







مستشفى الملك فيصل التخصصي ومركز الأبحاث
**King Faisal Specialist Hospital
and Research Centre**



Brain Attack

Strokeology Introduction

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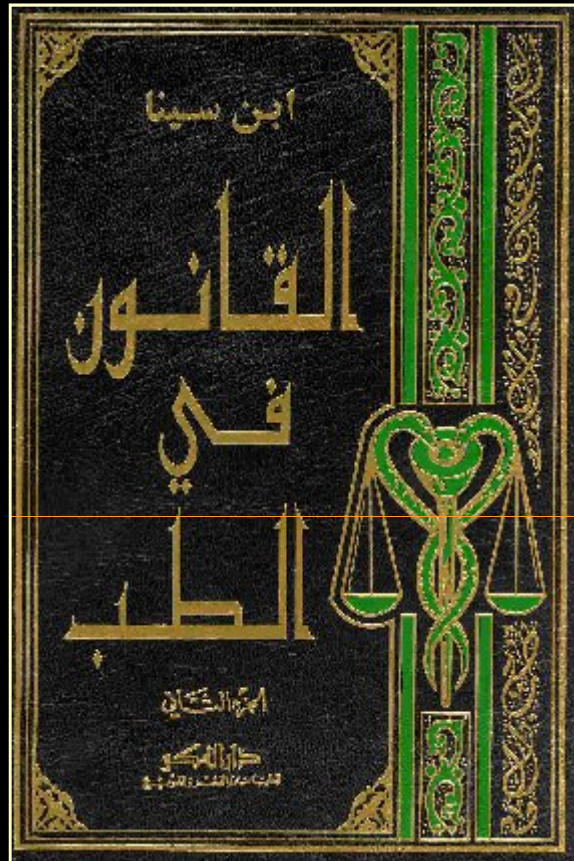
KFSH & RC-J

Neurology Made Easy, KAU, Feb.2004

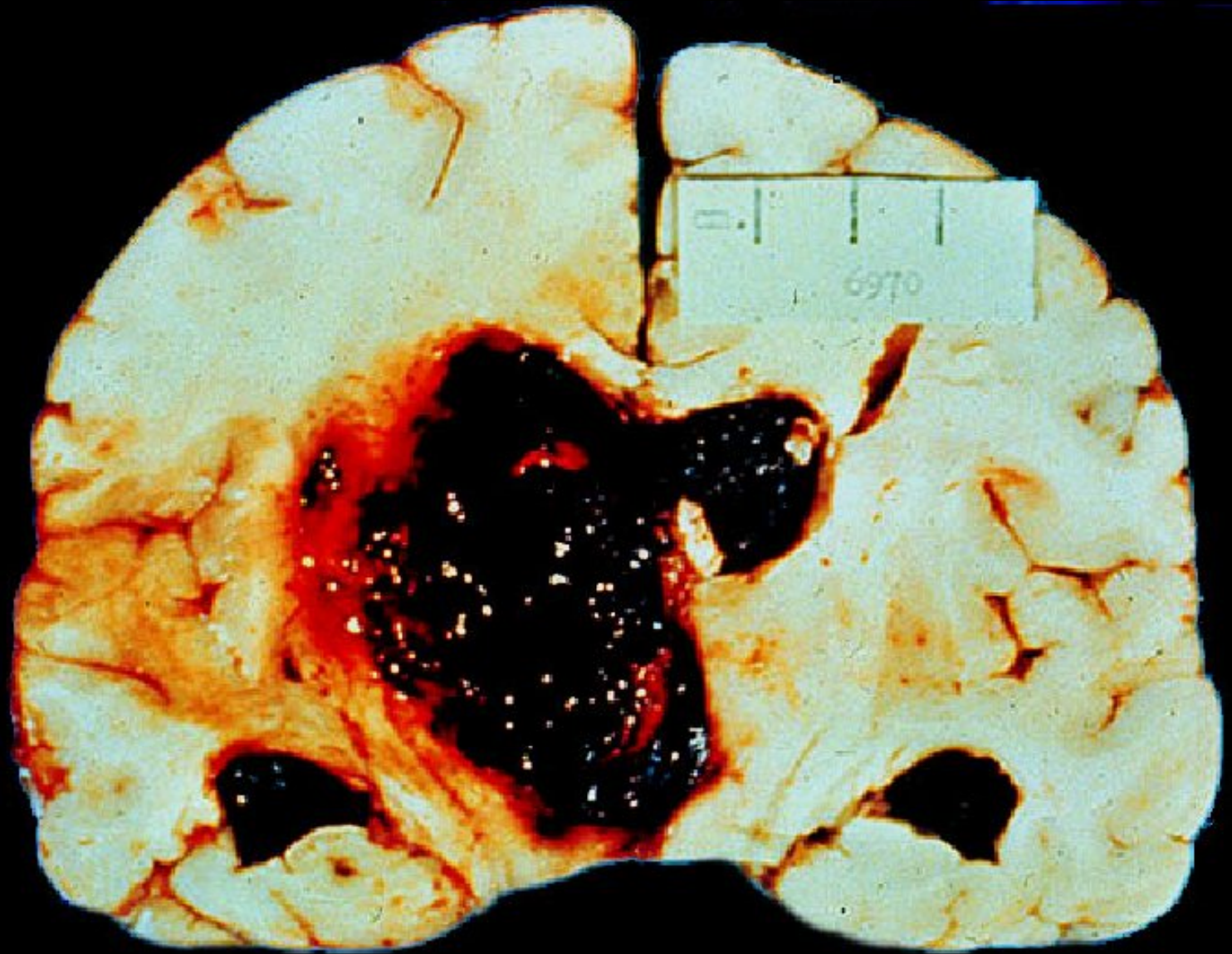
Welcome to Brain World!

Please Have Your Brain
Brained!!!!

He Says!







BG Bleed



Old infarct,
encephalomalacia

PCA

ACA



Pcom.

SCA

ICA

VA

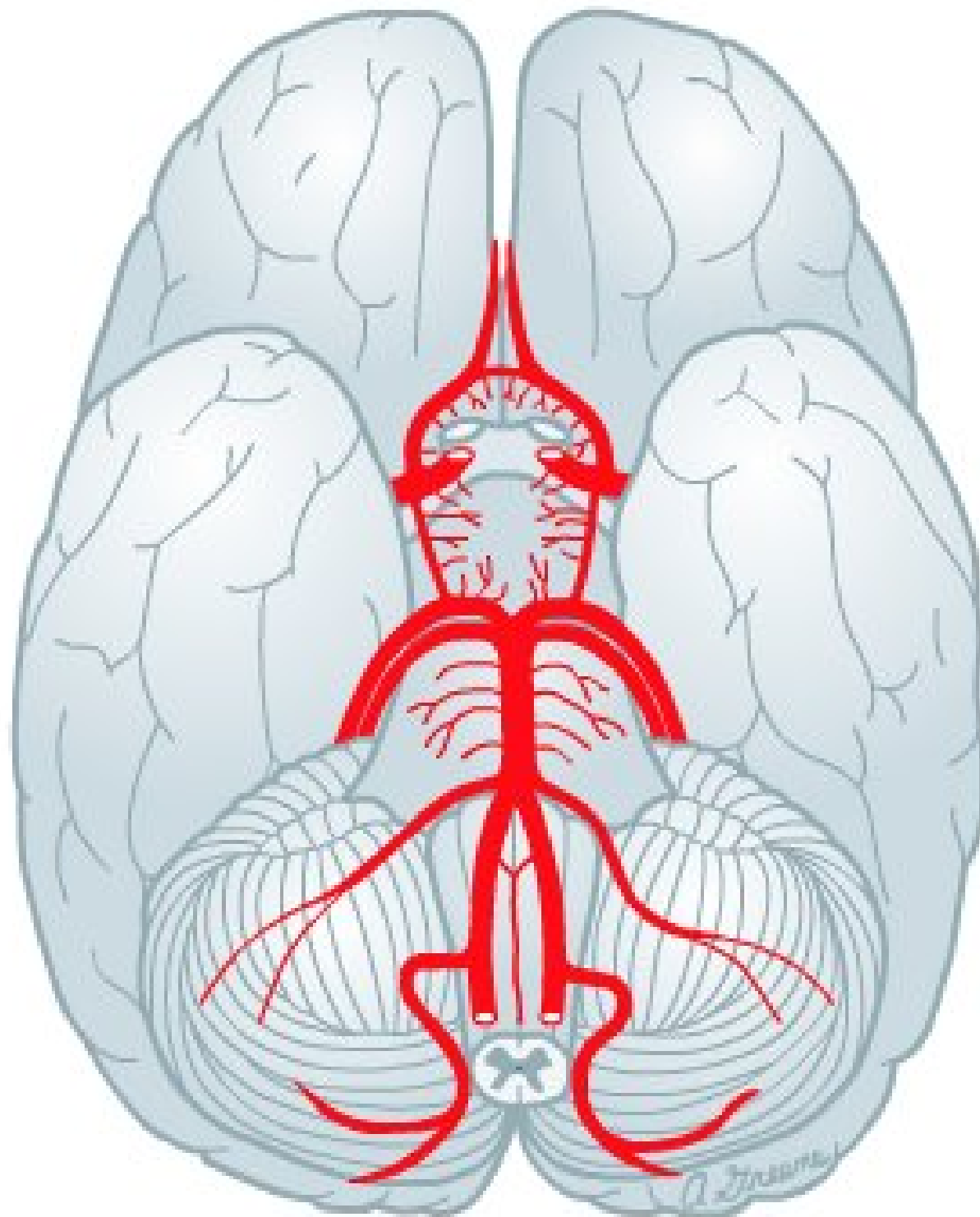
AICA

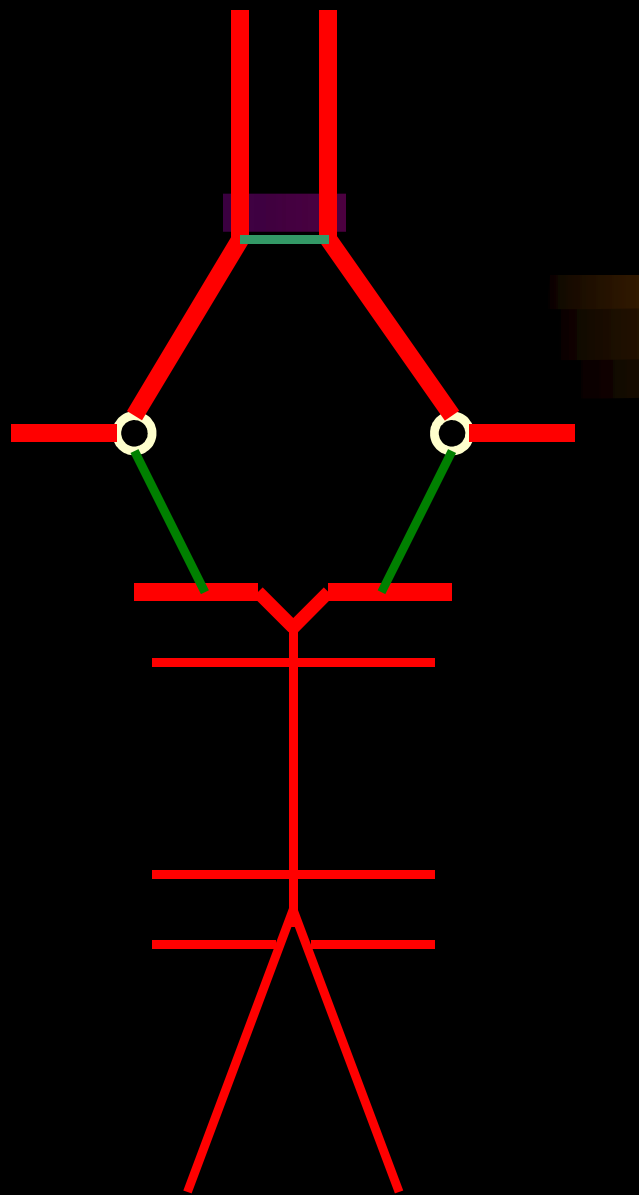
BA

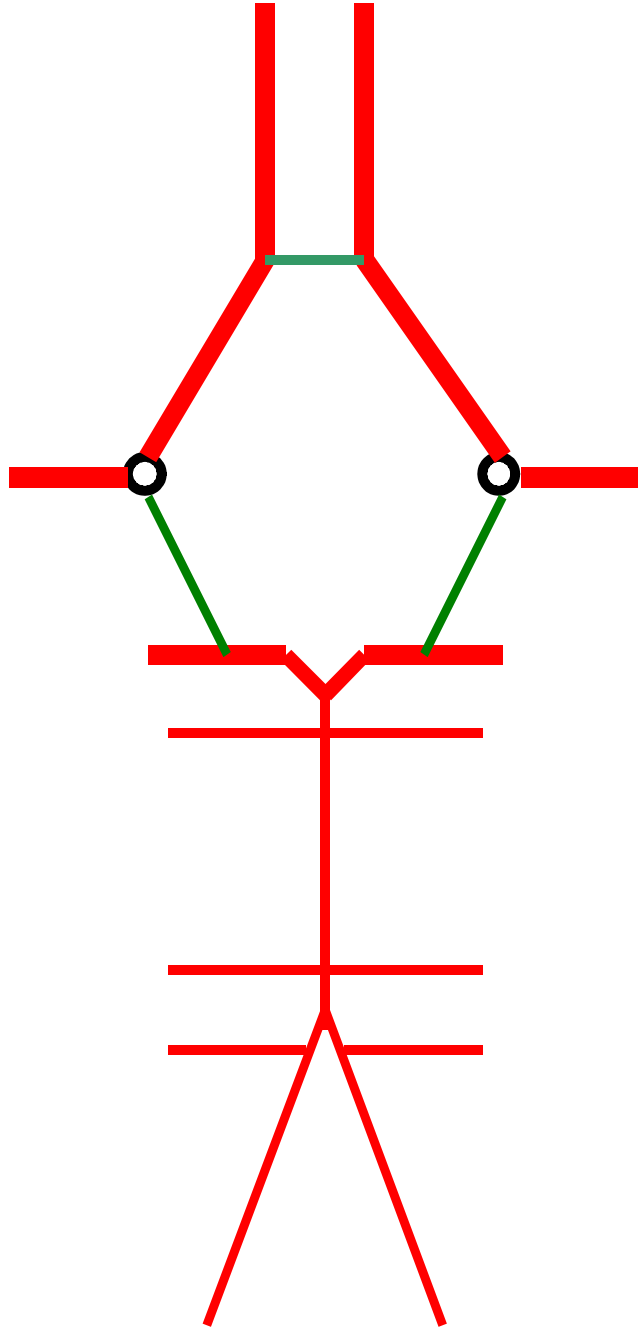
Acom.

MCA

PICA







ACA

A Com.

MCA

P Com.

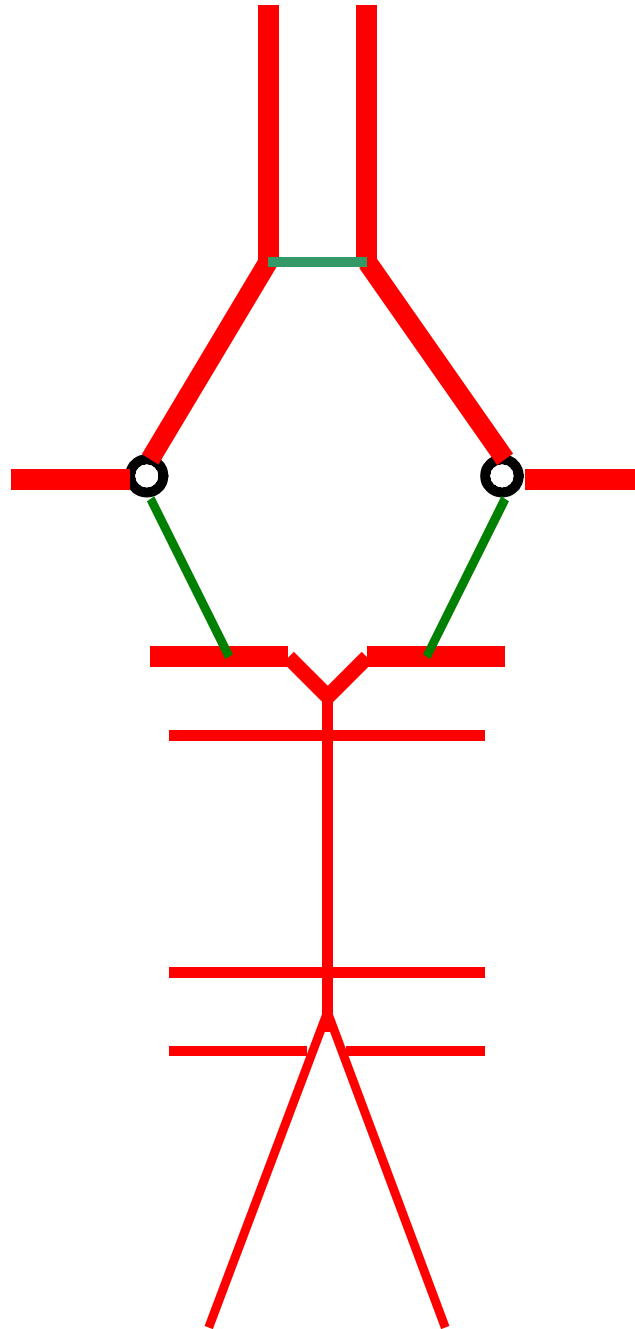
PCA

SCA

AICA

PICA

VA





Stroke

- Sudden onset of focal neurological deficit due to compromise of CNS blood supply

-Hypoglycemia

-Postictal

-Migraine

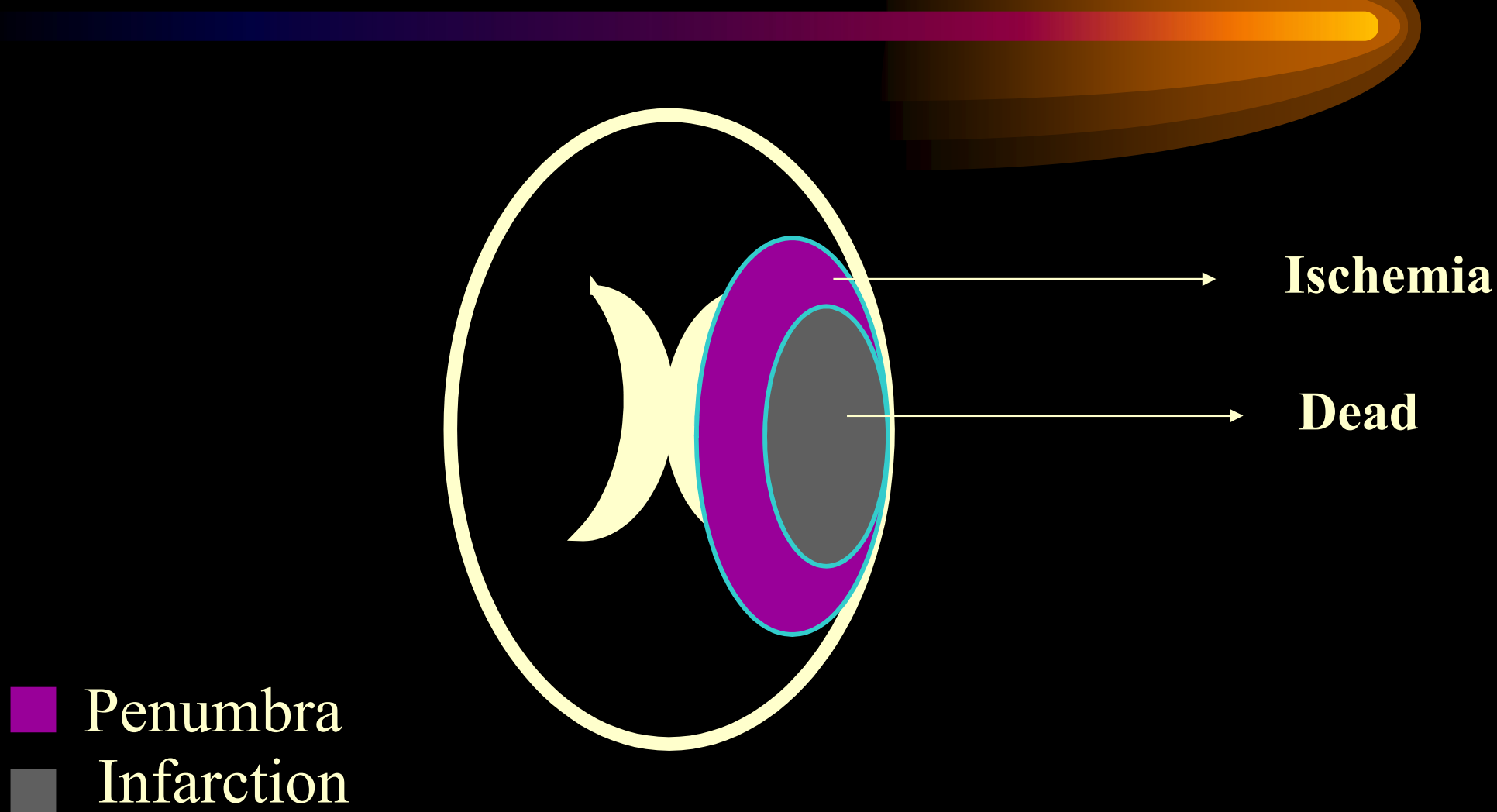
-Tumor

Stroke



- Blood.
- Glucose
- Influx(Ca, Na). Efflux (K)
- Lactic acidosis
- **Cell death**
- 50ml/100g/mi-----Normal
- 10ml/100g/mi-----Death
- 18ml/100g/mi-----**Penumbra**

Brain Attack



Risk Factors

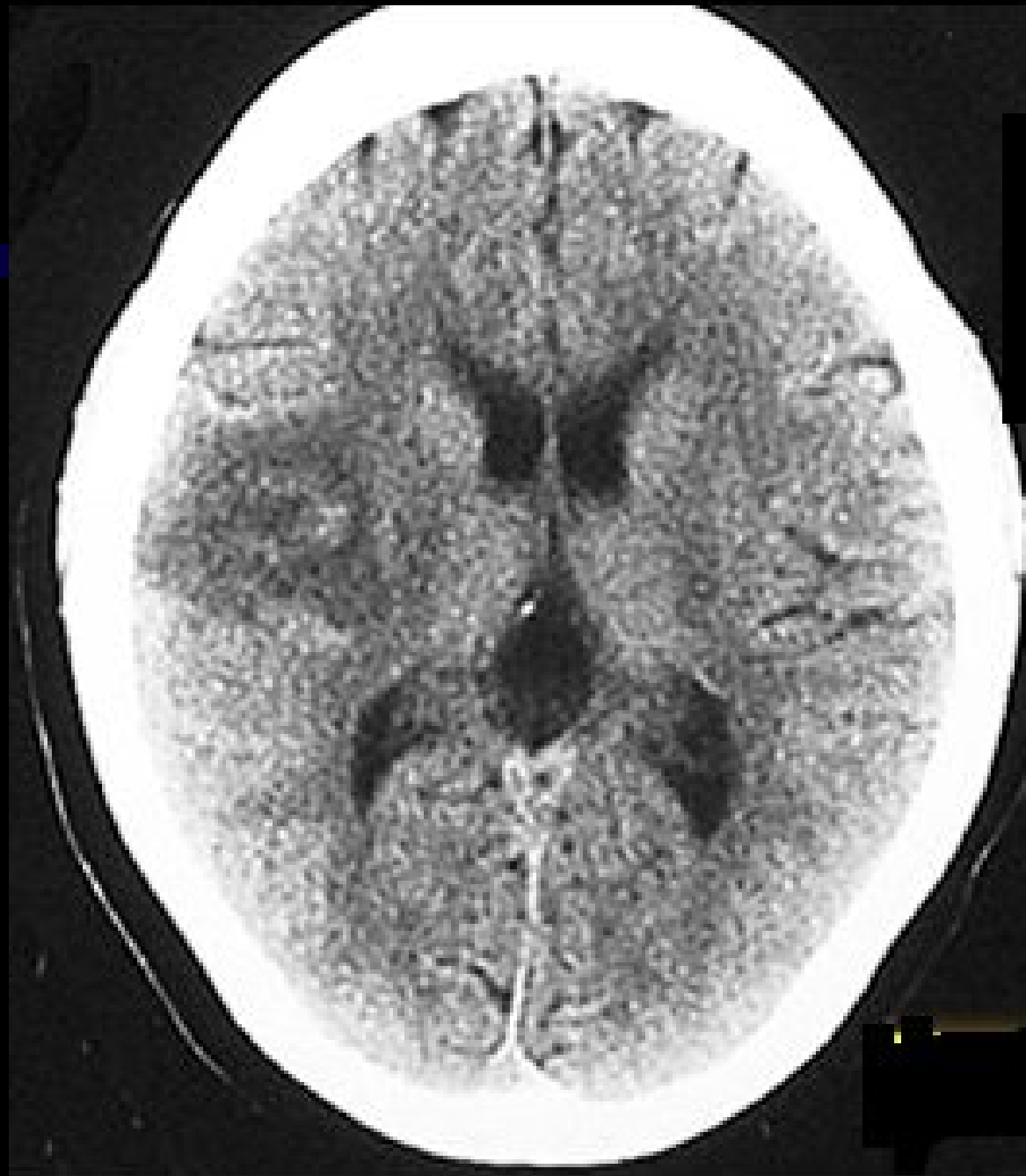
- **Age**
- Gender
- Ethnicity
- Family

- HTN
- Smoking disease
- DM
- Obesity
- **Physical**
- BCP, Lipid
- Coagulopathy



Ischemic

Bleeding





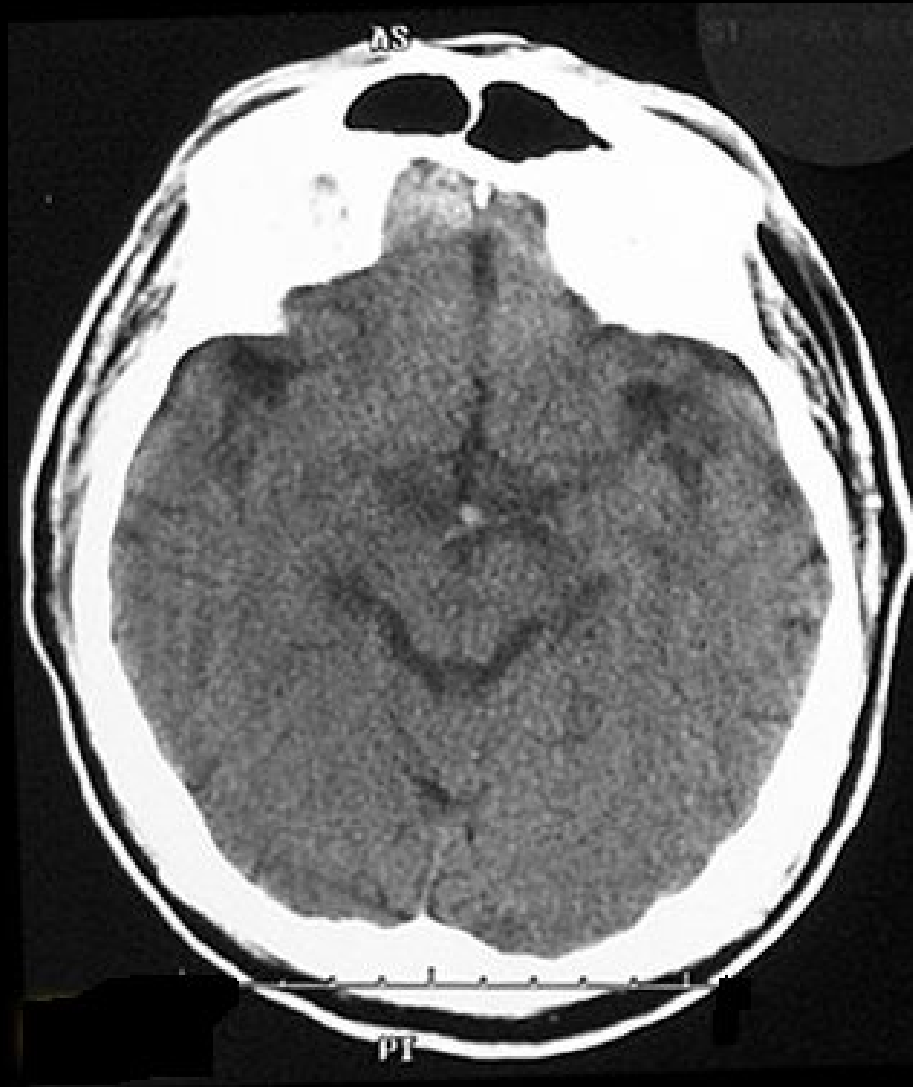


Not To Miss

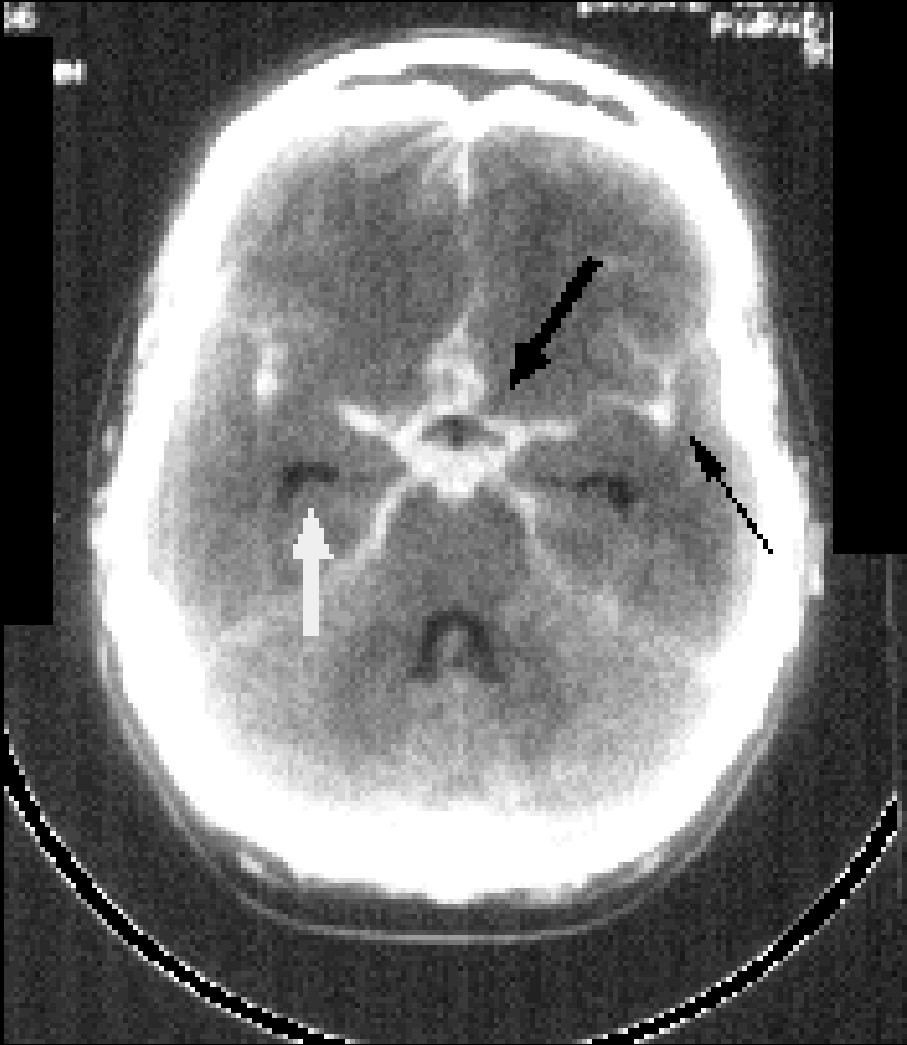


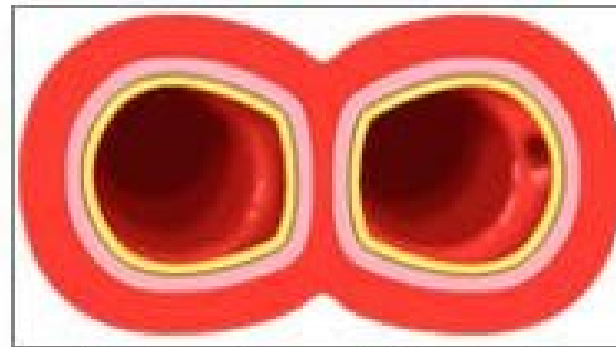
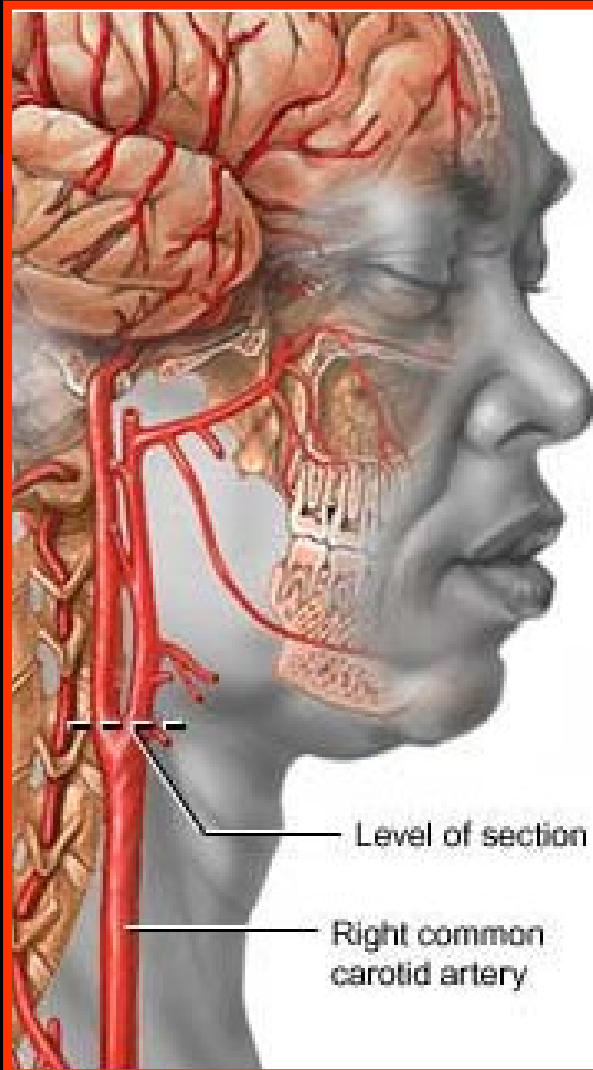
Cerebellar
bleed, bone

Find the thrombus.

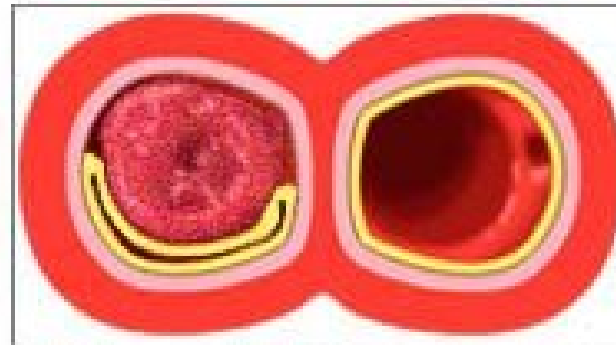


Basilar





Normal carotid artery



Lining of artery compressed due to blood dissecting up from a tear

Not To Miss!



- Cerebellar Bleed
- Basilar Thrombosis
- SAH
- Dissection

Stroke



- Large artery stenosis **Atherosclerosis**
- Small artery stenosis (Lacune)
- Cardiac embolism
- Hemodynamic (watershed)
- Vasculitis
- Viscosity (smoking, COPD)
- Coagulopathy
- **Unknown 30%**



ACA

- Hemiplegia (**L** > **A**)
- Bladder



MCA

- Hemiplegia ($A > L$)
- Hemi sensory
- **Aphasia**, Neglect
- HH

All or Part

- Eye deviation
- LOC



PCA

- Memory
- Confusion
- Agitation
- HH

- Hemiplegia

BRAIN STEM



- Vertigo
- N/V
- D/D/D-----Dysmashia!
- Weakness (Crossed) (III, VII, XII)
- Sensory
- LOC

STROKE

- CBC,PT,PTT
- Lytes
- LFT
- TFT
- U/A
- ESR
- VDRL
- ABG
- UDS **YOUNG**
- EKG
- CXR
- Head Image
- Echocardiogram
- Carotid U/S
- Holter
- LP
- Angio

STROKE



- BP (2 Arms)
- Pulse, Resp, Temp
- LOC---Pupils

- **IVF** (dry, NS)
- Pulmonary
- Bladder—Cath
- Nutrition (**NPO**)

Left Uncal
Herniation





Stroke Complications



- Pneumonia (Aspiration)
 - UTI
 - DVT
 - Skin Ulcer
 - Fall
 - Neglect
 - Contraction
 - SZ
 - Depression
- Brain Edema

Take home messages

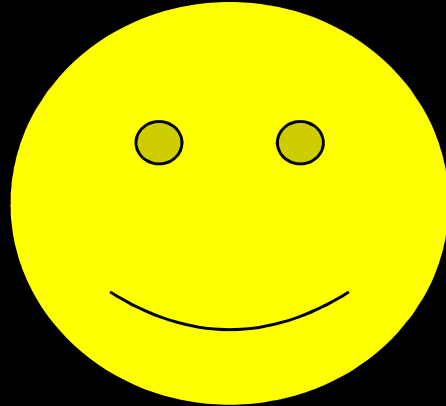
- Inclusion not-----Exclusion
- Condition to-----R/O
- Emergency-----Not to miss

- Post. Vs Ant.-----Circulation
- In Young

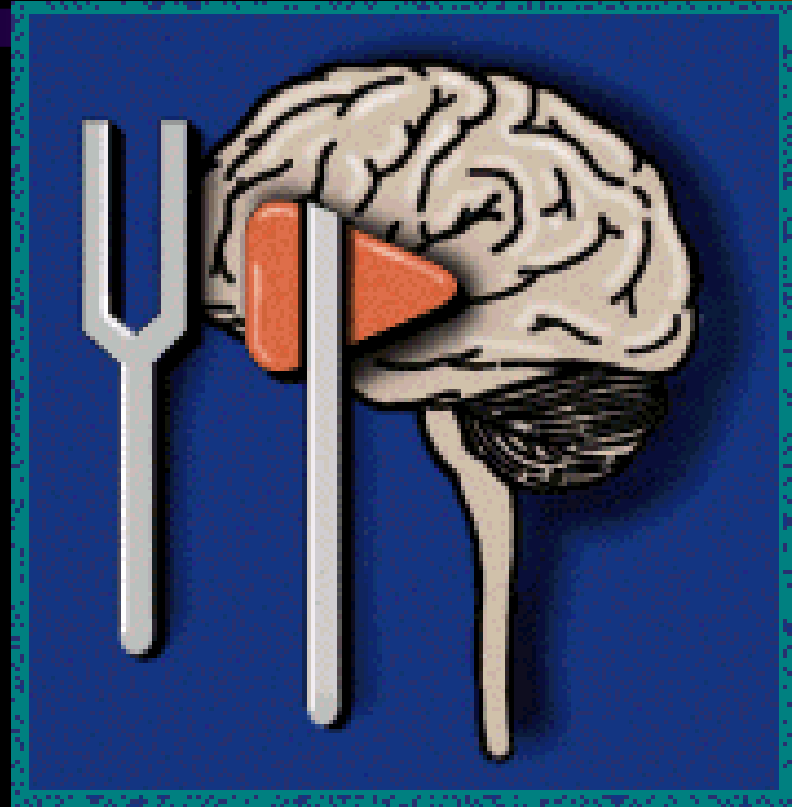


شكراً

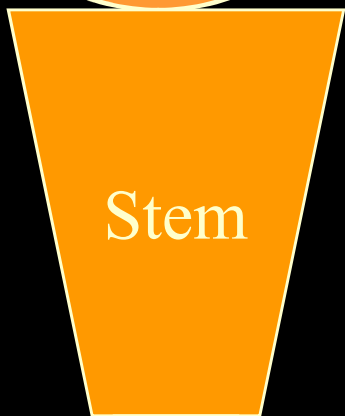
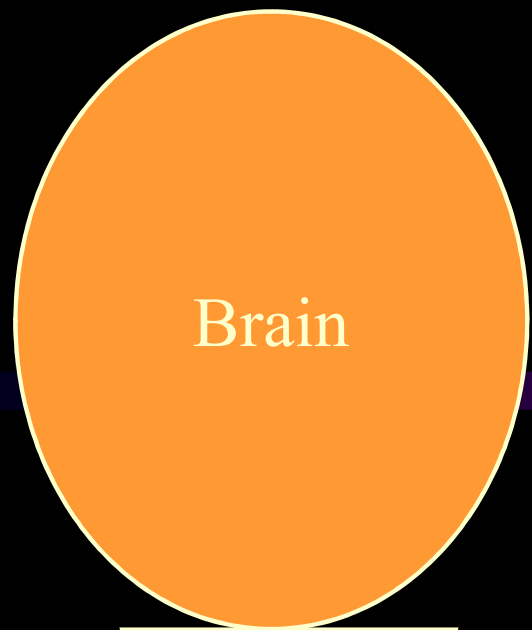
Please Do Not Come Back!



شكرا



THANKS!



Brain

Stem

Spinal