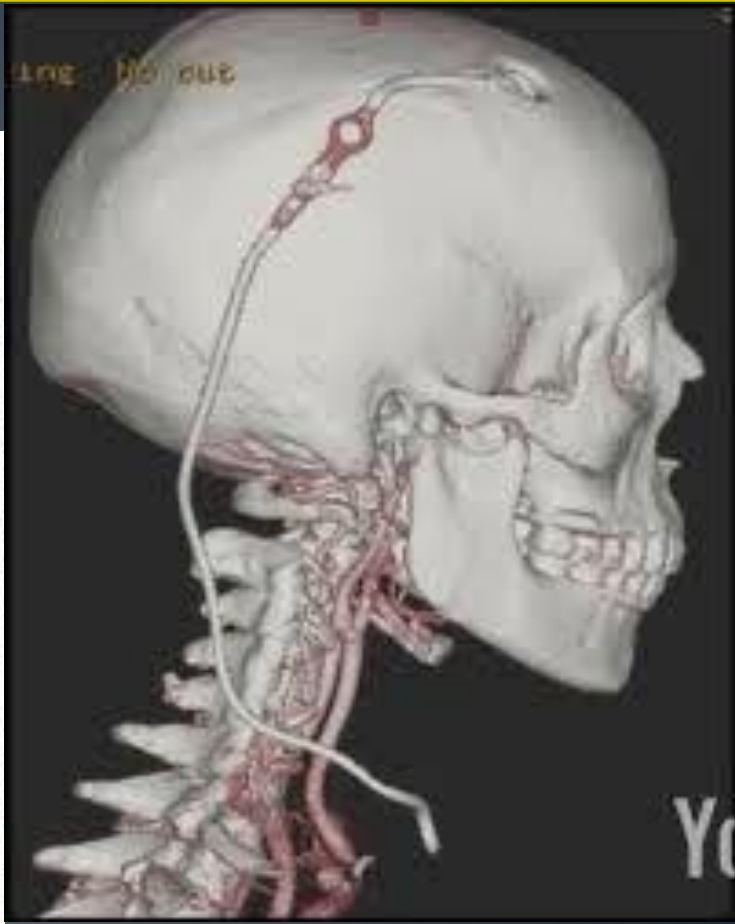




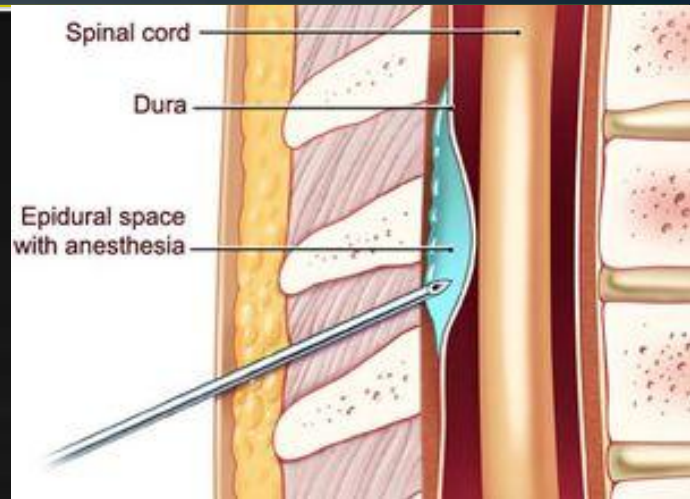
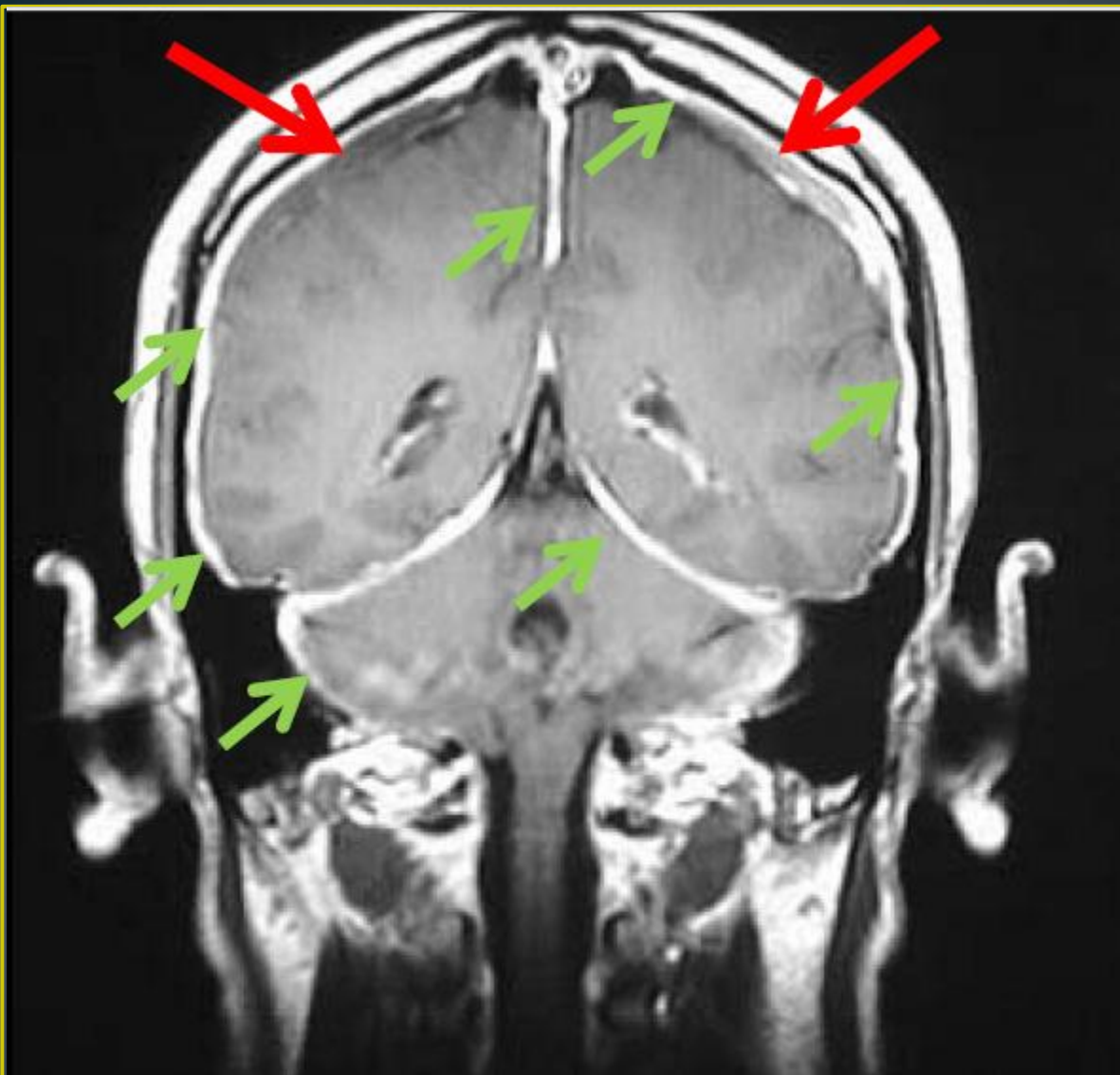




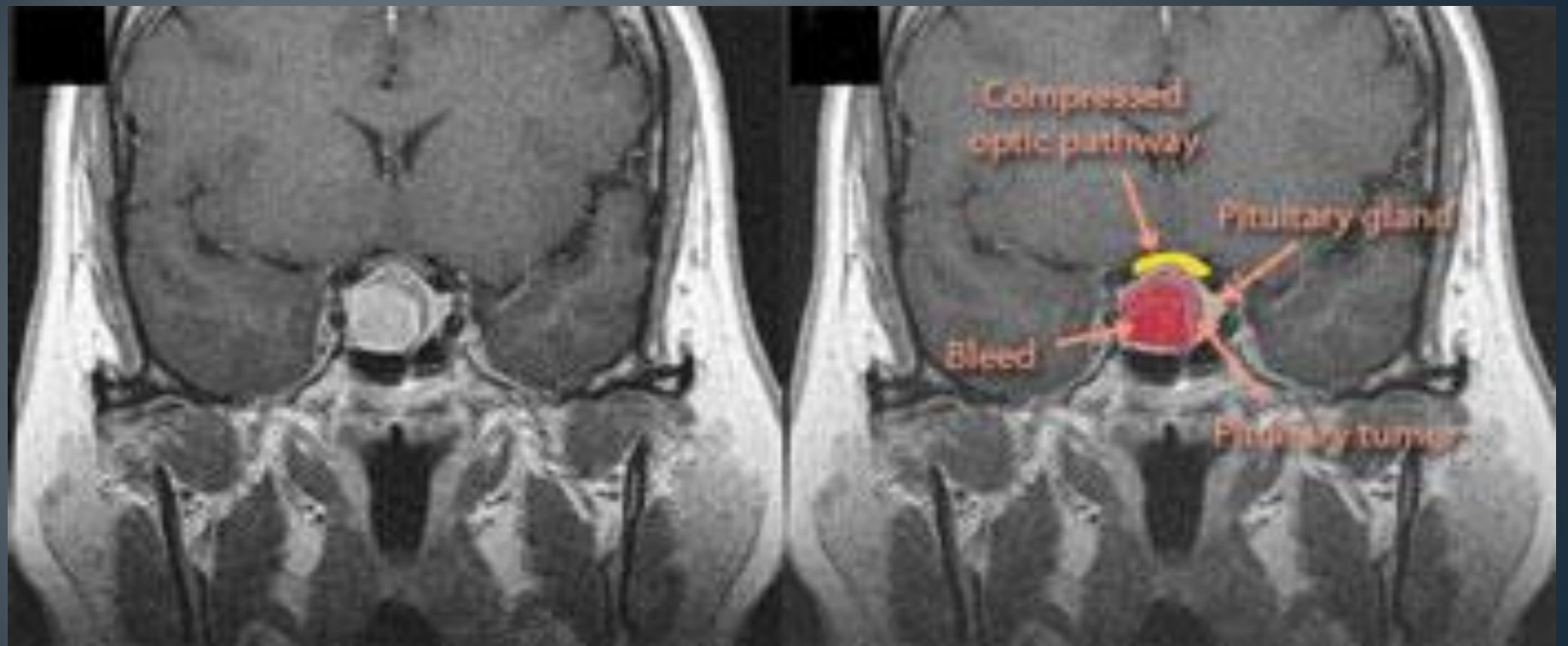
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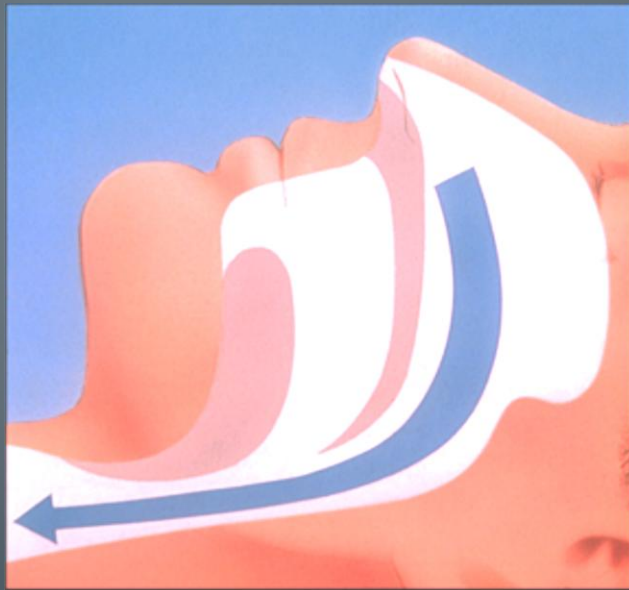




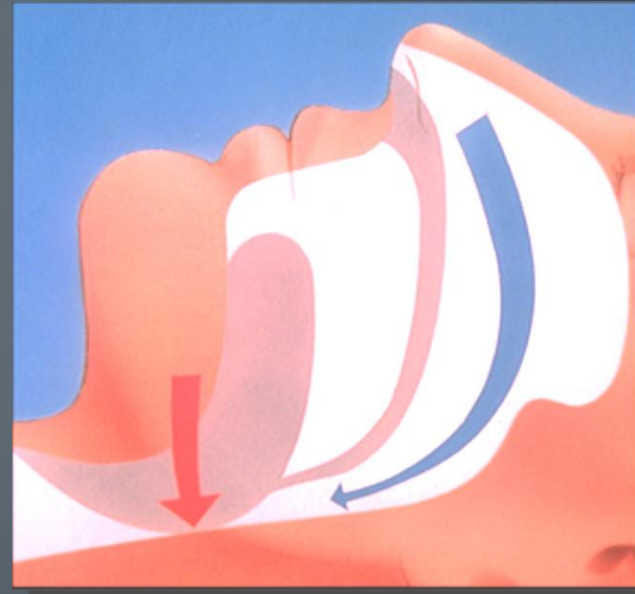


What's her problem

- ✘ OSA: Obstructive Sleep Apnea / Sleep Disordered Breathing (4/100, 2/100)
- ✘ Pauses in breathing last for 10 sec



Normal



Jane

- ✘ Let's look at her history again.

Obesity

