



# Central Nervous System Pathology Laboratory

## MACROSCOPY

Professor Rengin Ahiskali

**Only macroscopy samples are shown in this presentation. Please check your syllabus for descriptions.**



# CNS Pathology Laboratory

## Macroscopy - 08

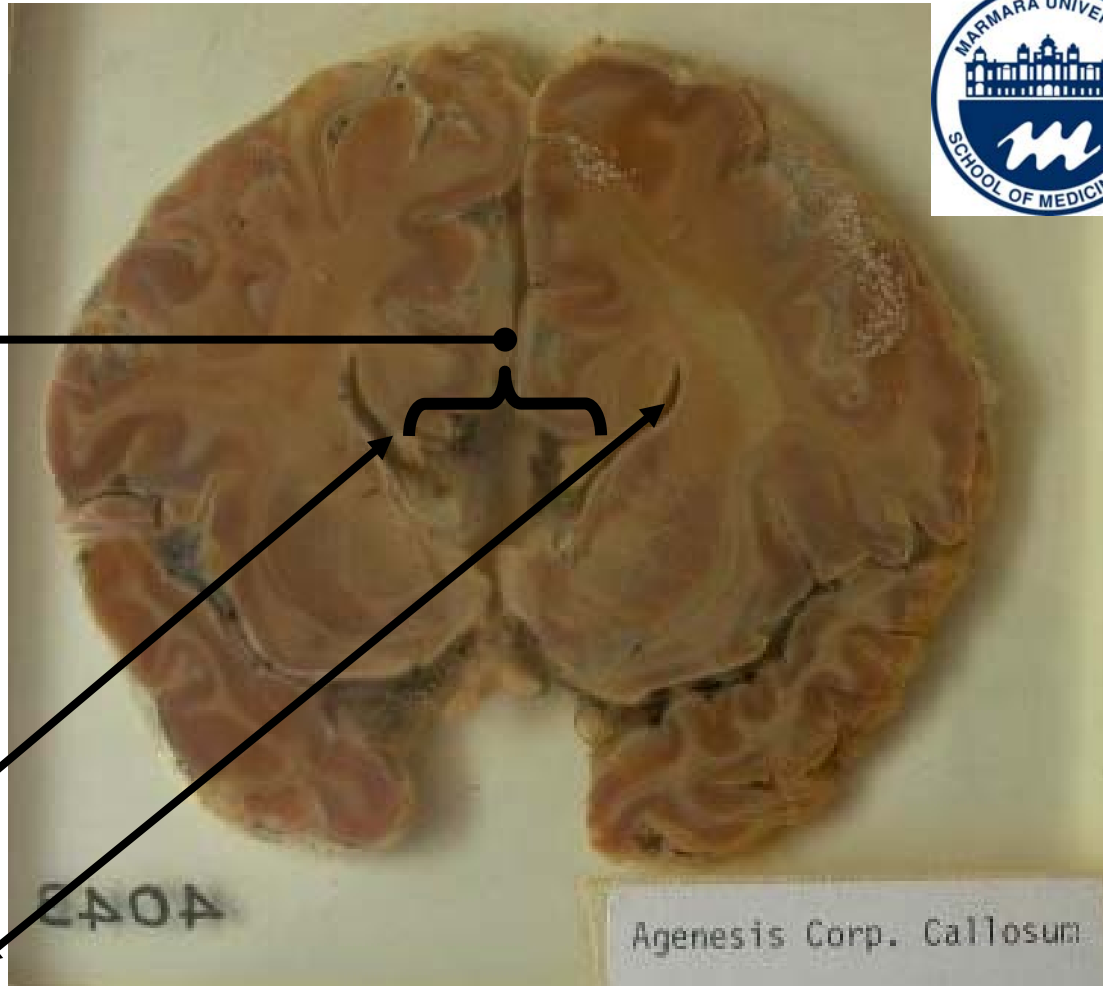
- Material displayed in this demonstration has been brought from USA and donated by Zeynep Bilgi, M.D. a former student of ours.
- Please handle them carefully, so that other students may have the chance to see them in the years to come. 😊 RA

# Aggenesis Of The Corpus Callosum



Missing part of  
Corpus  
Callosum

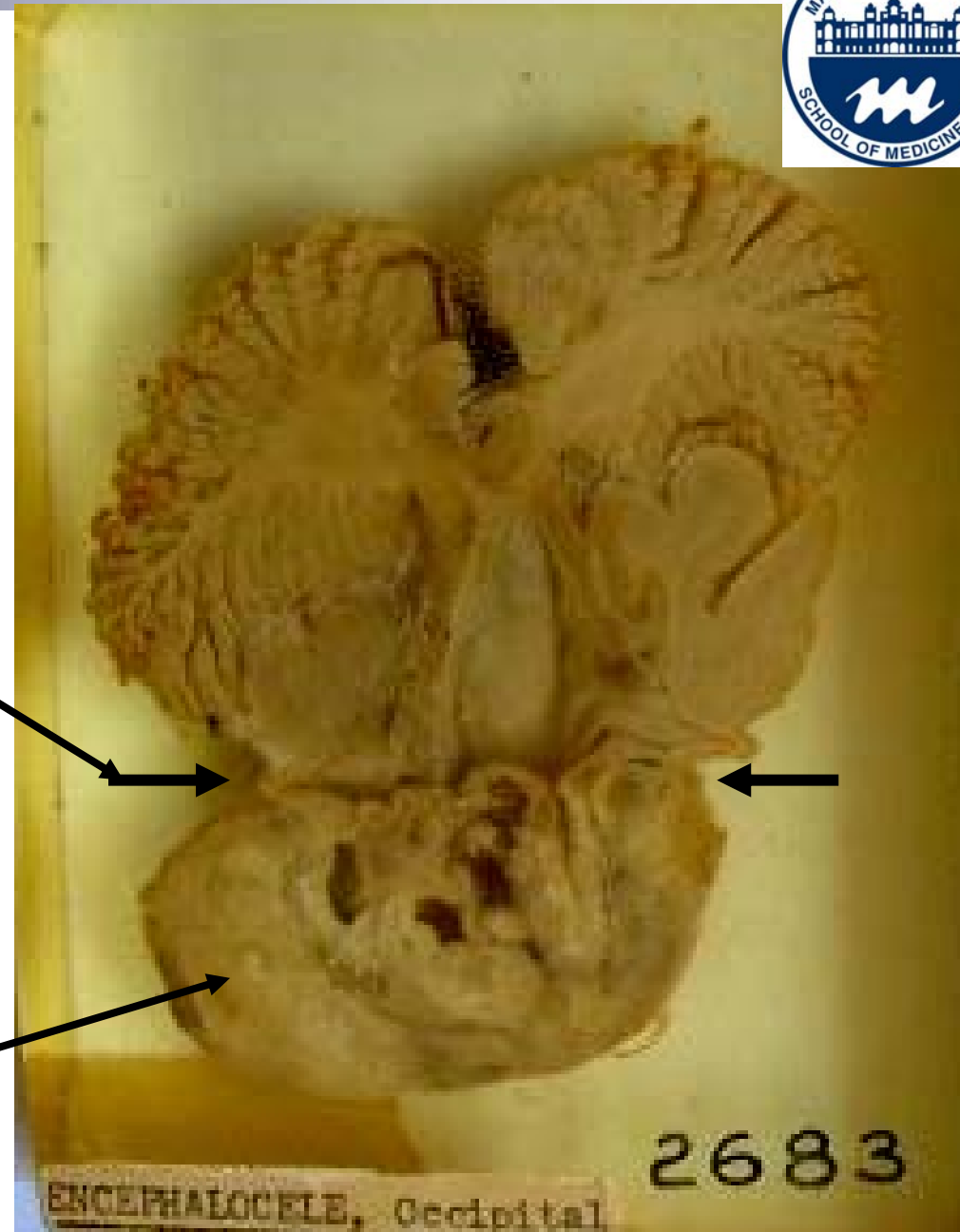
Malformed  
(wing-like)  
lateral  
ventricles



# Encephalocele

Site of defect in  
the cranium

malformed CNS  
tissue extending  
through a defect



# Polymicrogyria & Hydrocephalus

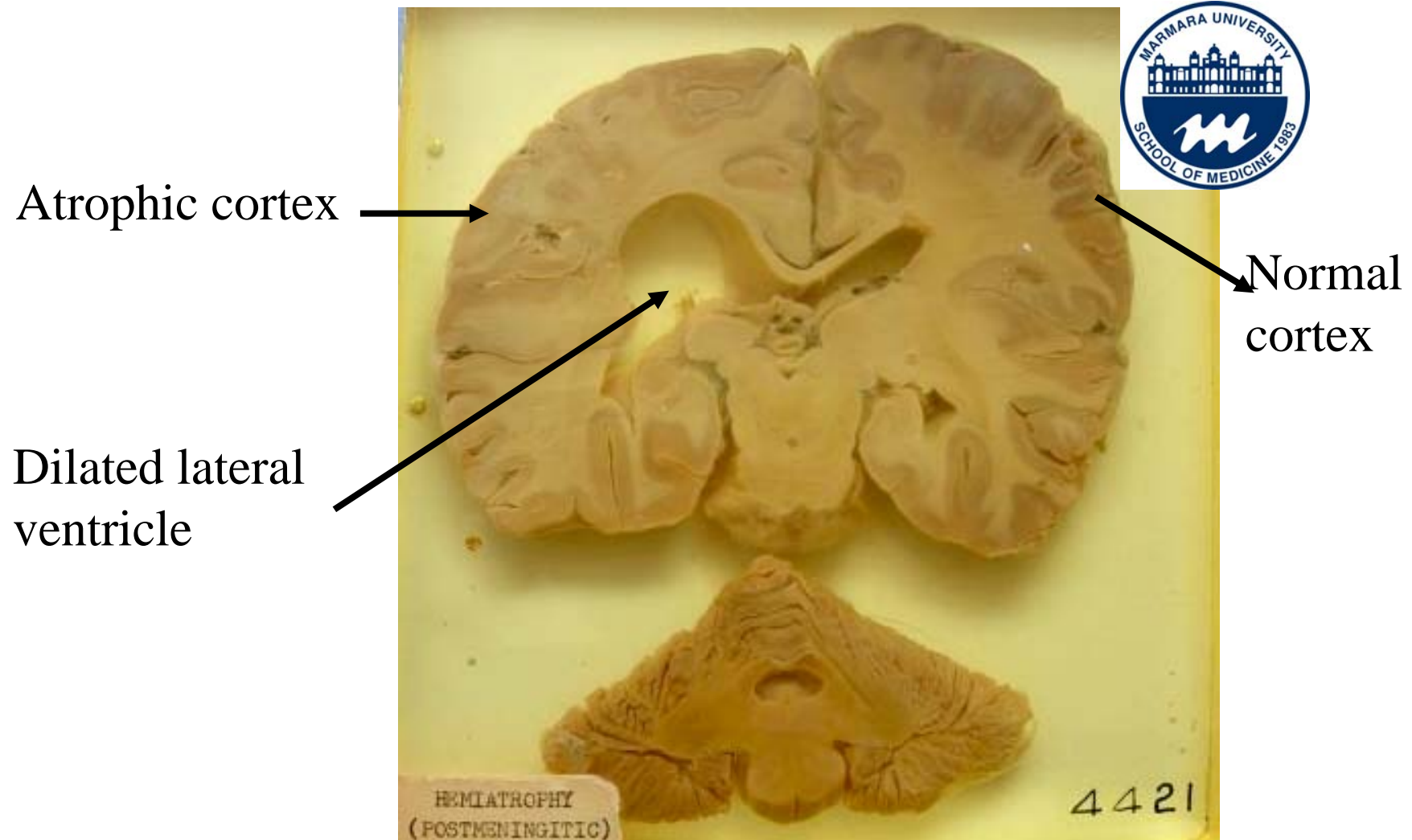
Enlarged lateral ventricles

small, numerous, irregularly formed gyri

\* Look at the sides of the sample to see better: Loss of the normal external contour of the cerebral convolutions, and very small gyri

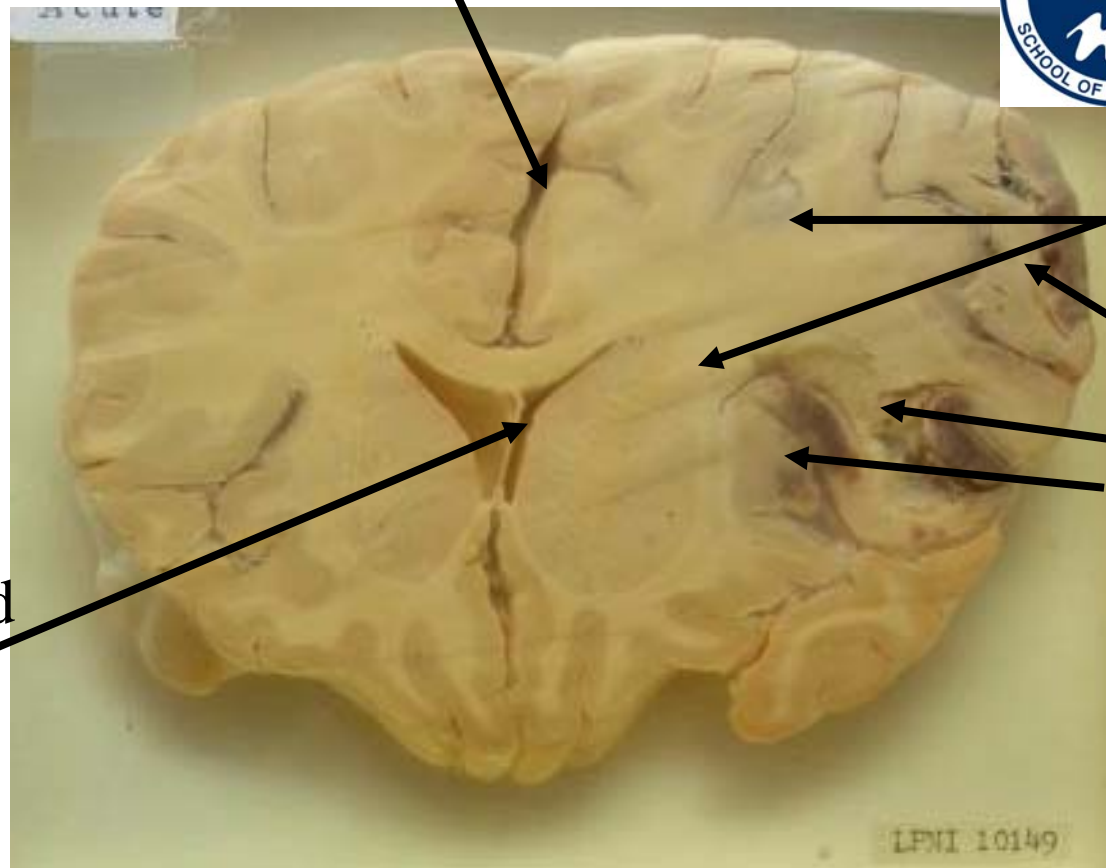
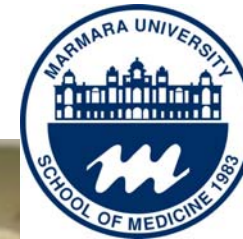


# Postmeningitic hemiatrophy



# Hemorrhagic (red) infarction

Shift of midline structures



edema

dark colored,  
focally  
hemorrhagic  
regions

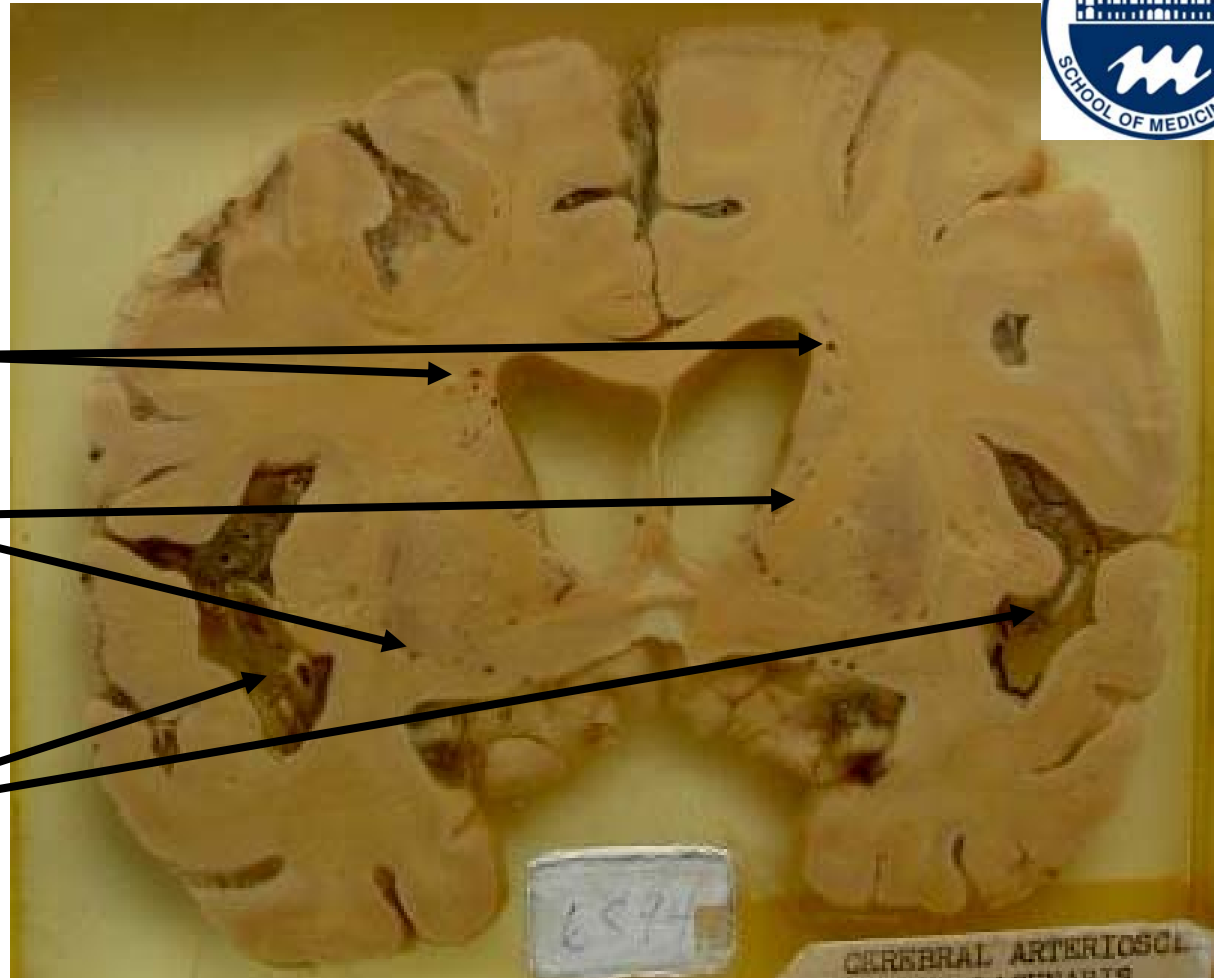
Compressed  
lateral  
ventricle

# Hypertension, arteriosclerosis, lacunar infarcts



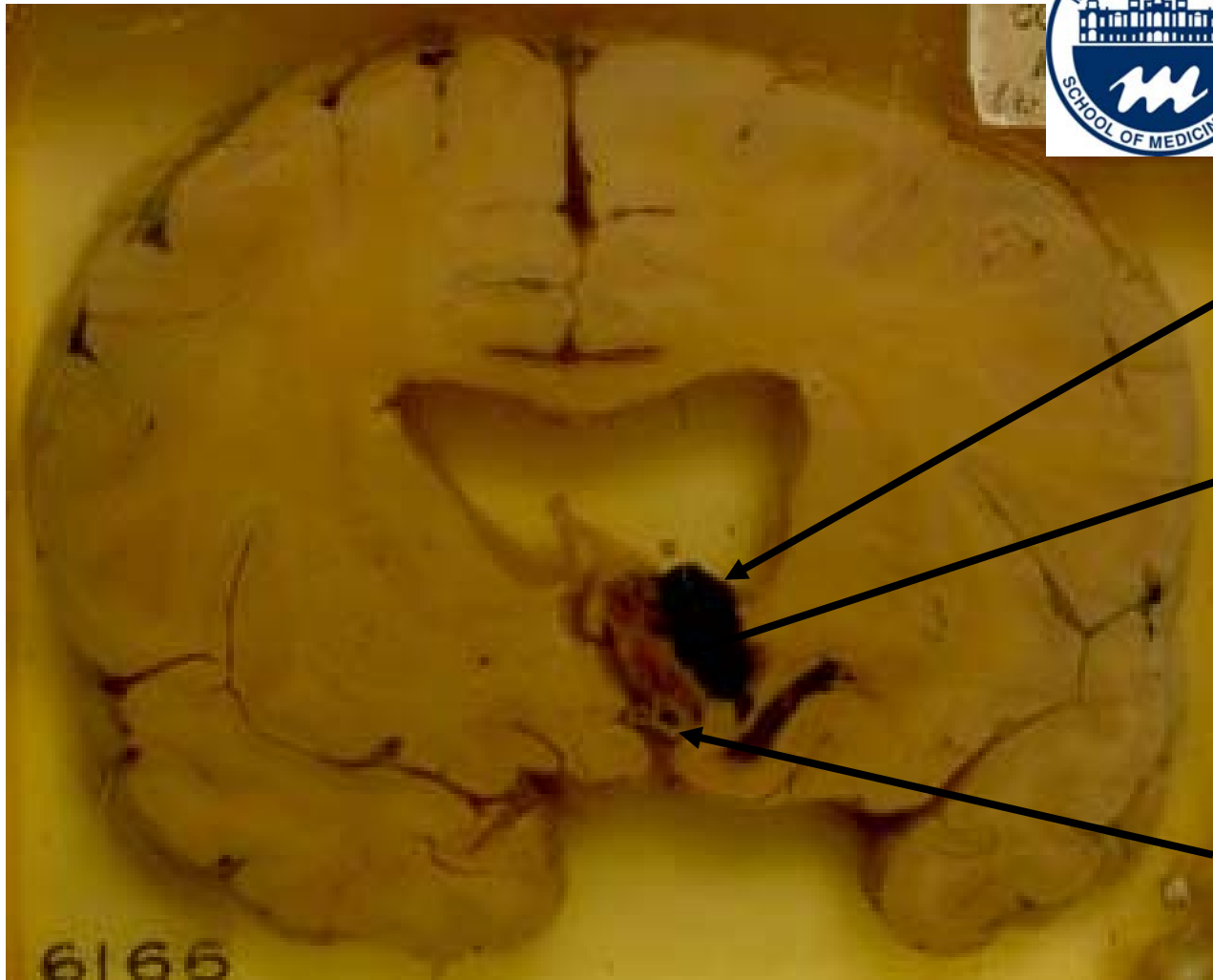
Wide-spread,  
multiple, small,  
cavitory infarcts  
(lacunes) more  
prominent in the  
basal ganglia

See vessels with  
thick walls





# Aneurysm: rupture and hemorrhage

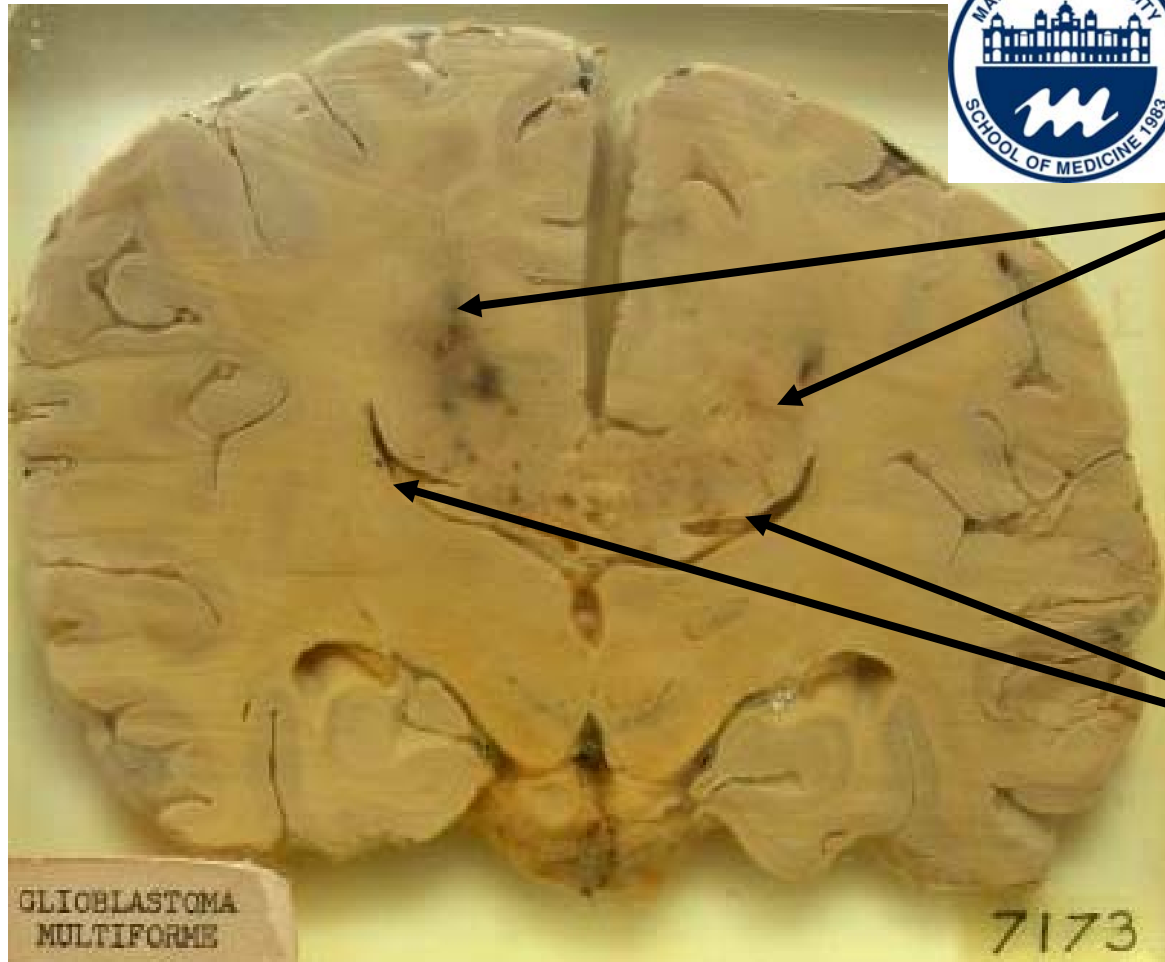
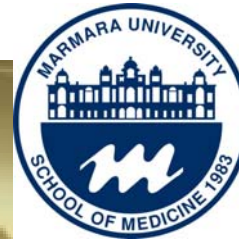


hemorrhage

aneurysm of the  
anterior  
communicating  
cerebral artery

Thick walled-  
dilated vessel

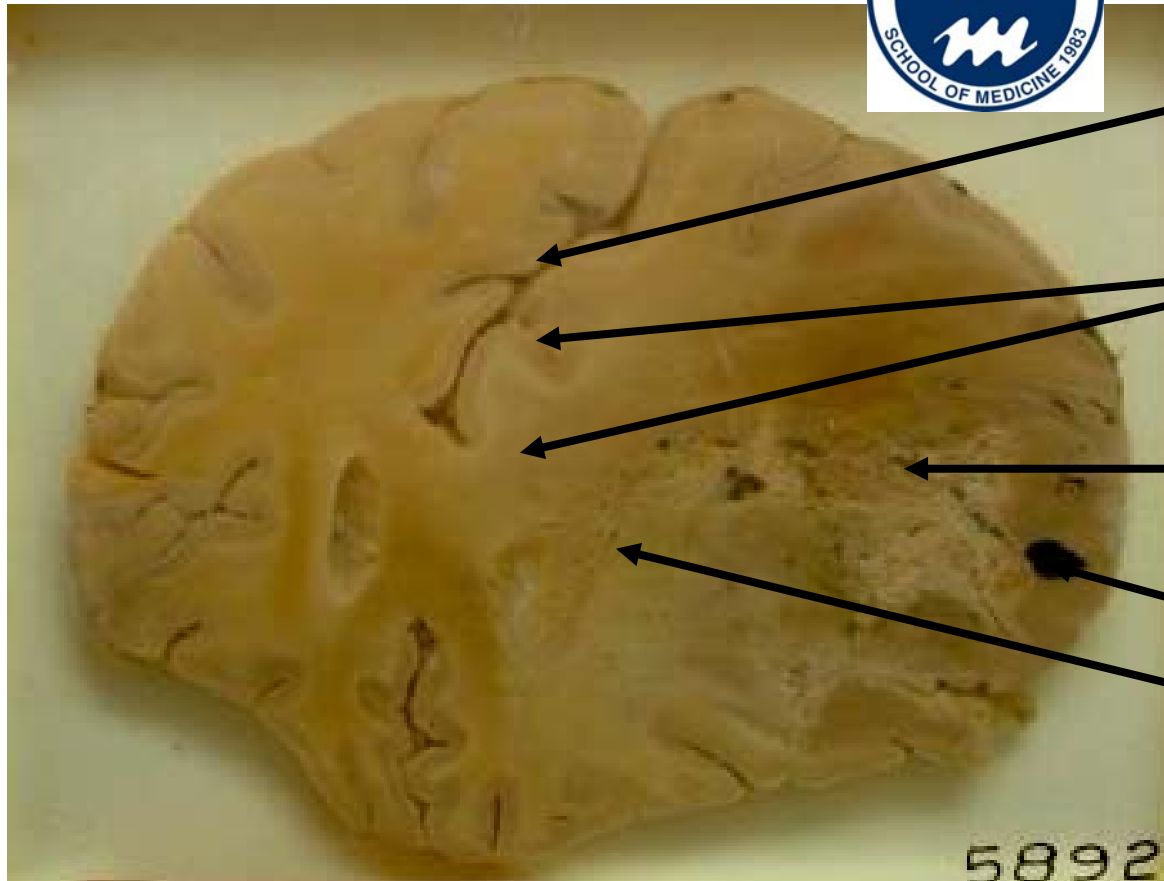
# Glioblastoma multiforme



“Butterfly” glioma, extending from one hemisphere to the other:  
necrotic,  
hemorrhagic,  
infiltrating mass

Compressed lateral ventricles

# Glioblastoma multiforme



Shift of midline structures

edema

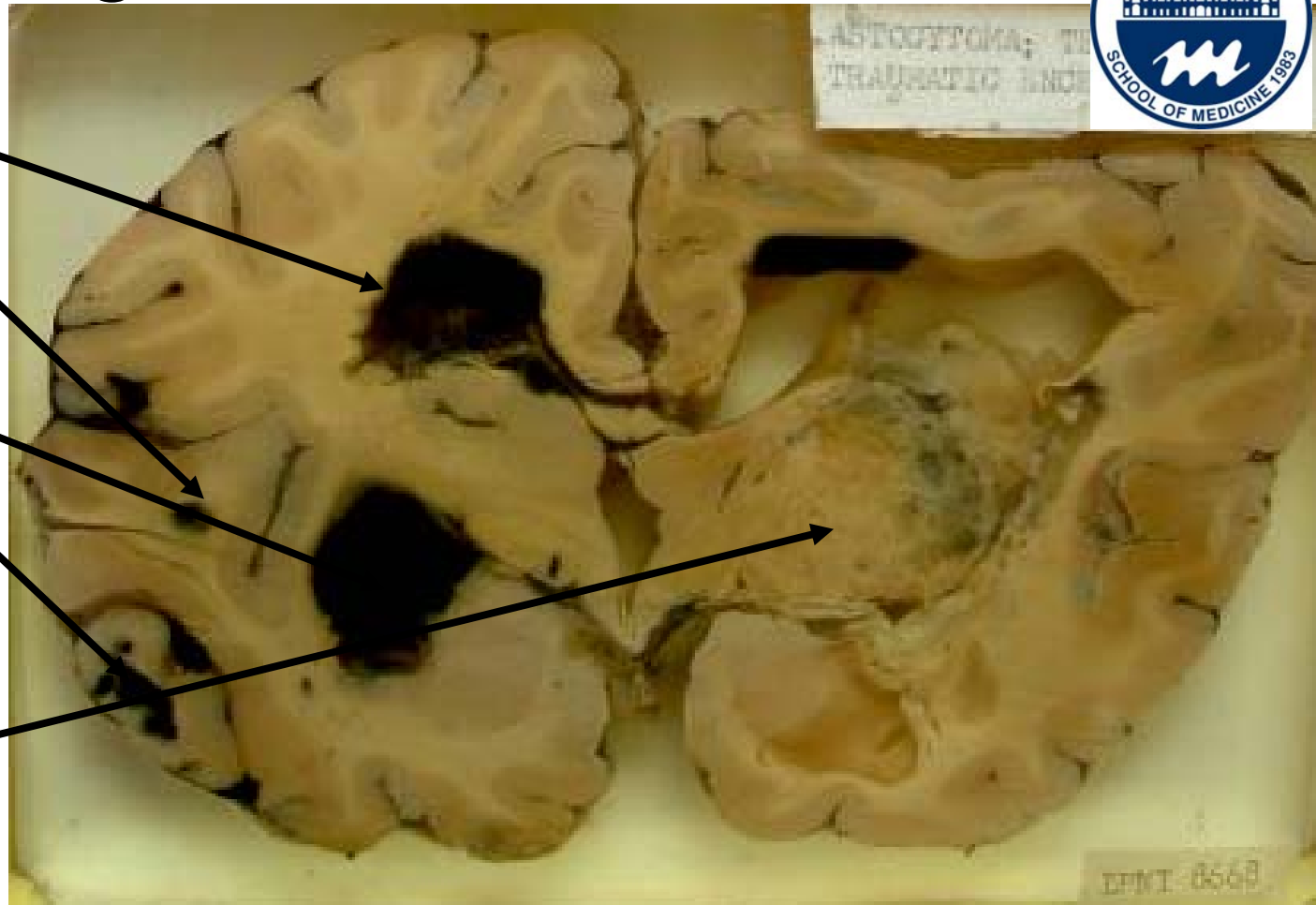
Necrotic (yellowish), hemorrhagic (dark), infiltrating mass

# Astrocytoma + traumatic hemorrhage



intraventricular  
and  
parenchymal  
hemorrhage

Tumor with  
ill-defined  
margins



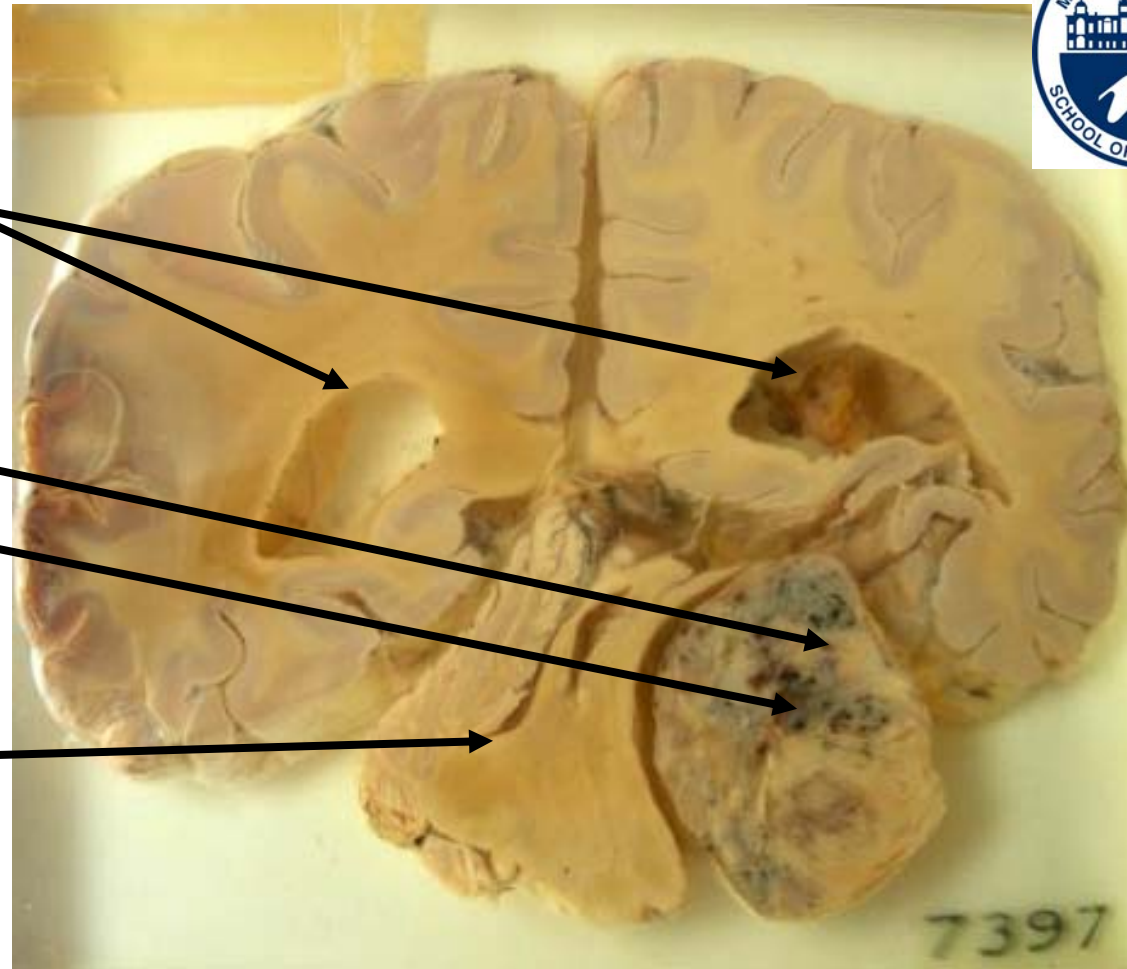
# Glioma compressing brain stem



Dilated lateral ventricles

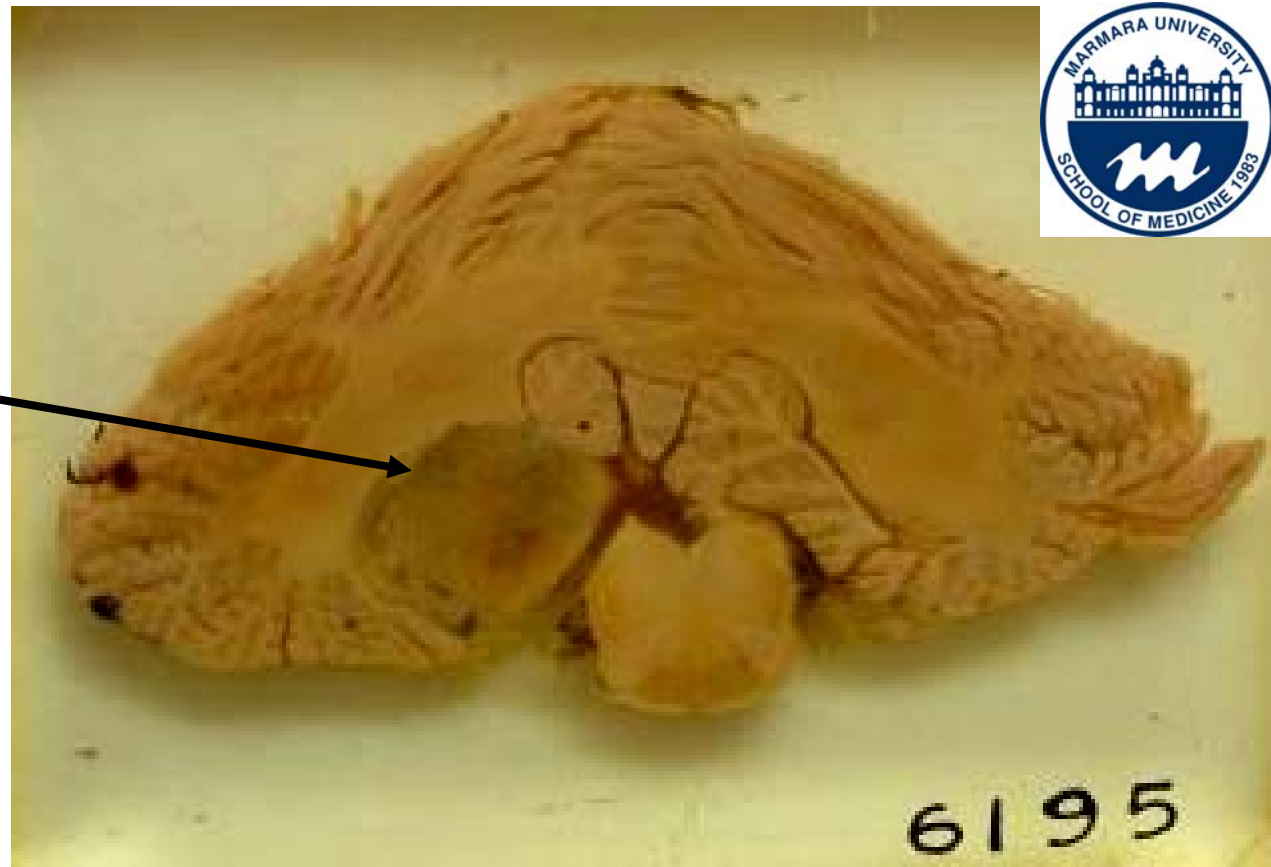
necrotic, hemorrhagic, tumor mass

compressed brain stem and cerebellum



# Pilocytic astrocytoma in the cerebellum

A nodular tumor with rather well defined borders and a gelatinous appearance. No necrosis or hemorrhage



# Hemangioblastoma in the cerebellum



A nodular tumor with rather well defined borders. See vascular structures and hemorrhage







# Leukemia involving dura with subdural hemorrhage



thickened  
dura

subdural  
hemorrhage

massive  
hemorrhage

compressed  
lateral  
ventricle

