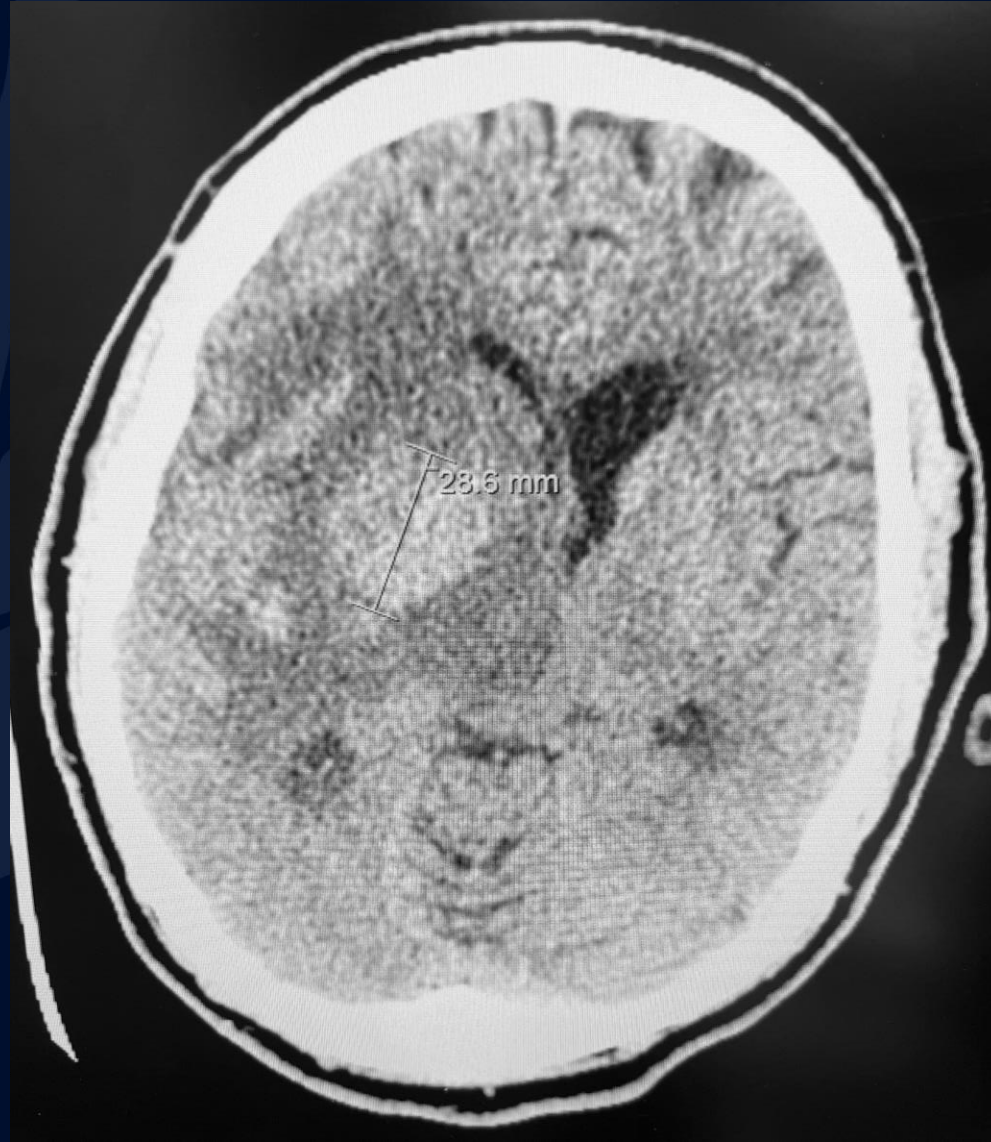


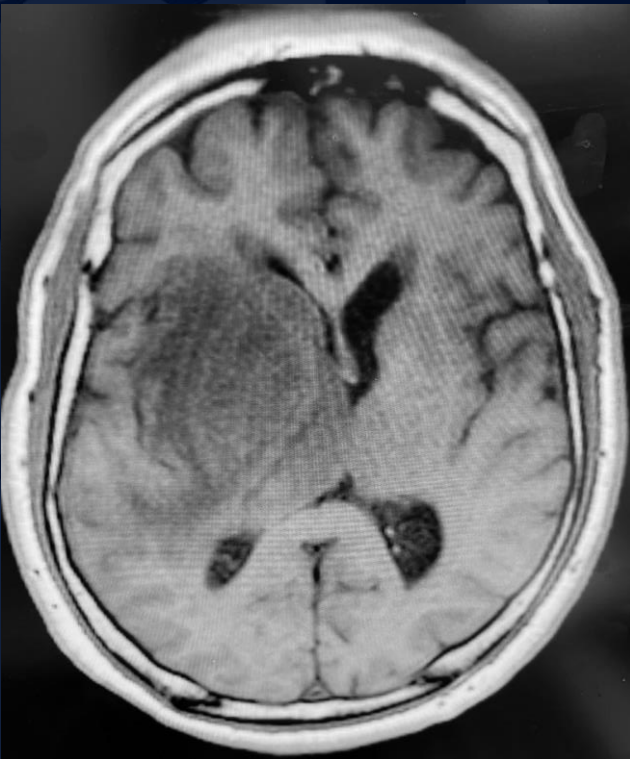
71-year-old male with acute  
mental status change, lower  
extremity weakness, urinary  
incontinence and recent falls

Laura Urbanski, MS3

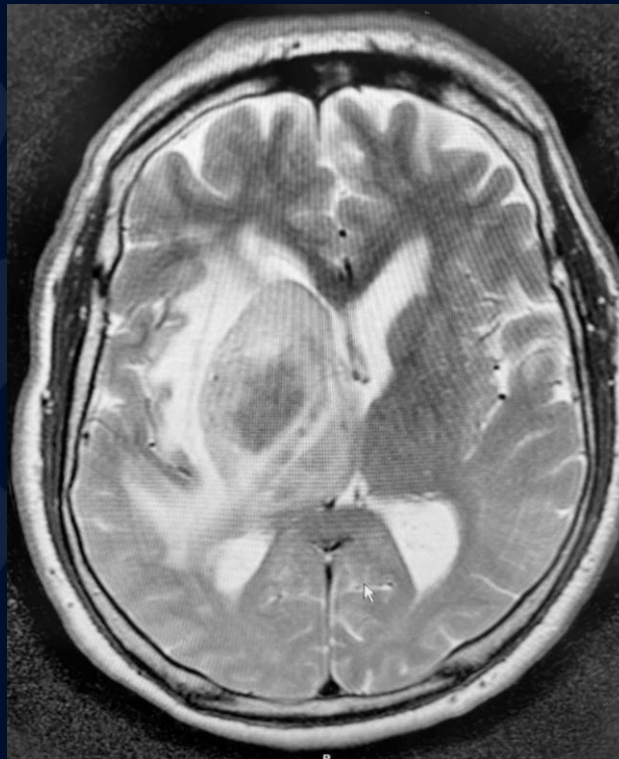
# Non-contrast CT



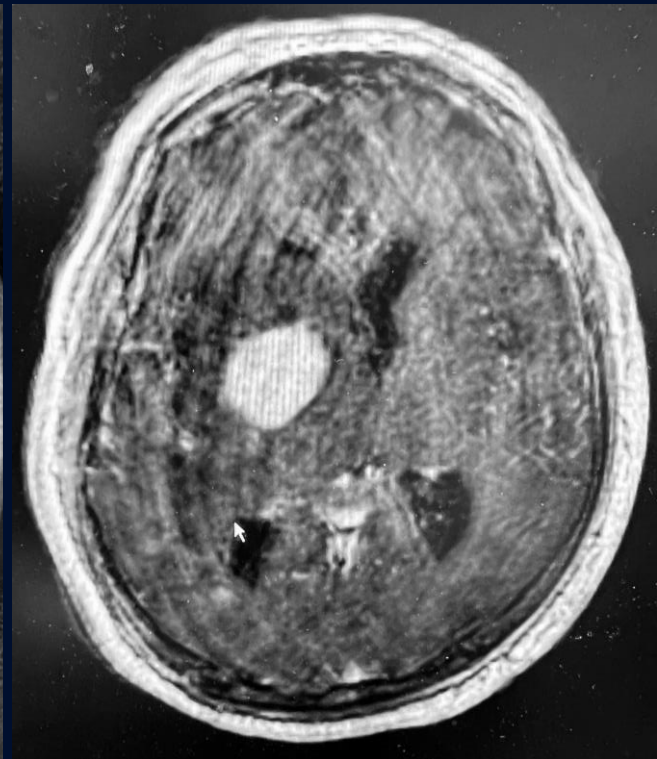
T1



T2



Post-contrast



Motion artifact noted



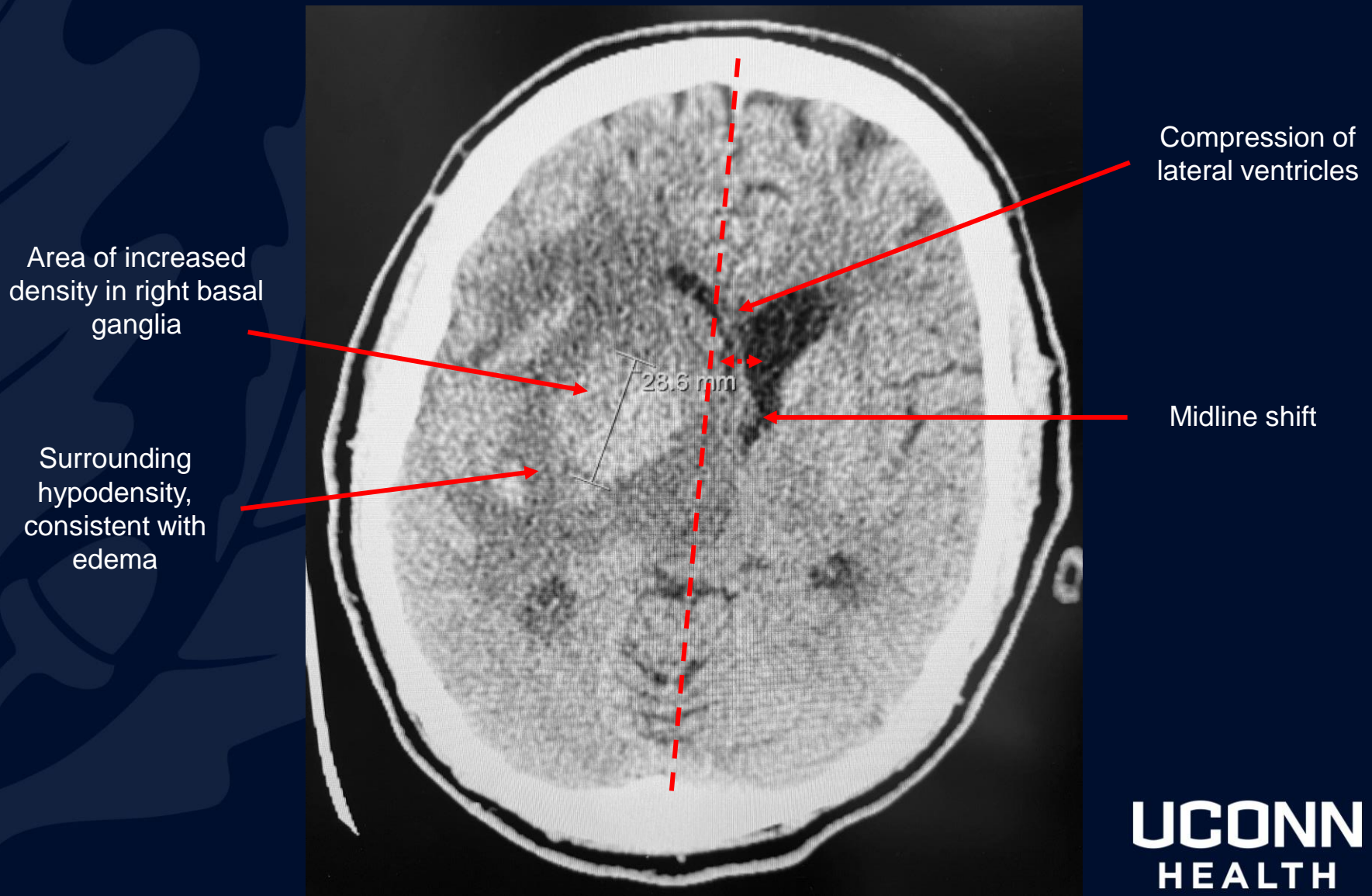
?

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the title text.

# Primary CNS Lymphoma



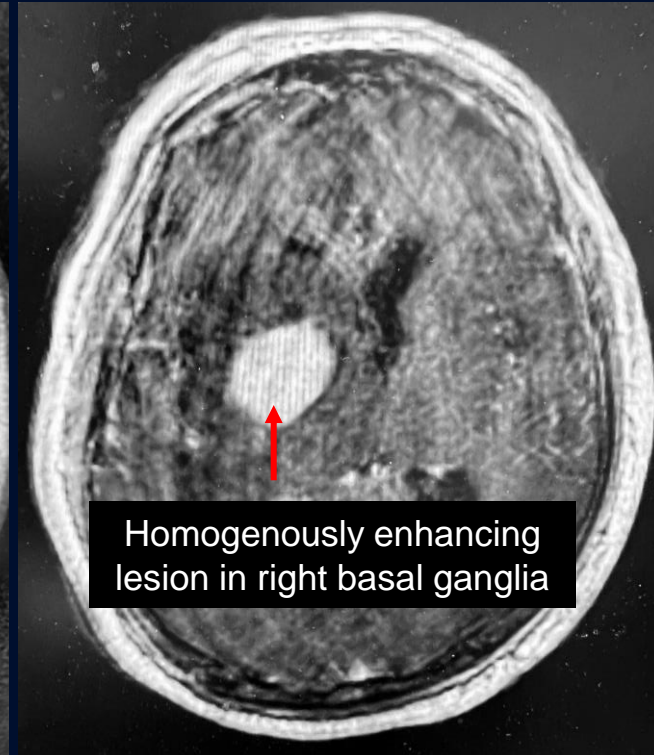
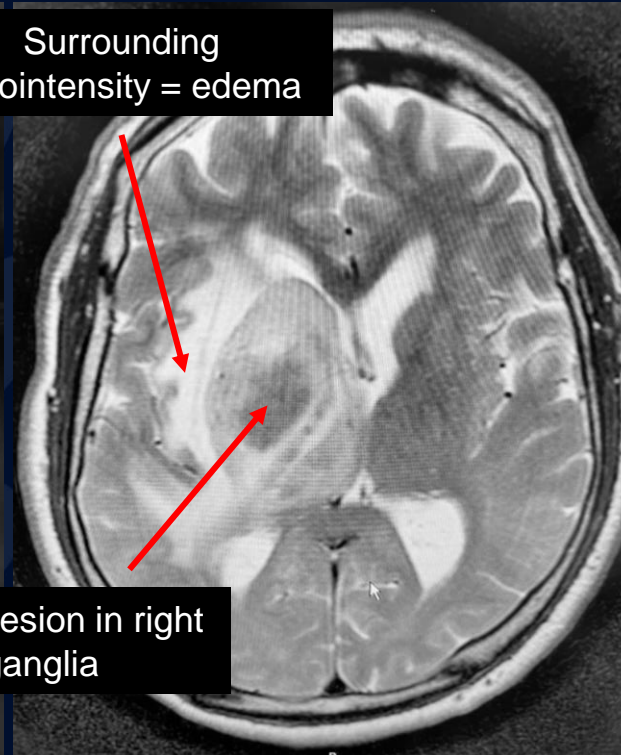
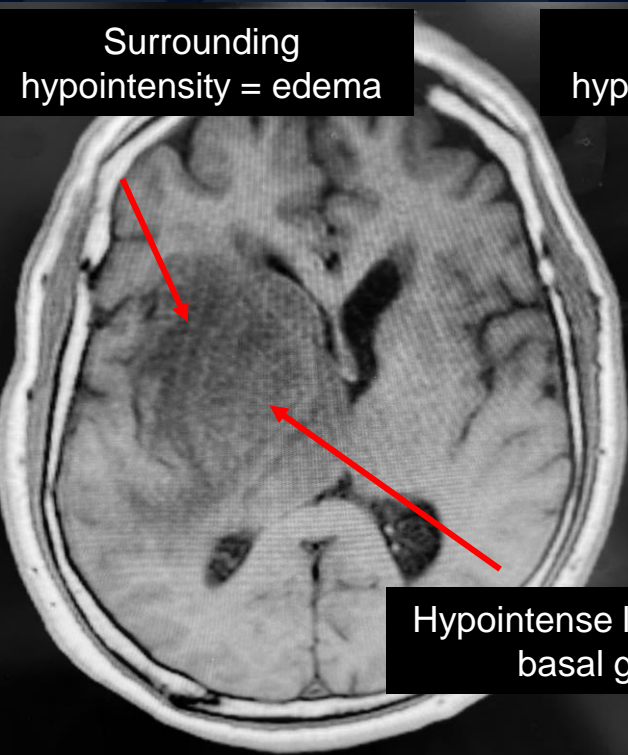
# Non-contrast CT



T1

T2

Post-contrast



# Primary CNS Lymphoma

- **Primary CNS Lymphoma:**

- Primary CNS lymphoma accounts for 1-5% of brain tumors
- Subtype of non-Hodgkin lymphoma in the brain, spinal cord, CSF or eyes
- Diagnosed via biopsy

- **Clinical Presentation:**

- Acute/subacute neurologic symptoms that progress over days to weeks
- Nature of symptoms depends on location of the lesion
- Constitutional symptoms such as fever, weight loss, or night sweats are not common

- **Differential Diagnosis:**

- Primary malignancy: glioblastoma, CNS lymphoma, astrocytoma, oligodendroglioma
- Metastasis of another primary tumor
- Hemorrhage
- Infection: bacterial, fungal, toxoplasmosis (especially if patient is immunocompromised)



# Imaging Findings

- **CT**
  - Most are hyperattenuating but can be isoattenuating
- **MRI**
  - T1: hypointense to grey matter
    - Post Gd contrast – high grade show intense homogenous enhancement, lower grade no to moderate enhancement
  - T2: variable, iso- to hypointense
- Edema is sometimes present
- Hemorrhage or calcification is rare

# References

- Gaillard, Frank. “Lymphomas of the Central Nervous System: Radiology Reference Article.” *Radiopaedia Blog RSS*, Radiopaedia.org, 18 Mar. 2023, <https://radiopaedia.org/articles/lymphomas-of-the-central-nervous-system?lang=us>.
- Haldorsen, I.S., et al. “Central Nervous System Lymphoma: Characteristic Findings on Traditional and Advanced Imaging.” *American Journal of Neuroradiology*, American Journal of Neuroradiology, 1 June 2011, <https://www.ajnr.org/content/32/6/984>.
- “Primary Central Nervous System Lymphoma: Clinical Features, Diagnosis, and Extent of Disease Evaluation.” *UpToDate*, <https://www.uptodate.com/contents/primary-central-nervous-system-lymphoma-clinical-features-diagnosis-and-extent-of-disease-evaluation>.