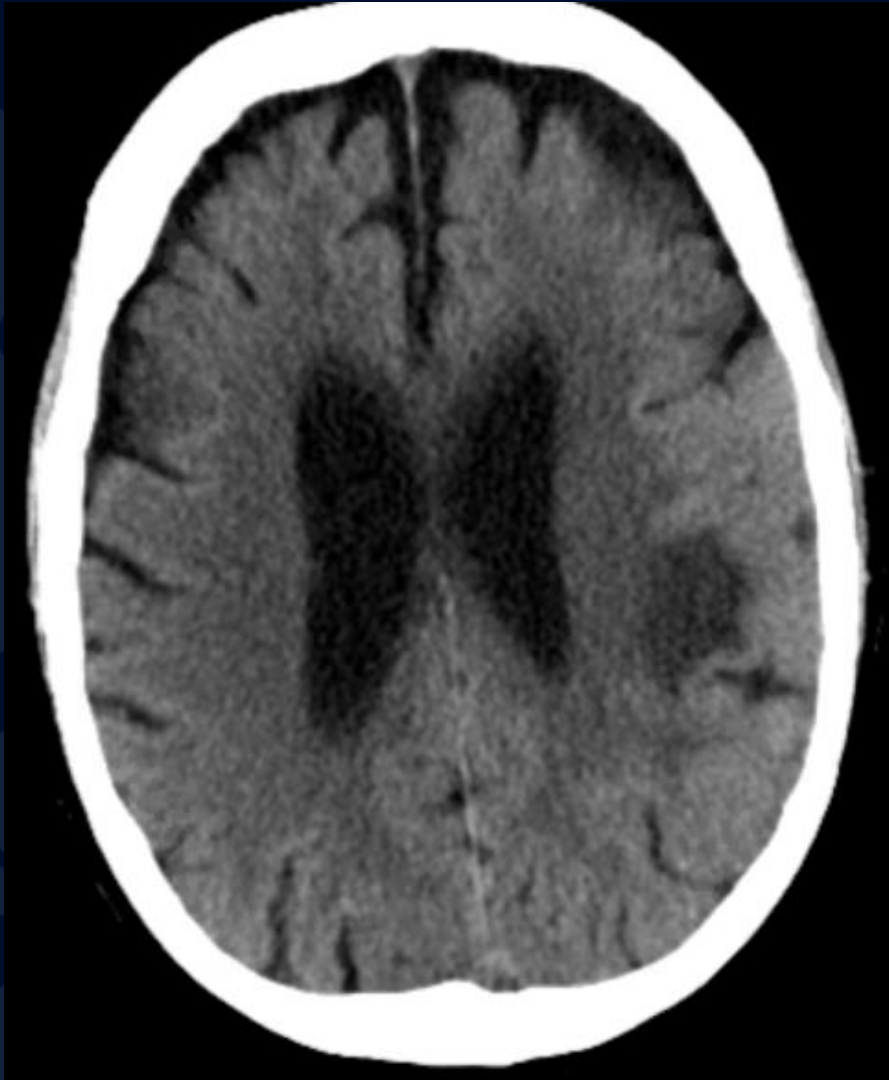


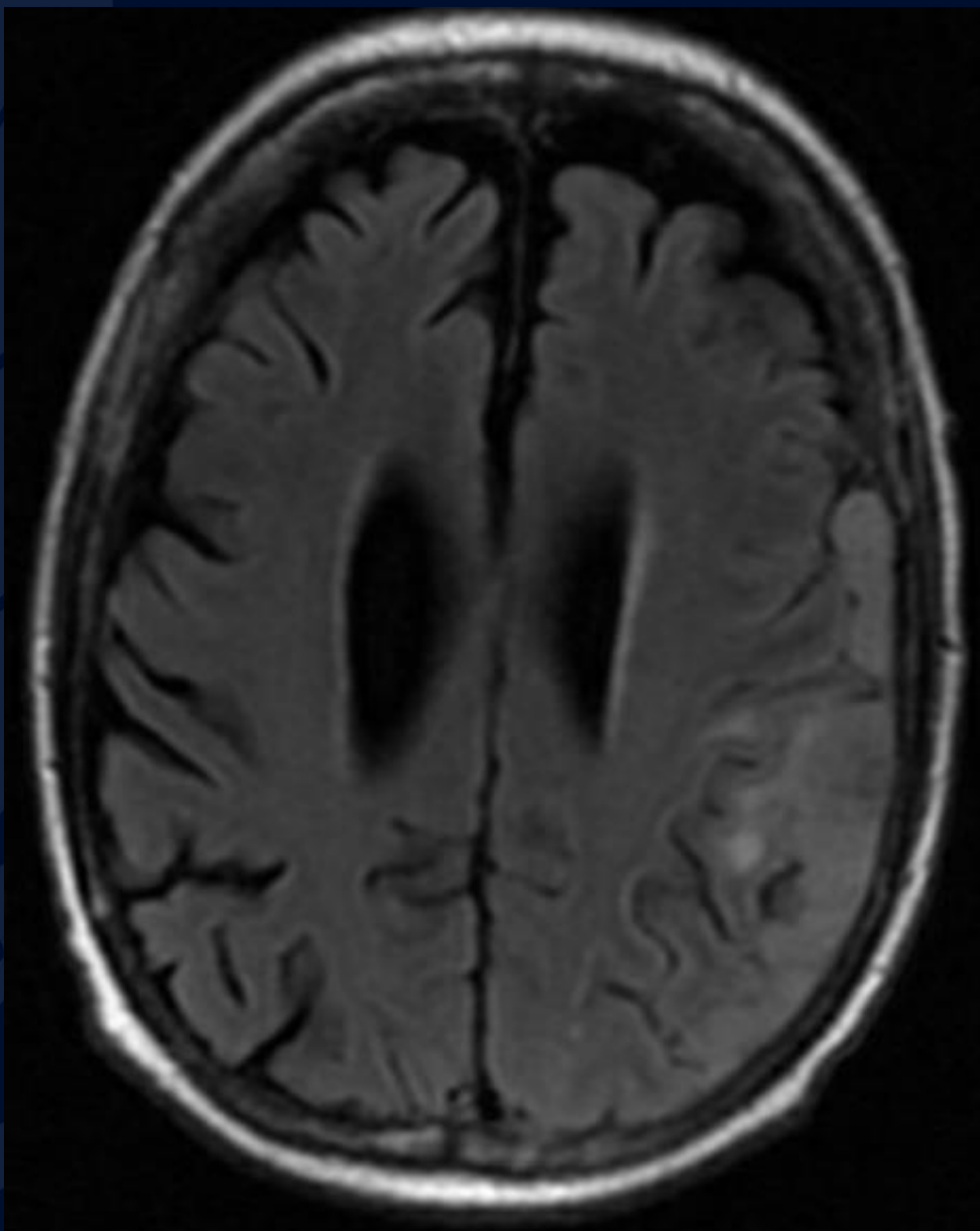
81-year-old male with history of
cancer on chemotherapy
presents with right sided
hemiparesis and dysarthria

Neeharika Krothapalli, DO

Leo Wolansky, MD



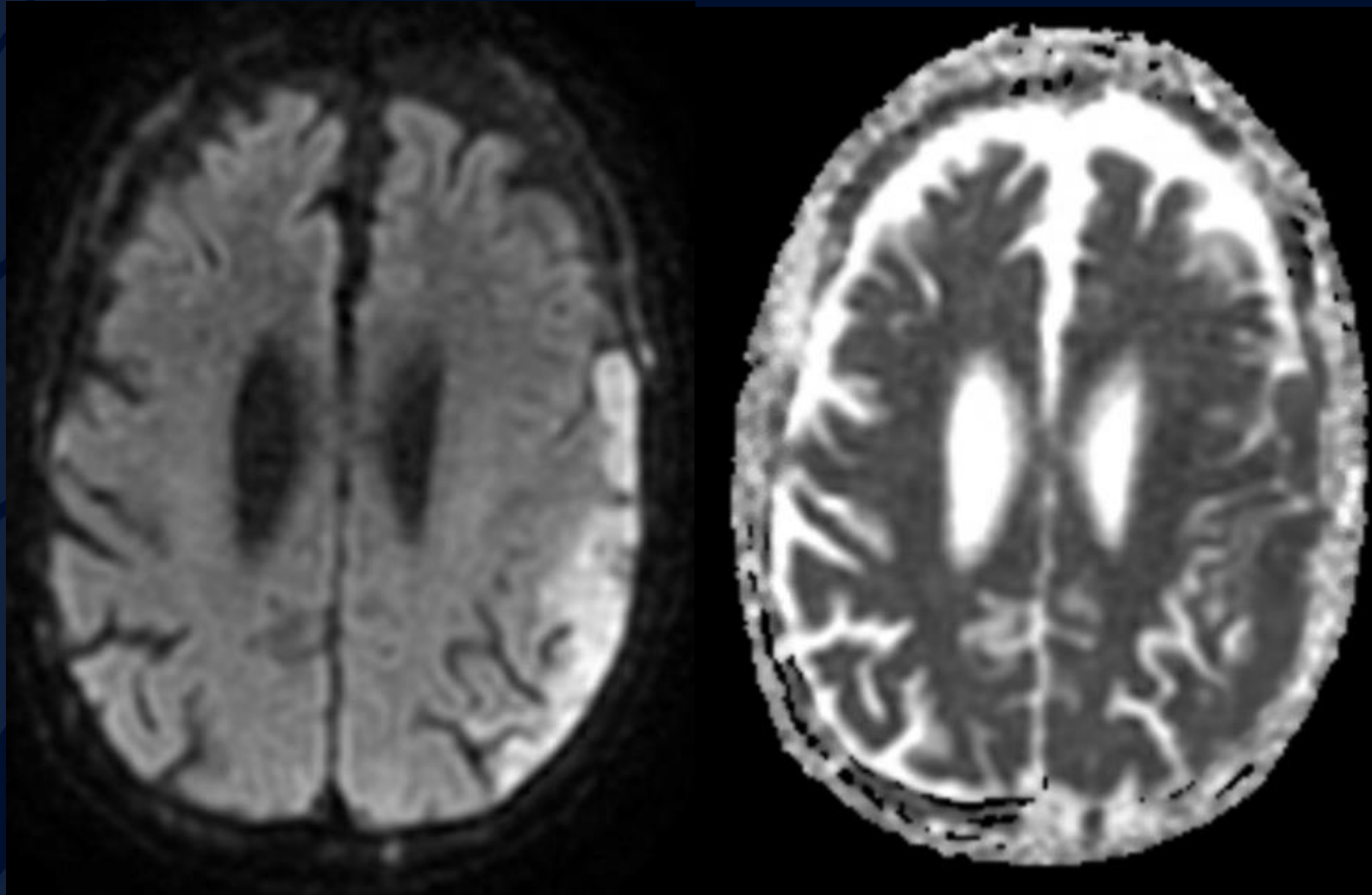
CT
Head
w/o
contrast



MRI
Brain
w/o Gd

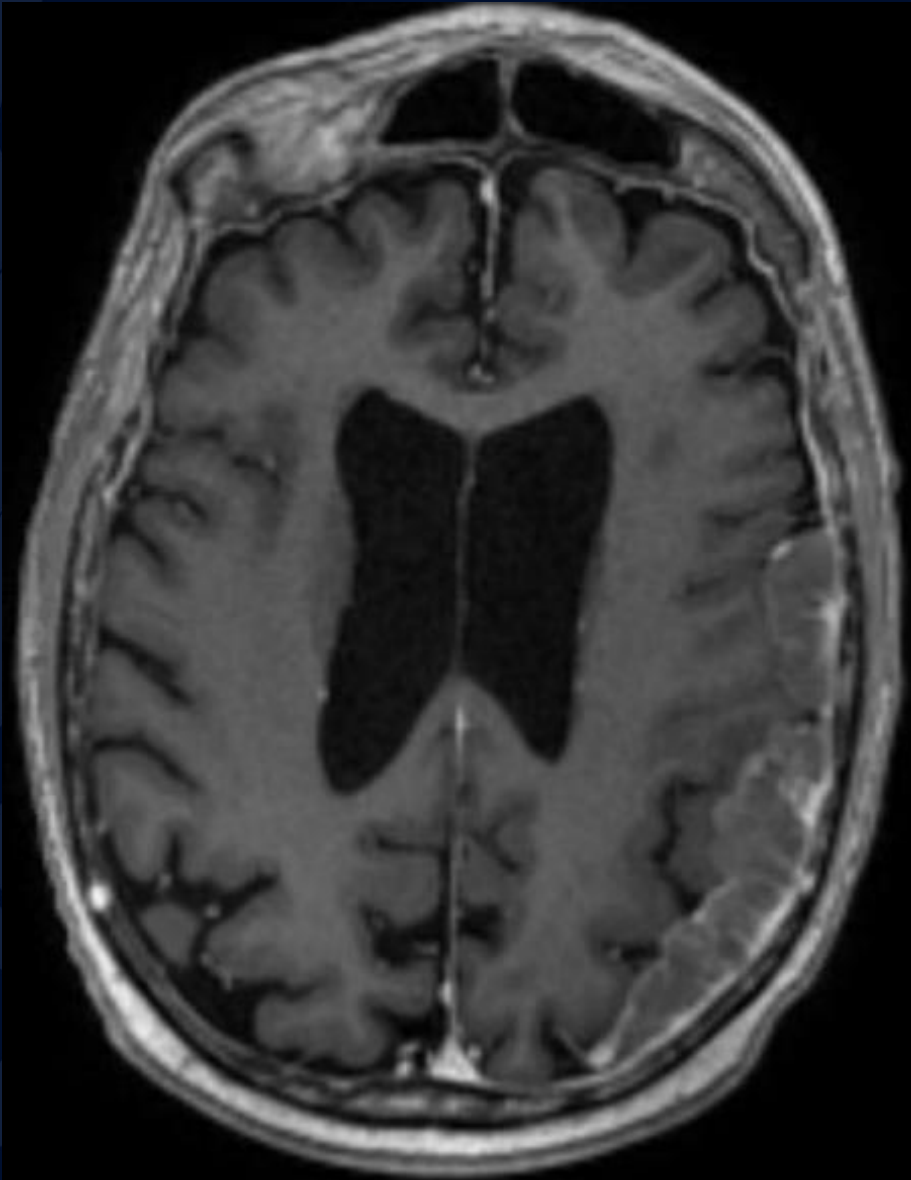
Axial T2 FLAIR

MRI
Brain
w/o Gd



DWI

ADC



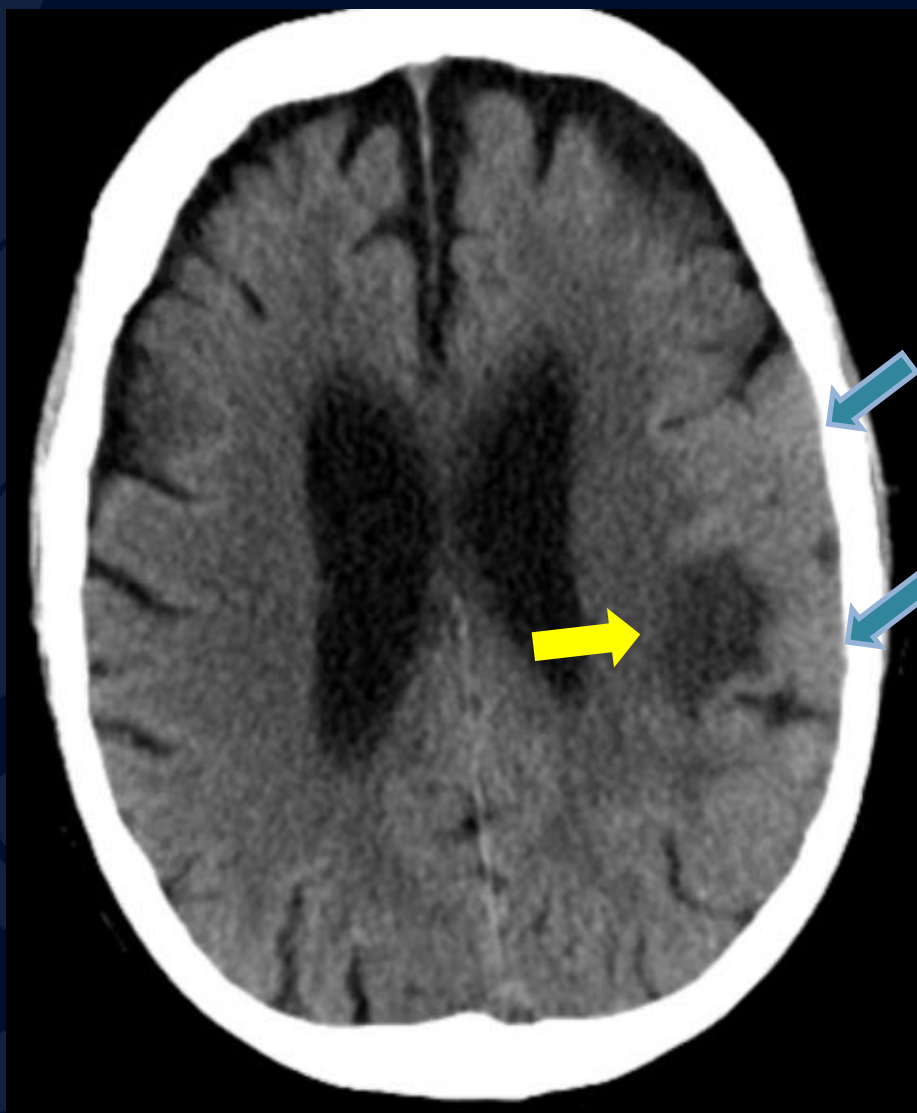
Axial T1
Post-Gd



?

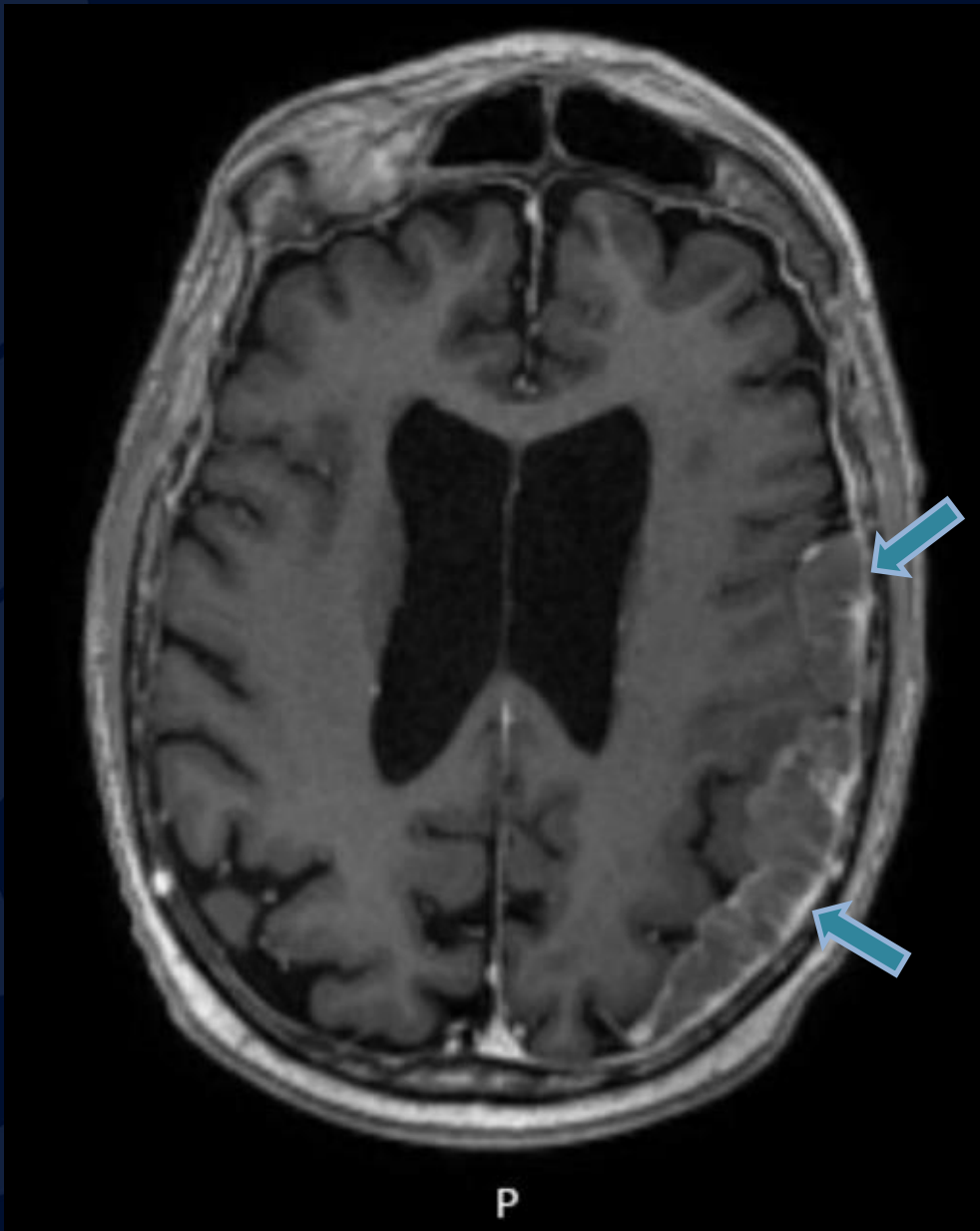
A large, stylized, dark blue oak leaf graphic is positioned on the left side of the slide, extending from the top to the bottom. The leaf has a prominent central vein and several smaller veins branching off it. The background is a solid dark blue.

Intracranial Metastases from Prostate Carcinoma



CT
Head
w/o contrast

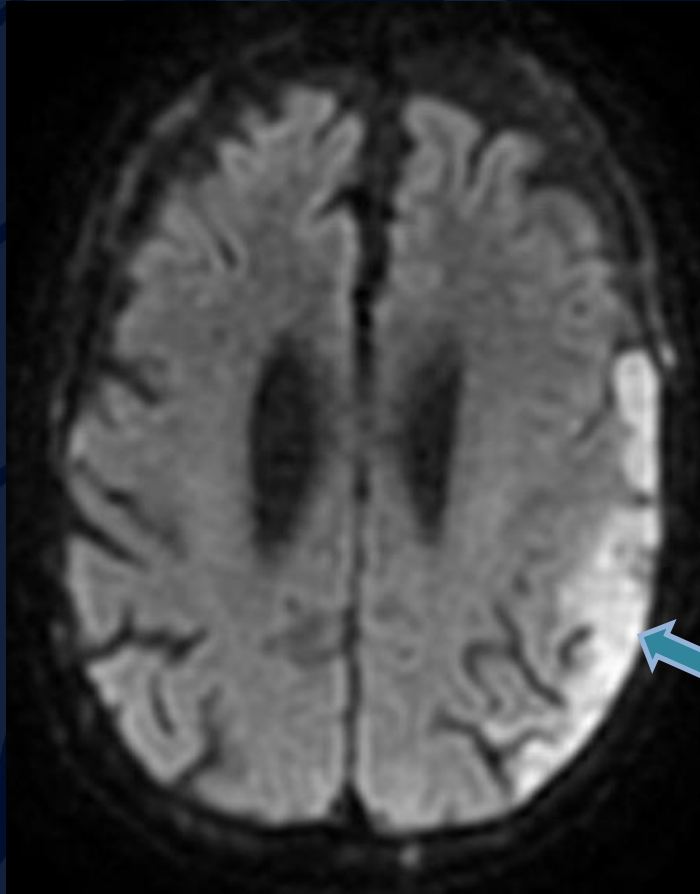
Isodense to
Hyperdense
superficial mass
(blue arrows)
with adjacent
vasogenic edema
(yellow arrow)



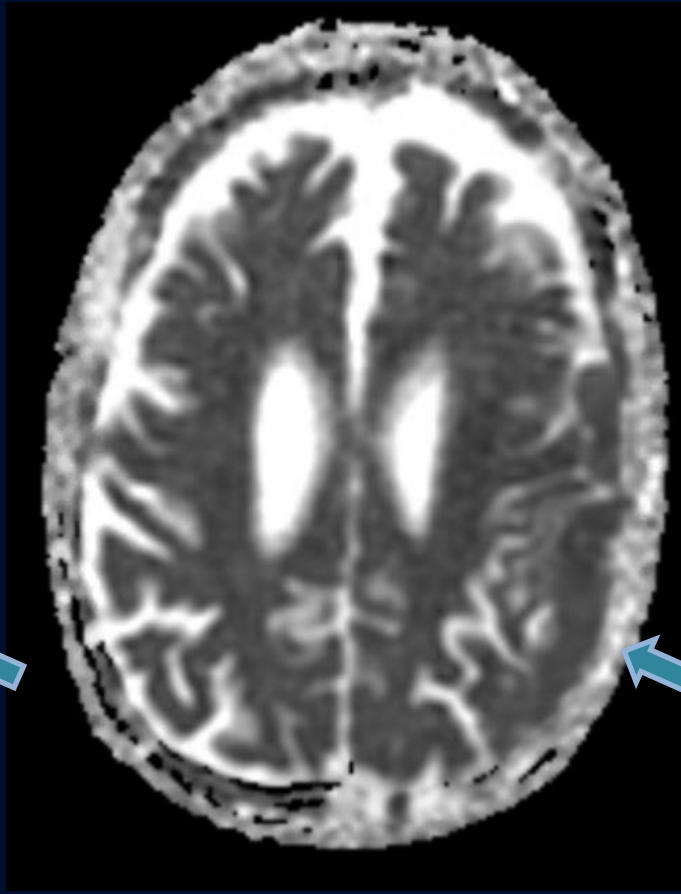
Axial Post-Gd

Extensive
nodular dural
thickening with
areas of
enhancement
over left cerebral
convexity
(arrows)

DWI MRI Brain w/o Gd



DWI



ADC

Mass is
diffusion
restricting
(arrows)

Intracranial Metastases from Prostate Cancer

- Most common intracranial location of prostate cancer metastases: Meninges (67%)
- Neurologic features: Headache, seizures, motor deficits, intracranial hemorrhage, subdural hematoma, mental status changes, gait disturbance, nausea/vomiting, vertigo, multiple CN palsies

Imaging Characteristics

- CT Head
 - Mass may be isodense, hypodense or hyperdense in comparison to normal brain parenchyma
 - Variable degree of vasogenic edema
 - Post-contrast: enhancement can be variable and intense, nodular, punctate or ring-enhancing

Imaging Characteristics

- MRI brain
 - T1: Iso to hypointense, intrinsic high signal if hemorrhagic or occasionally, if calcified
 - T1 + contrast: Enhancement uniform, punctate, ring-enhancing
 - T2: variable
 - FLAIR: hyperintense typically, hyperintense peritumoral edema of variable amount
 - DWI/ADC: Lesion often diffusion restricting. Edema, if present, demonstrates increased diffusivity

Differential Diagnosis

- Meningioma
 - Extra-axial, homogenous enhancement
 - Often calcification
 - Dural mass with “dural tail” is typical but not specific
 - Hyperostosis,
- Chronic subdural hemorrhage
 - Trauma history, fluid-fluid levels, varying density or intensity
- CNS lymphoma
 - Diffusely enhancing dural mass, often multifocal
 - Low T2 signal due to hypercellularity

References

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