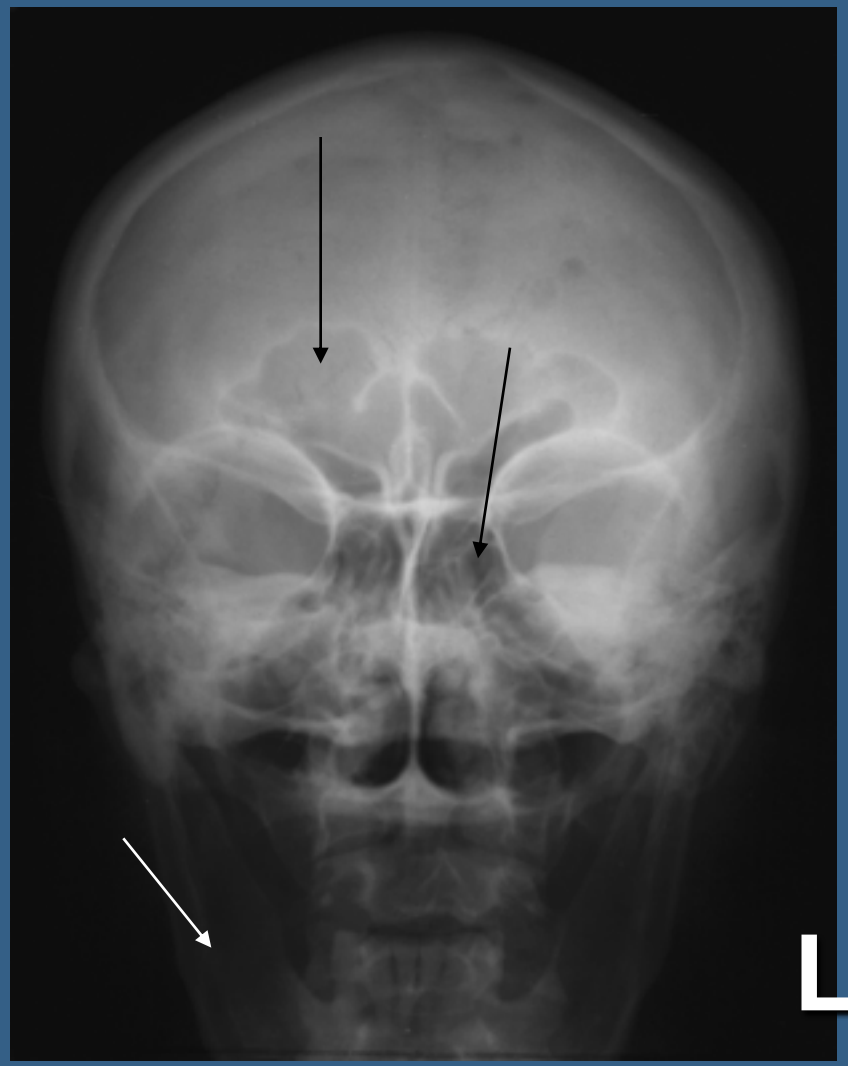
Neuroradiology

interactive lecture

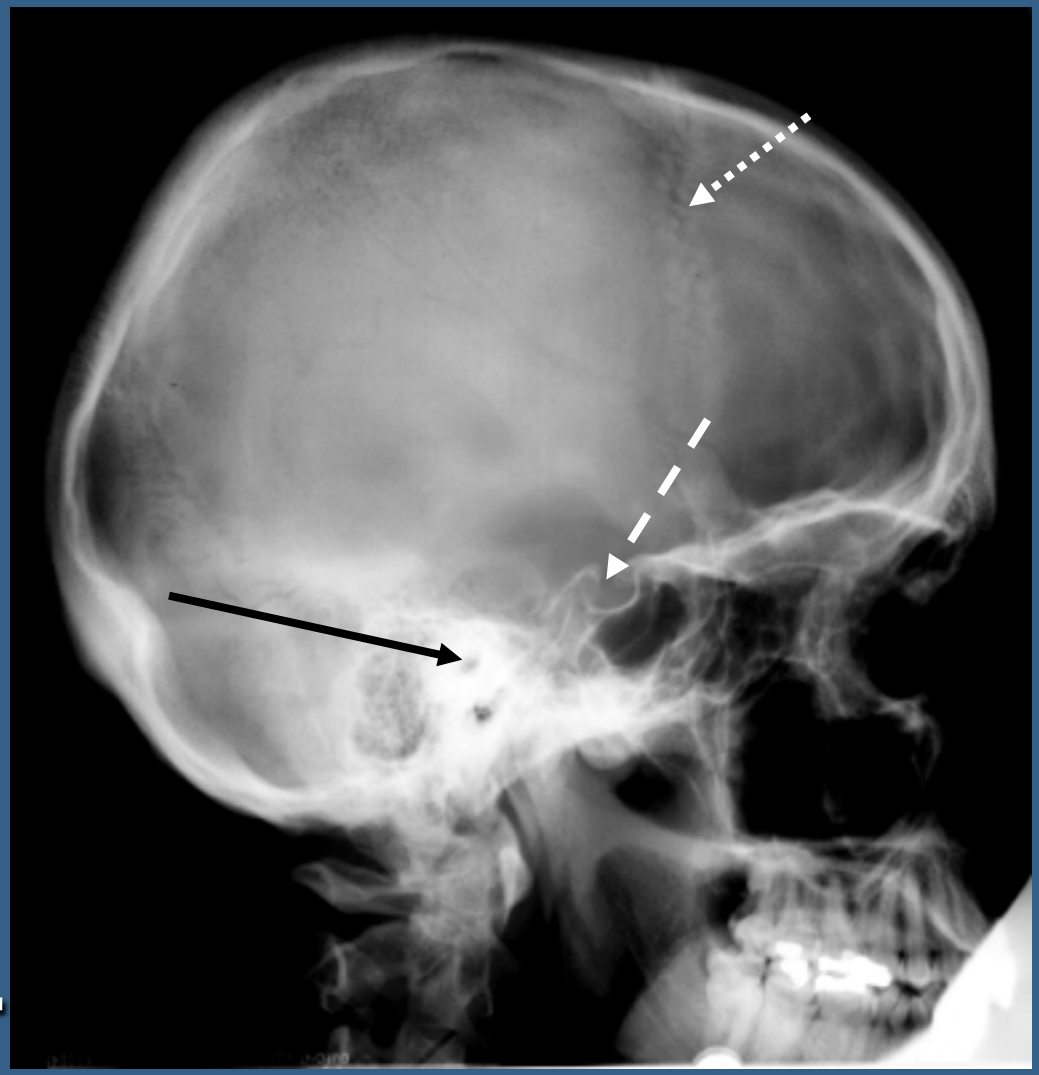
366 RAD (Radiology)

Prof. Ibrahim A. Alorainy

Name the structures



SKULL PA VIEW



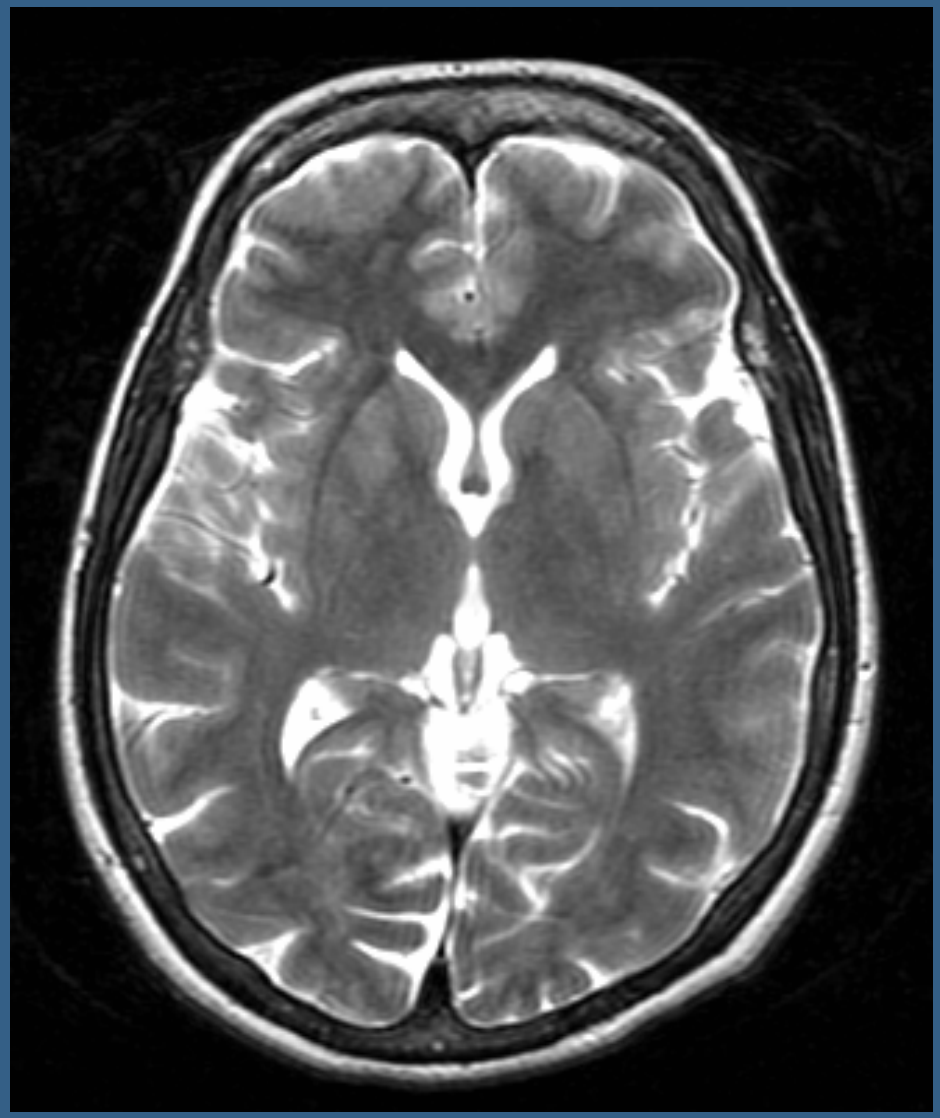
Skull X-RAY LAT. VIEW

Which is true on this brain CT regarding anatomy:

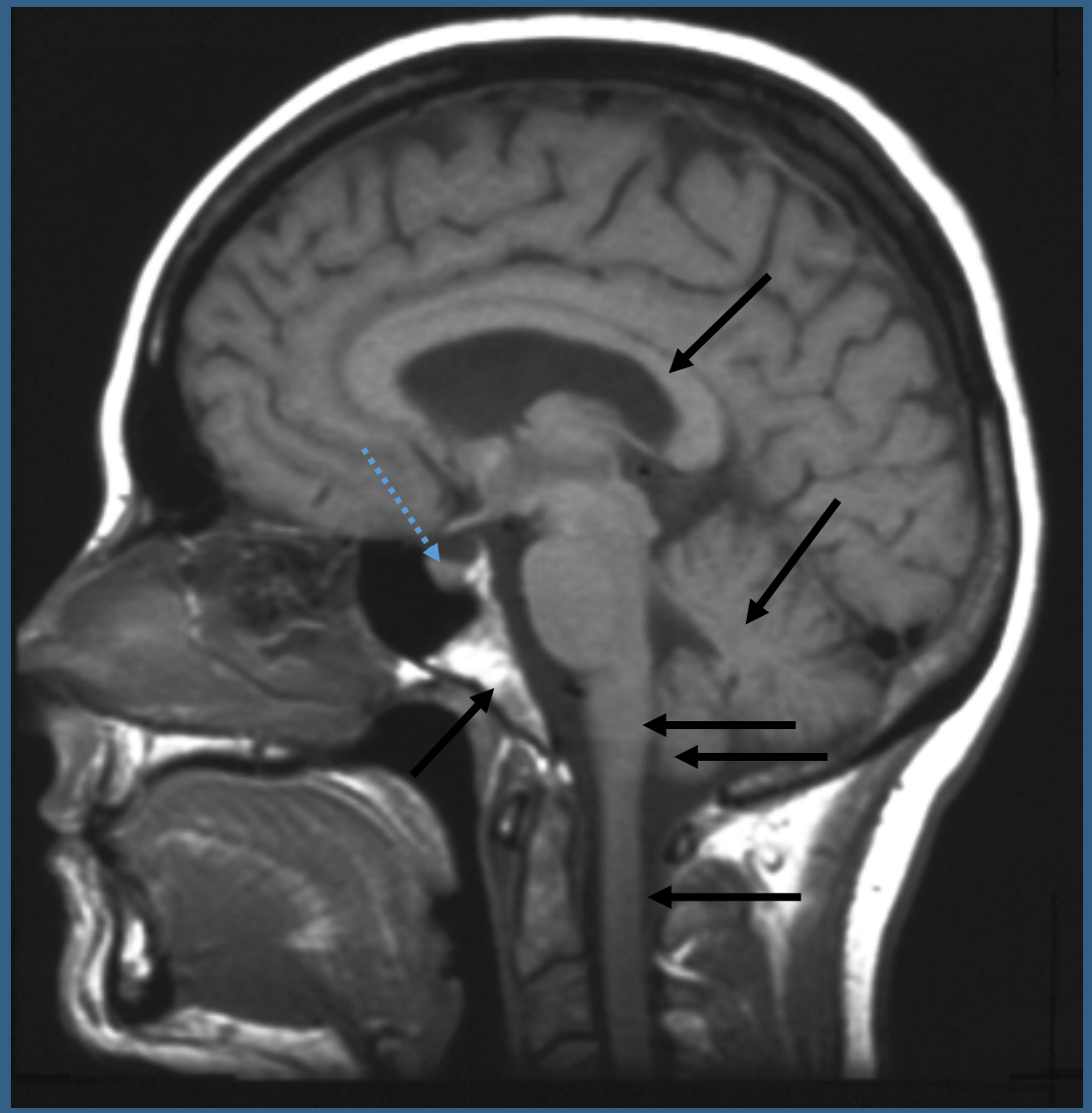
A. Internal capsule
B. Caudate head
C. Cerebral peduncle
D. Putamen
E. Thalamus
F. 4th ventricle

Which is true in CT?

A. Bone is black
B. CSF is black
C. Gray matter is darker than white matter
D. Gray and white matter can not be differentiated



Name the structures



Contraindication of MRI include all the following EXCEPT:

A. cardiac pacemaker
B. cochlear implants
C. metal close to the eye
D. neurostimulators
E. pregnancy (3rd trimester)

MRI diffusion (DWI) is particularly helpful in assessment of:

A. Brain infarction
B. Brain abscess
C. Brain tumors
D. Hydrocephalus

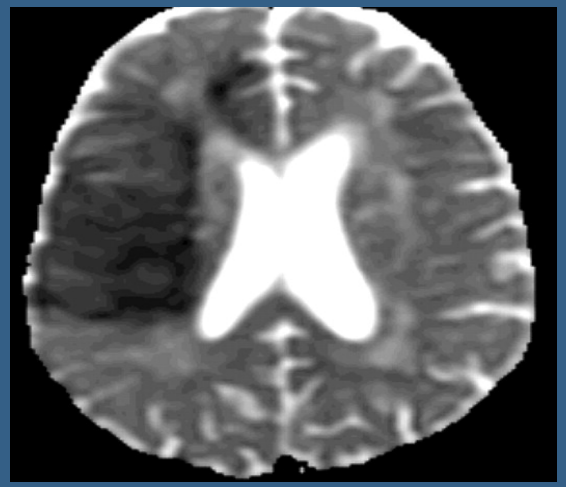
MRI Diffusion..

MR diffusion

Very helpful in assessment of:

- **Early brain infarction.**
- **Brain abscess.**
- **Certain types of brain tumor.**

DWI



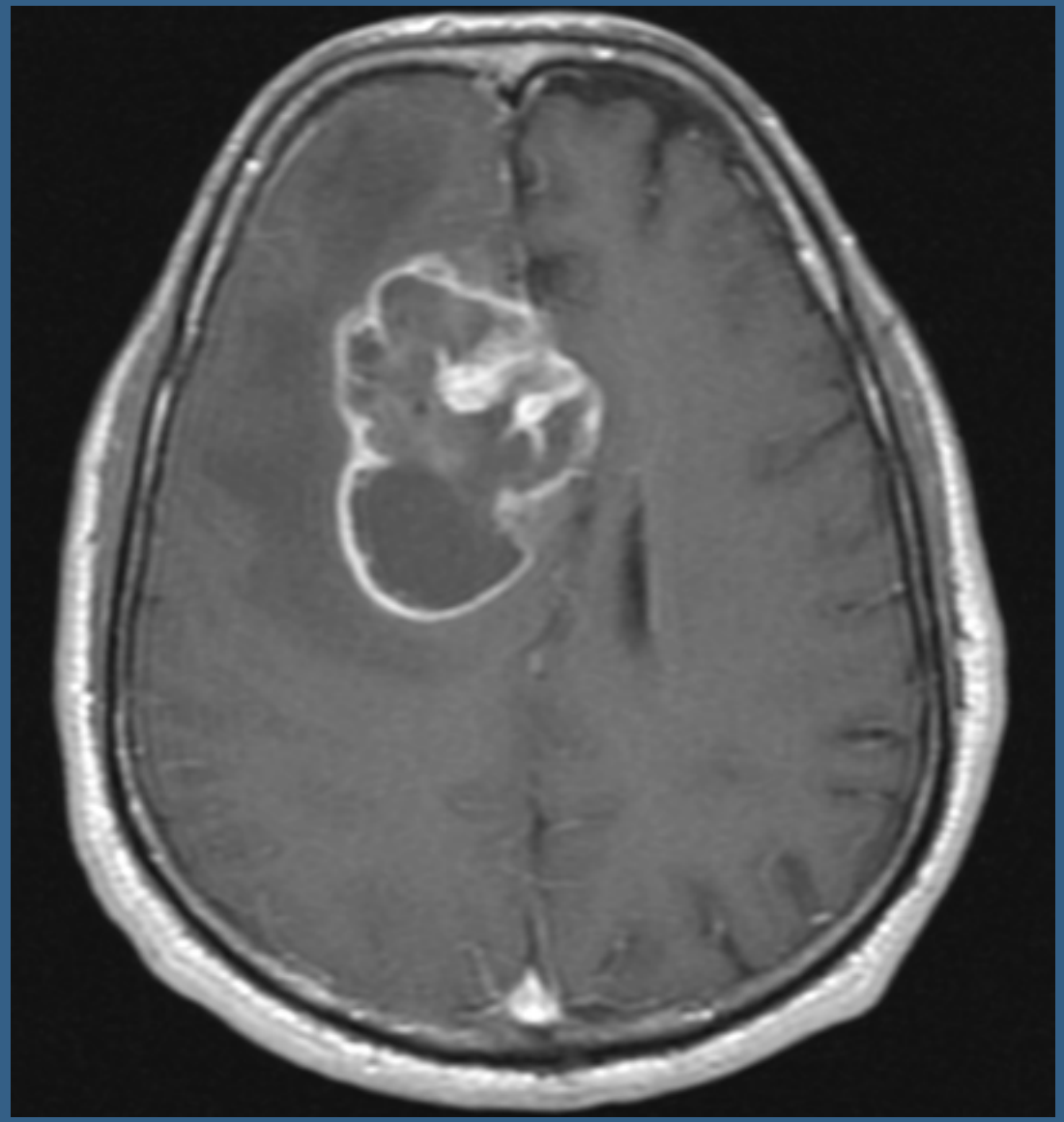
ADC map

Which of the following is true?

A. This is CTA study
B. This is MRA study
C. This can only be done with contrast
D. This is good to diagnose cerebral venous thrombosis

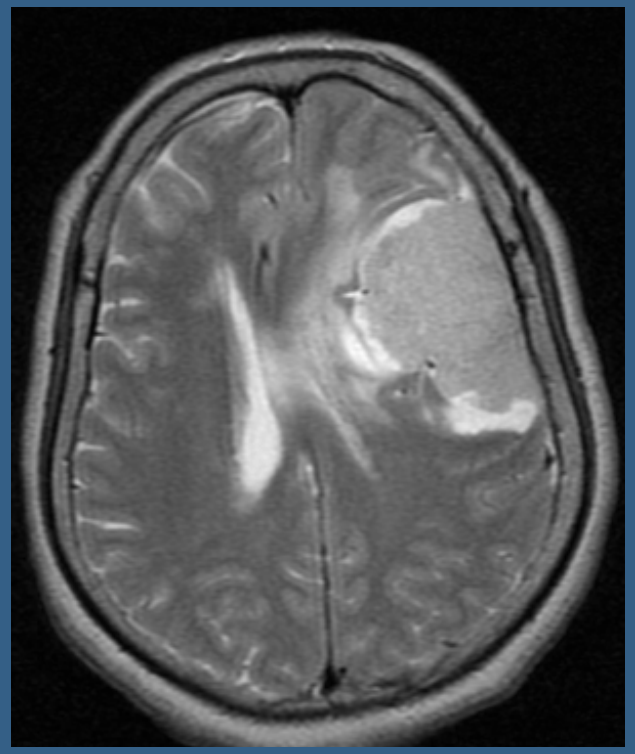
An MRI showed intra-axial lesion that is necrotic, irregular, strongly enhancing, and crossing midline. This lesion is most likely:

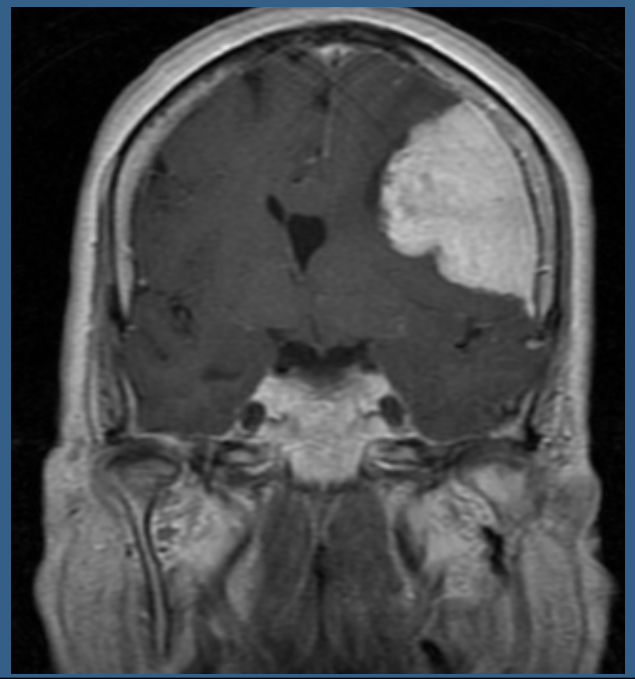
- Meningioma
- Infarction
- Multiple sclerosis
- Glioblastoma multiforme



The lesion on this CT is:

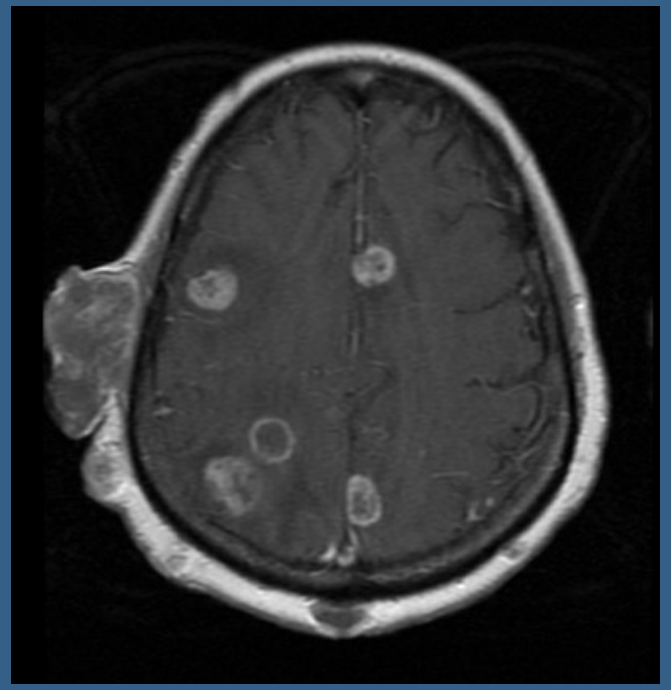
- Meningioma
- Abscess
- Multiple sclerosis
- Glioblastoma multiforme

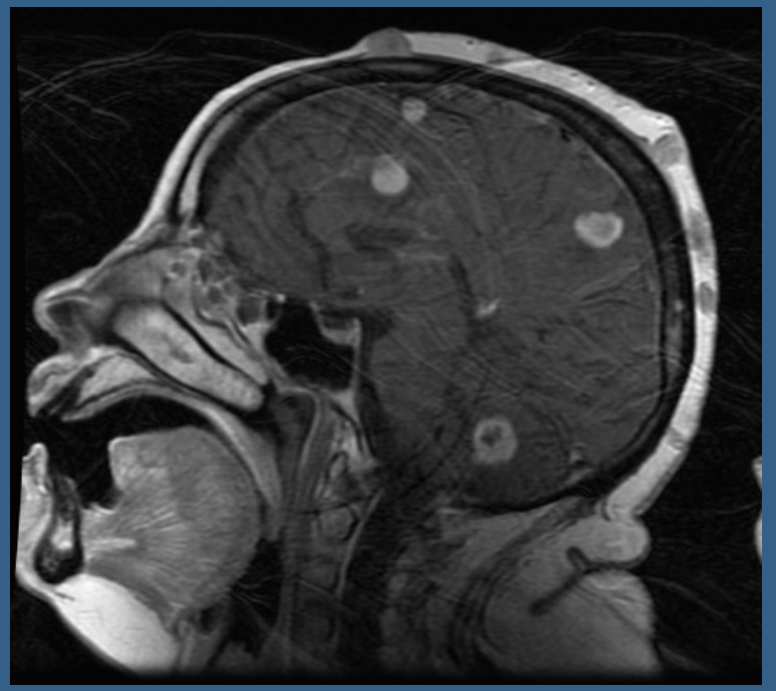


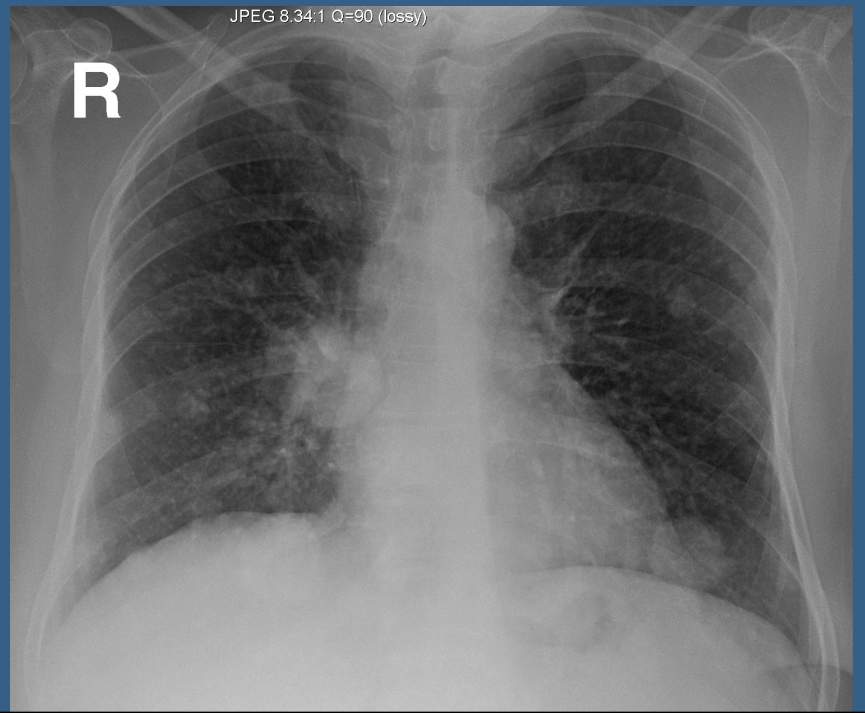


The lesion on this MRI is:

- Meningioma
- Infarction
- Metastasis
- Abscess

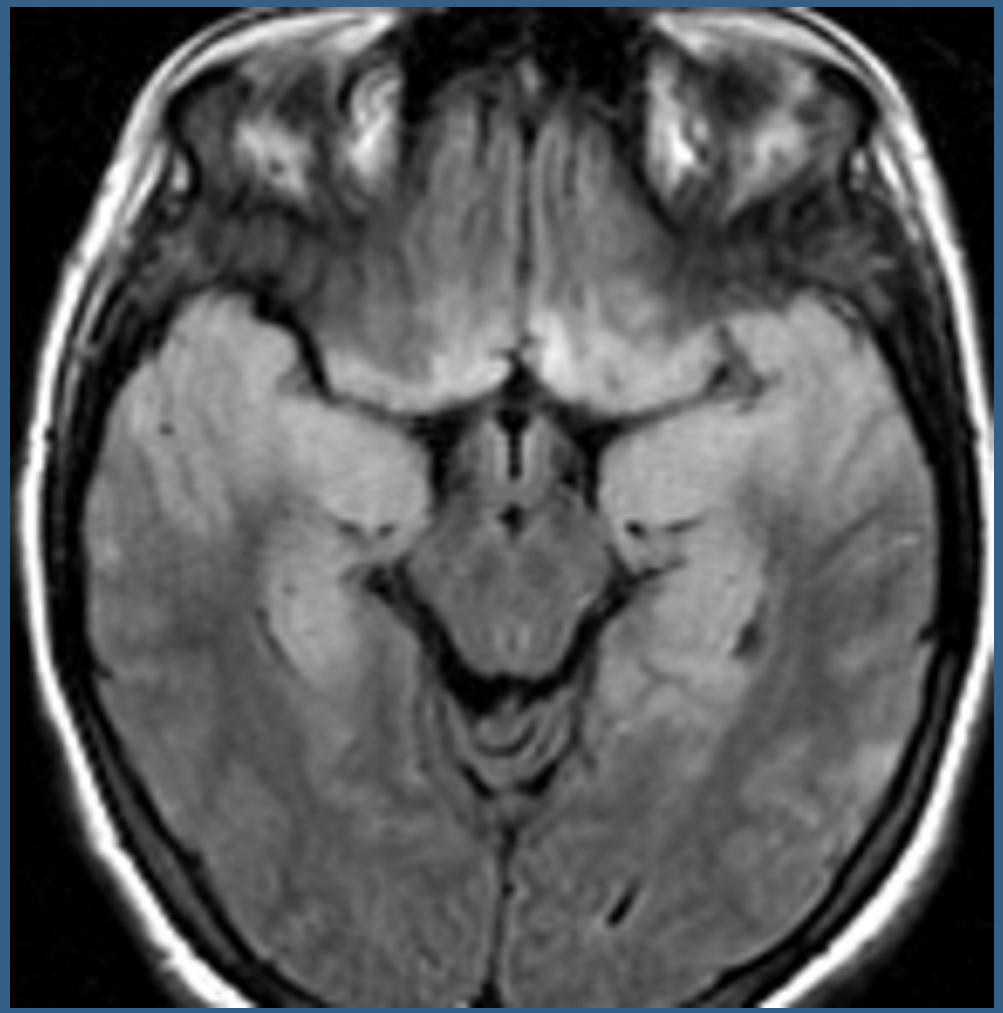





JPEG 8.34:1 Q=90 (lossy)
R

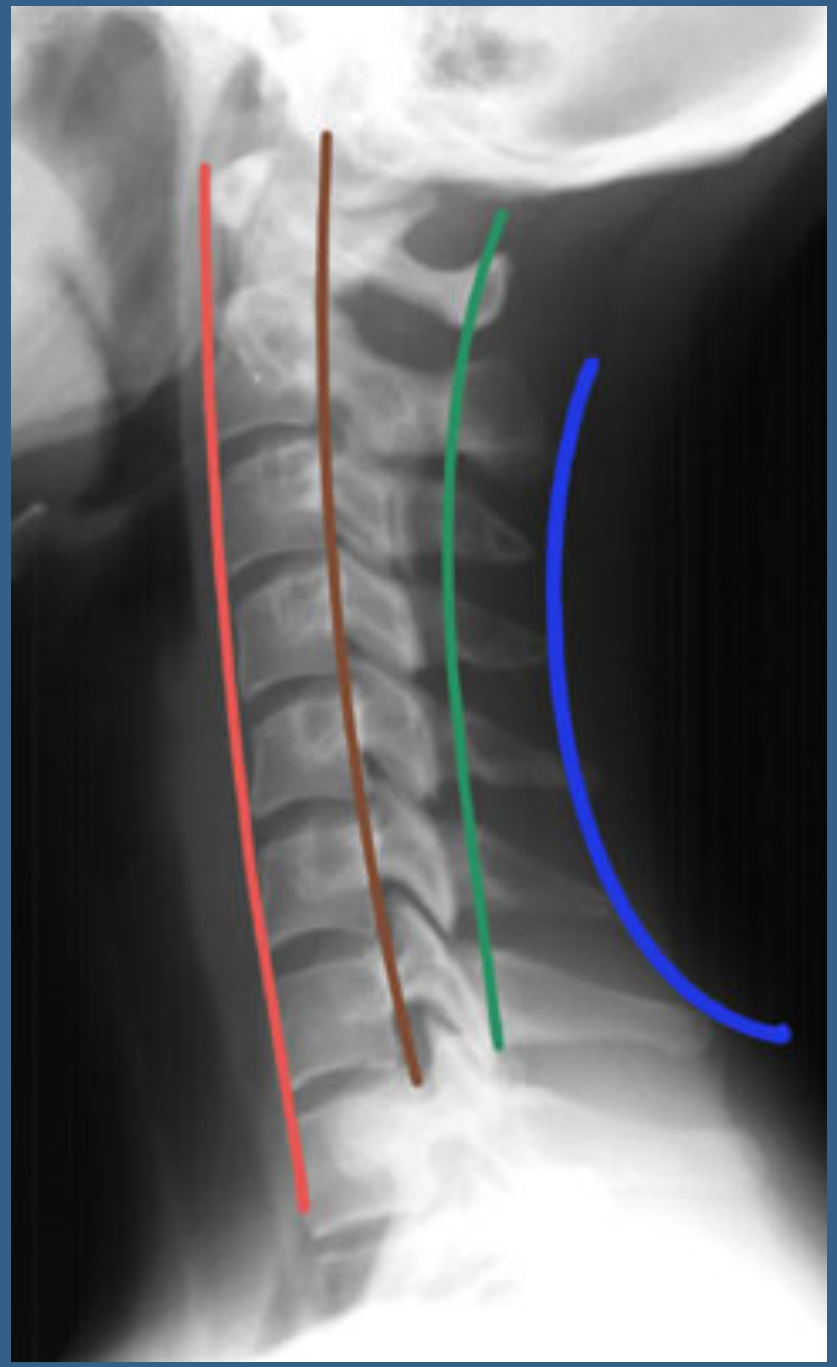
The lesion on this MRI is:

A. Pituitary adenoma
B. Craniopharyngioma
C. Meningioma
D. Glioblastoma multiforme



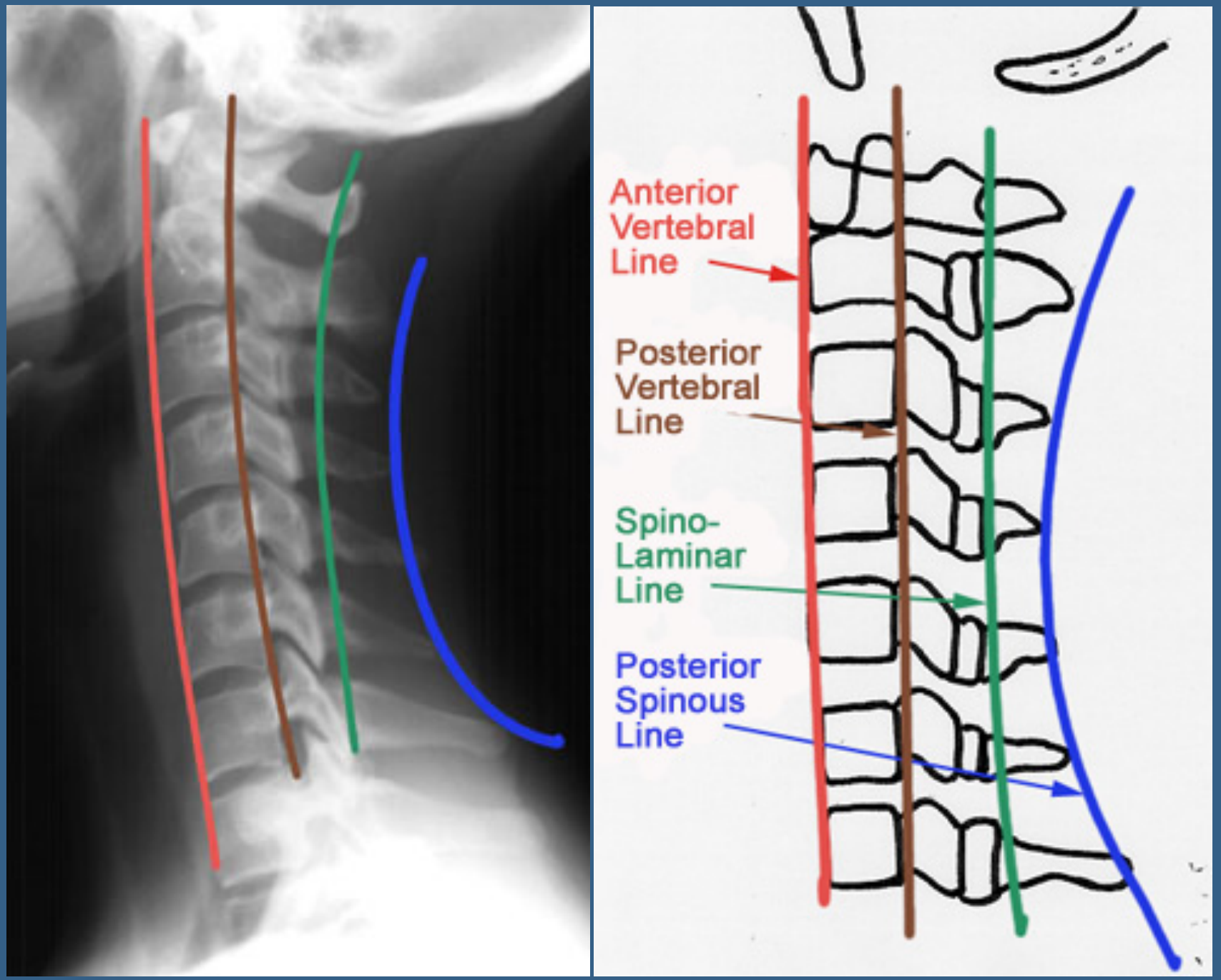
The abnormalities on this MRI are due to:

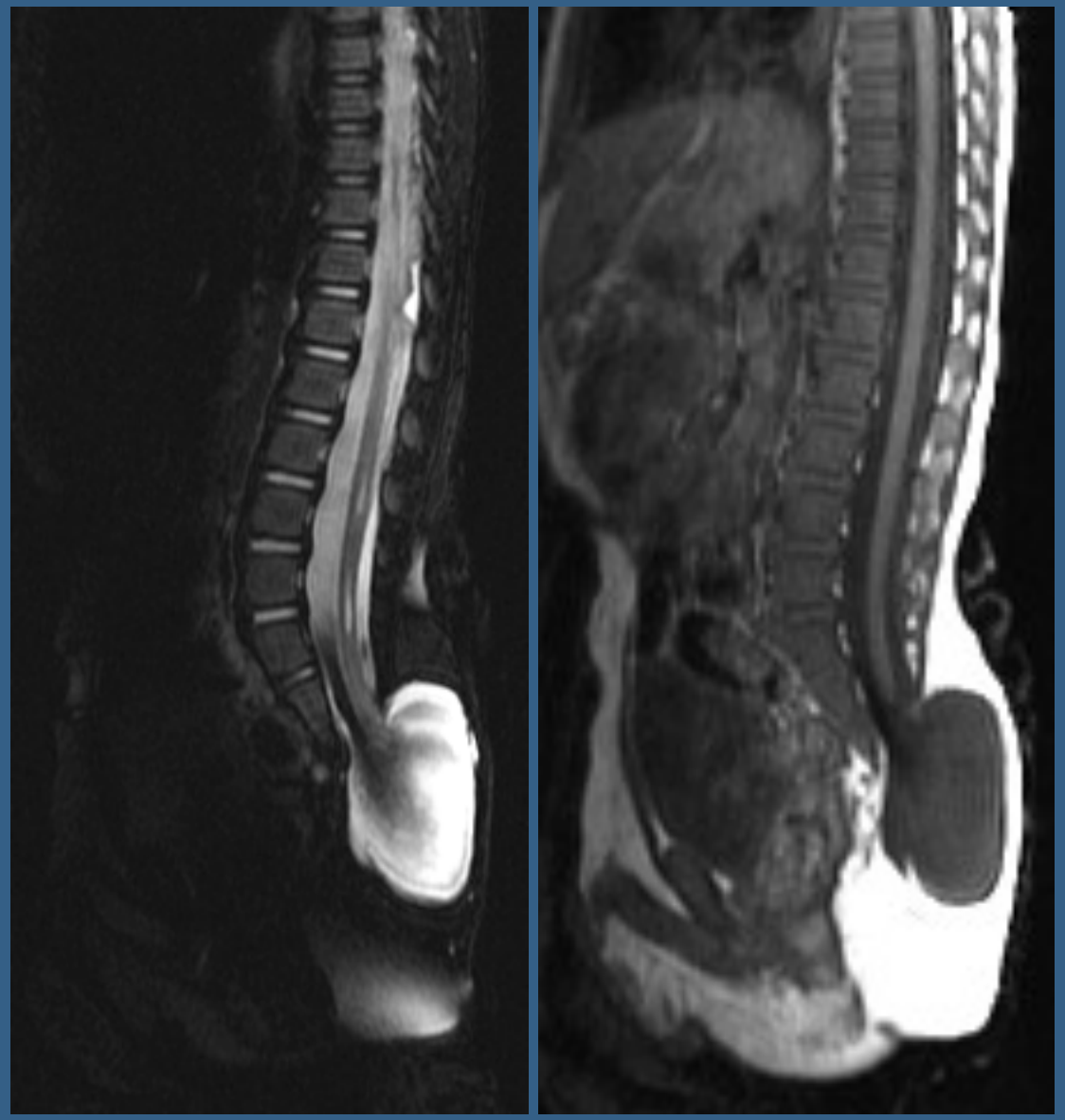
A. Multiple sclerosis
B. Meningitis
C. Brain tumor
D. Encehalitis



Which of the following is true about the lines of the cervical spine?

A. Red is intervertebral line
B. Brown is posterior spinous line
C. Green is spinolaminar line
D. Blue is posterior vertebral line


Anterior
Vertebral
Line
Posterior
Vertebral
Line
Spino-
Laminar
Line
Posterior
Spinous
Line



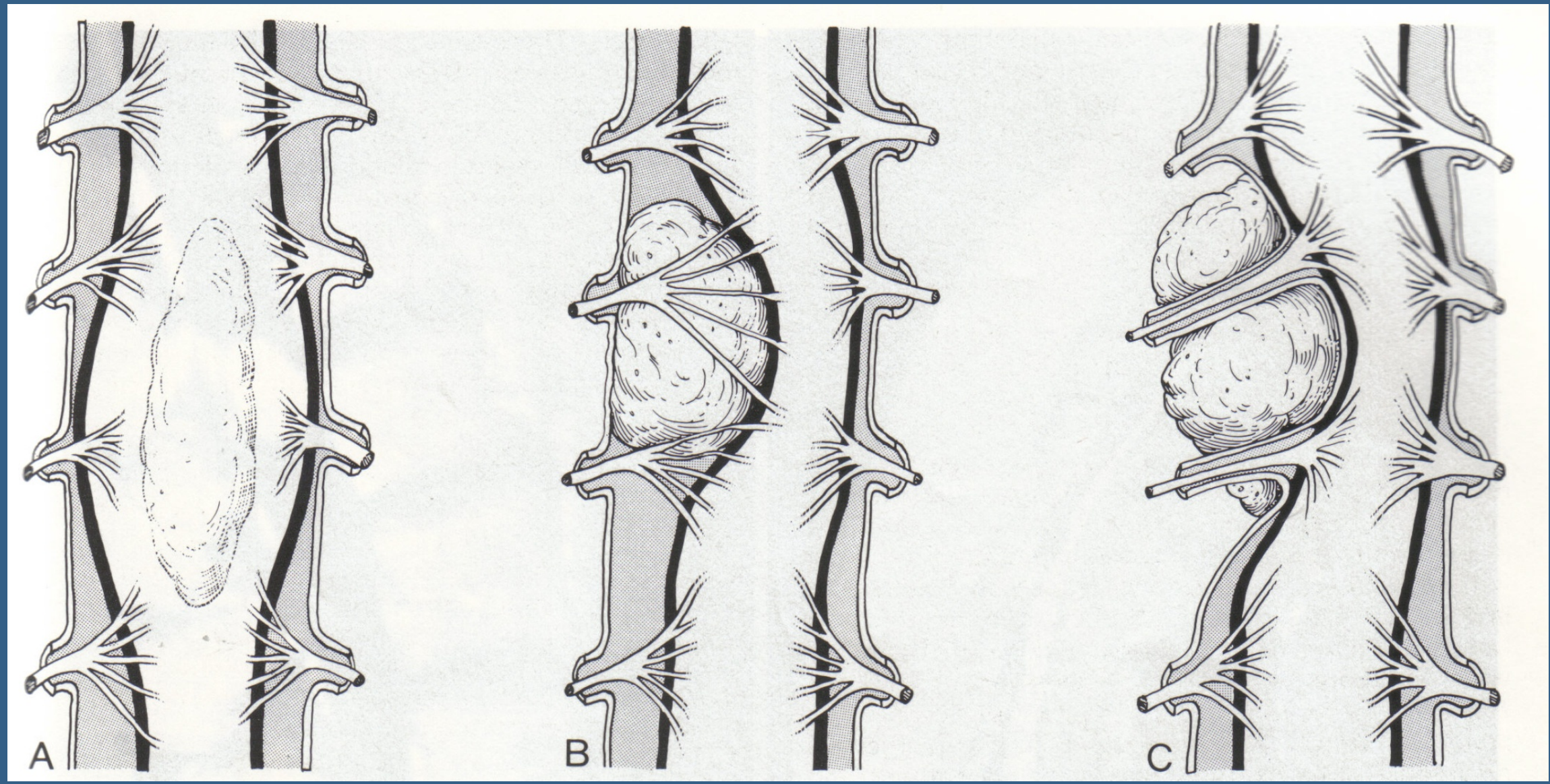
This MRI of the spine shows:

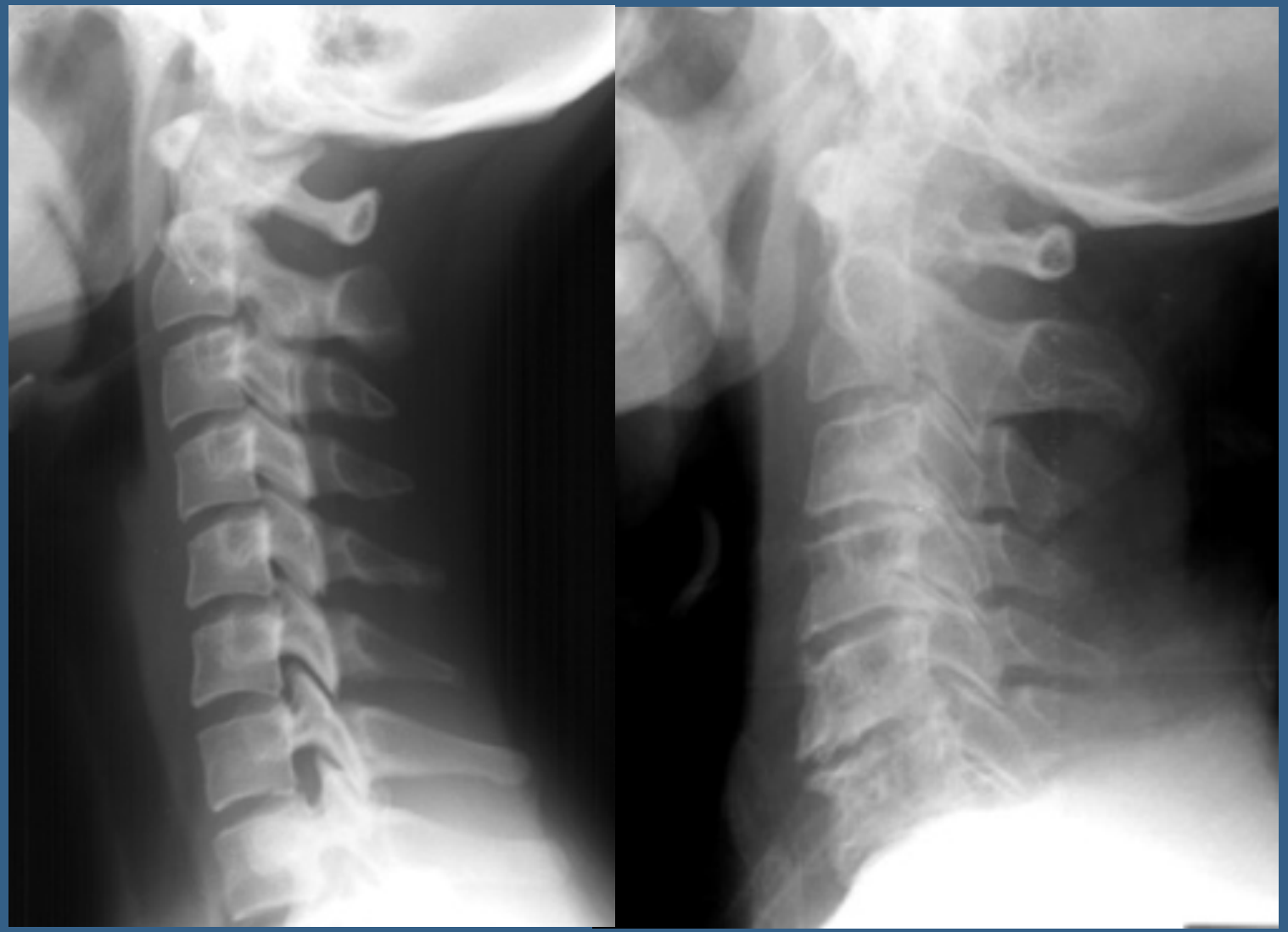
A. Meningocele
B. Extradural tumor
C. Discitis
D. Vertebral fusion

Patient A

Patient B

Patient C

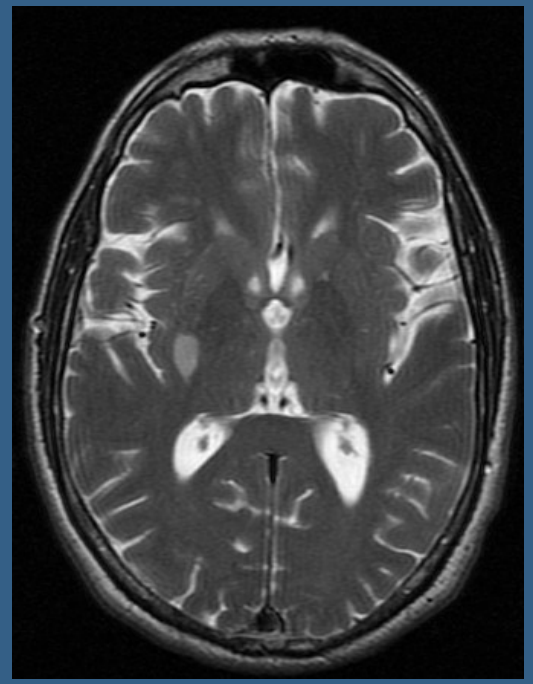

A
B
C



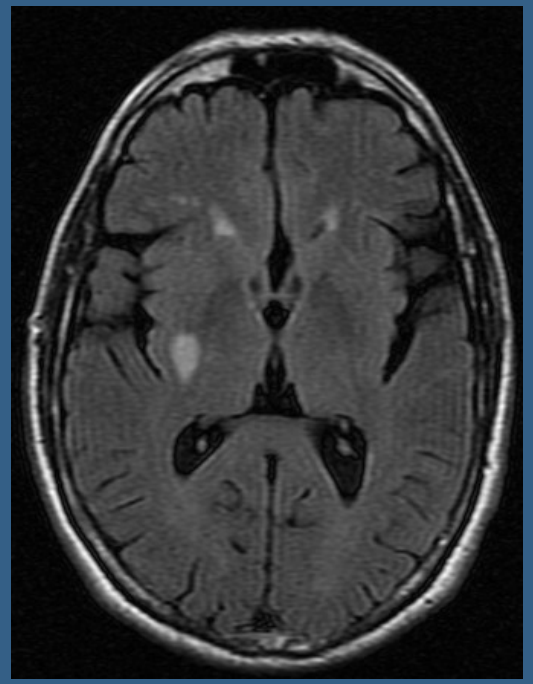
Normal control

Patient

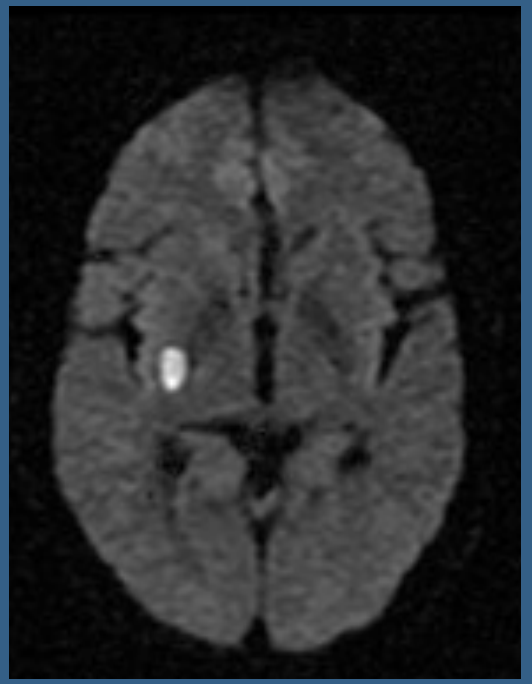
What is the difference?



T2WI



FLAIR

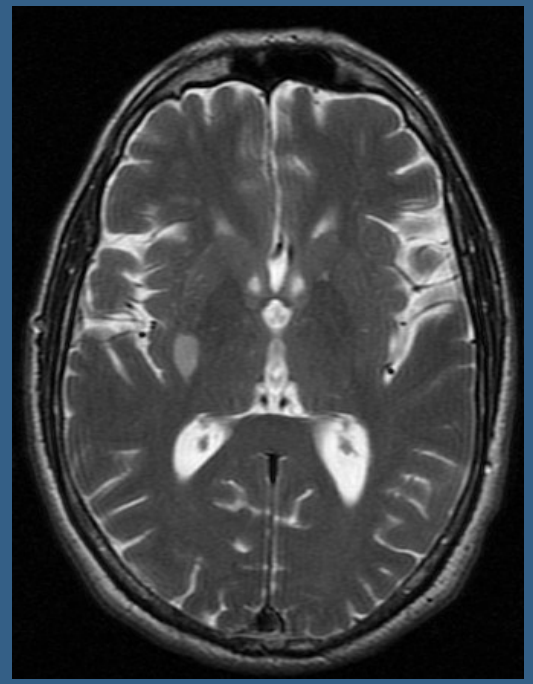


DWI

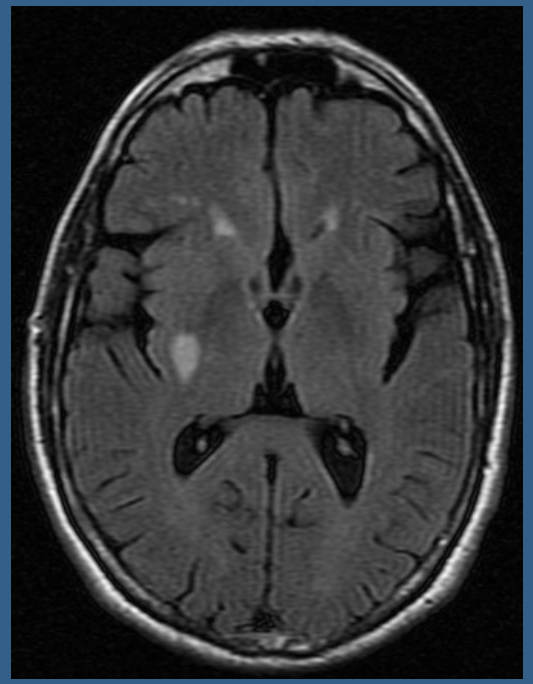
This MRI shows an infarction in the right basal ganglia.

The infarction is:

A. Acute (recent)
B. Chronic (old)
C. Hemorrhagic
D. In PCA territory



T2WI



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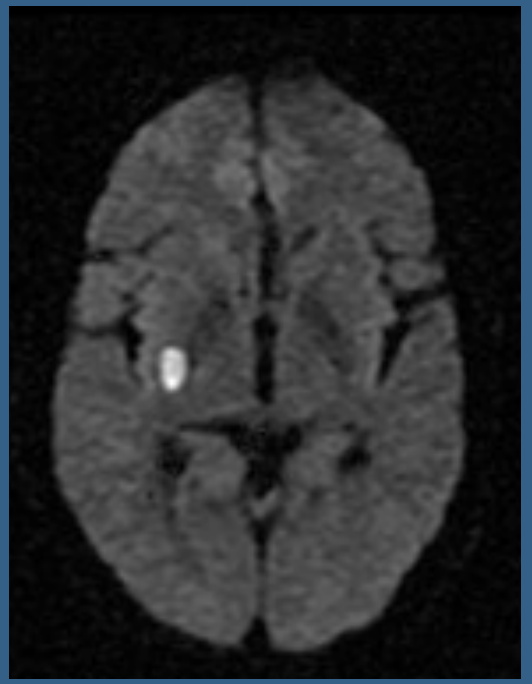

DWI

This patient is most likely to have:

A. Left monoplegia
B. Left hemiplegia
C. Diplegia
D. No symptoms

This CT shows:

A. Subdural hematoma
B. Subarachnoid hemorrhage
C. Intraventricular hemorrhage
D. All of the above

The hematoma pointed by the arrow is:

A. Acute epidural
B. Chronic epidural
C. Acute subdural
D. Chronic subdural
E. None of the above

This CT shows:

A. Acute PCA infarct
B. Chronic ACA infarct
C. Subarachnoid bleeding
D. Meningioma
E. Abscess

Thank you