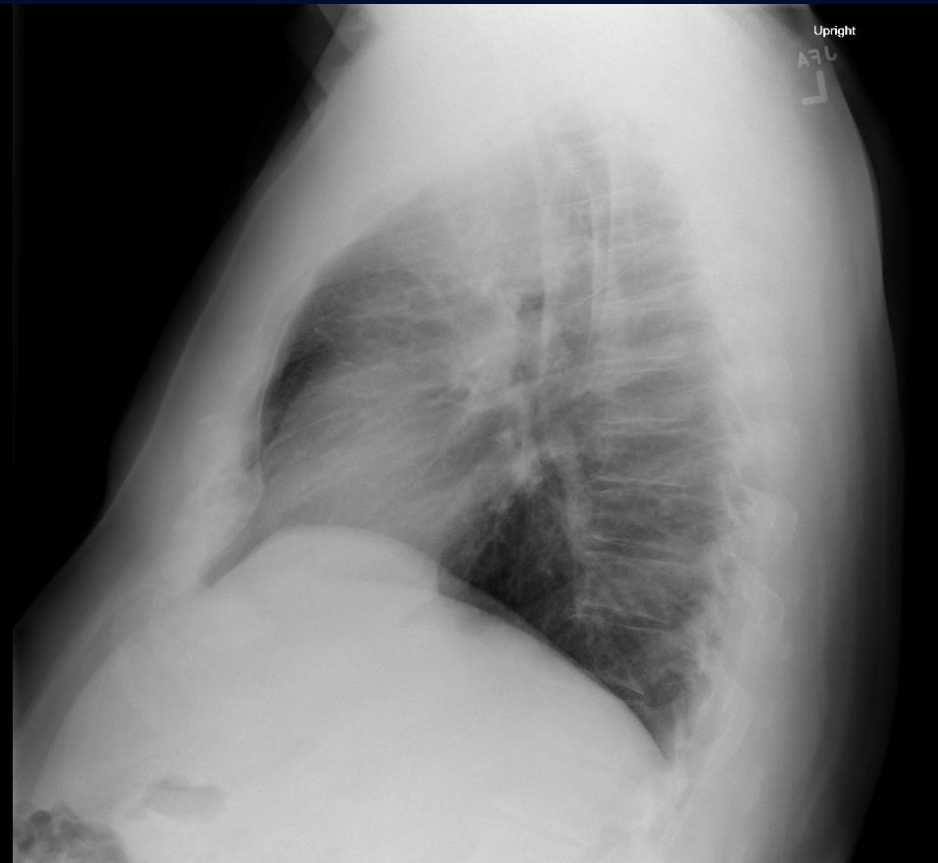


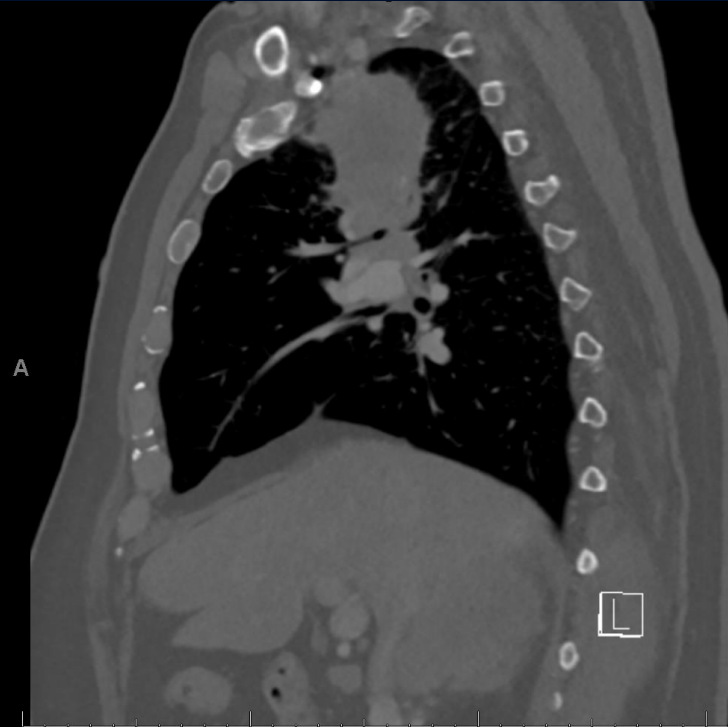
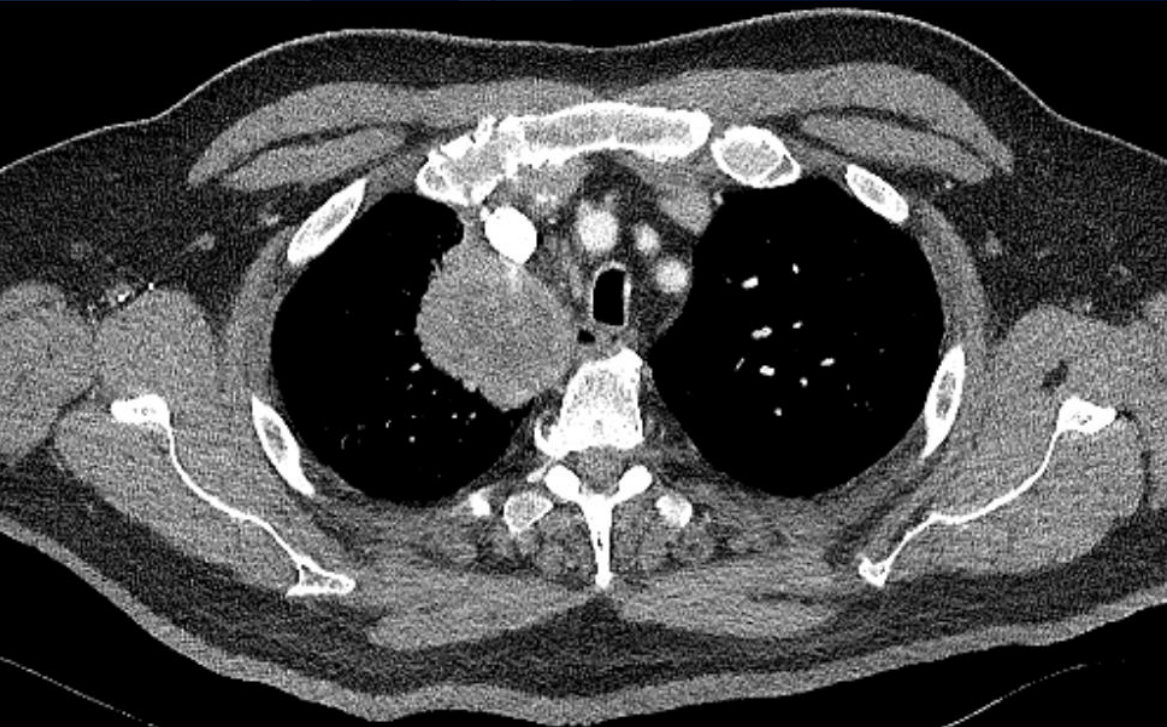
# 69-year-old male with 2-month history of intermittent left lower extremity weakness

Fabrizio Tropea, MS3

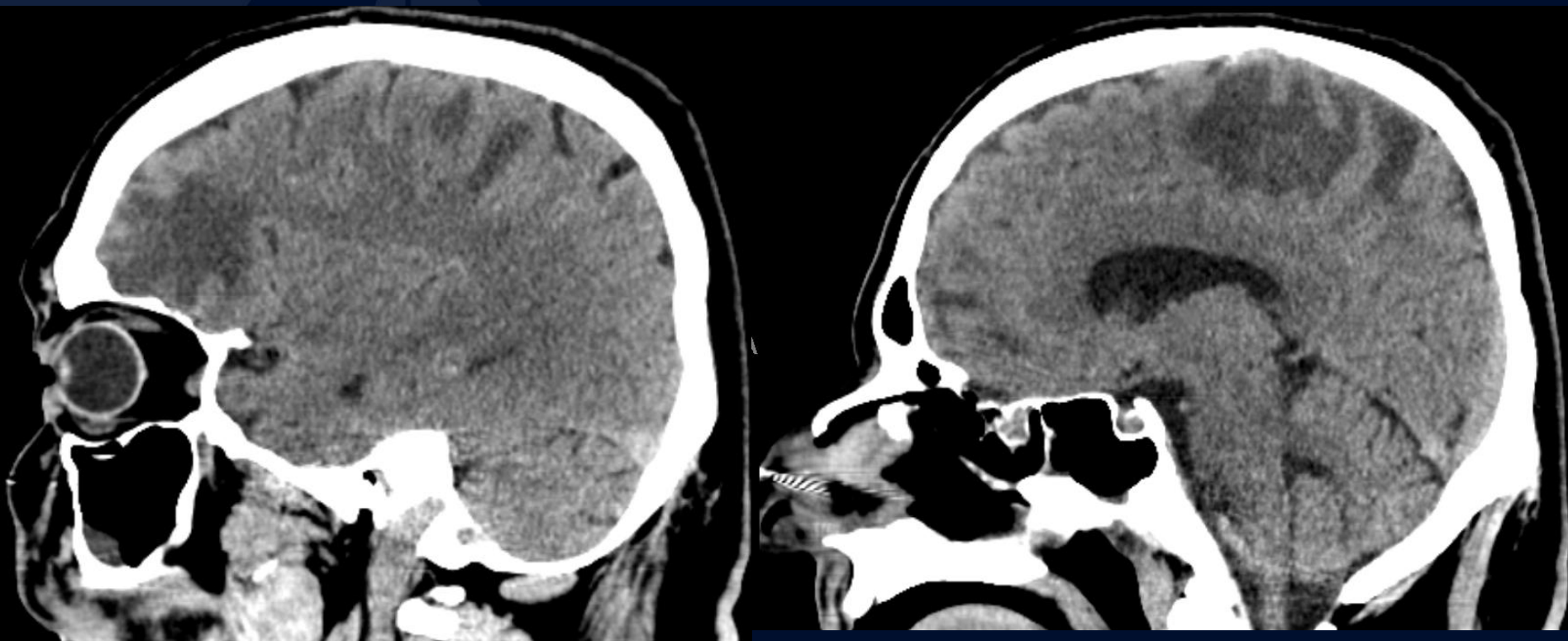
# Radiographs



# CT IV Contrast

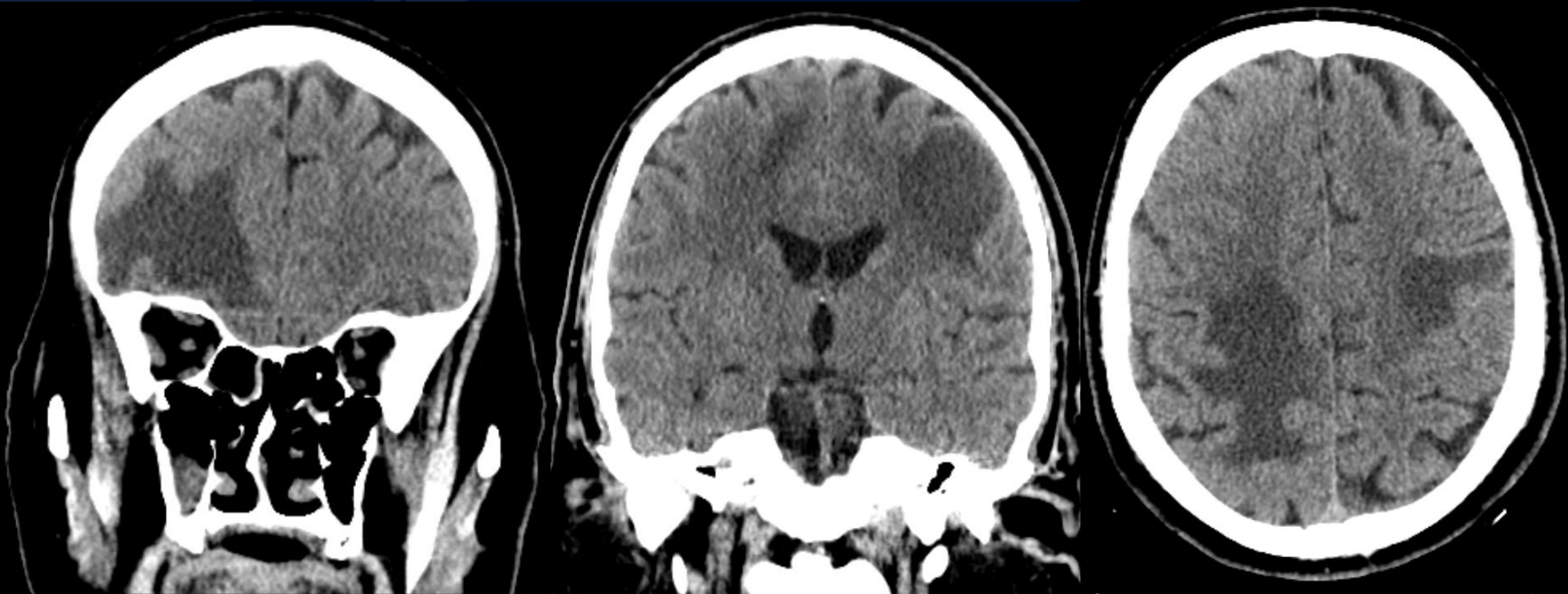


# Non-contrast CT

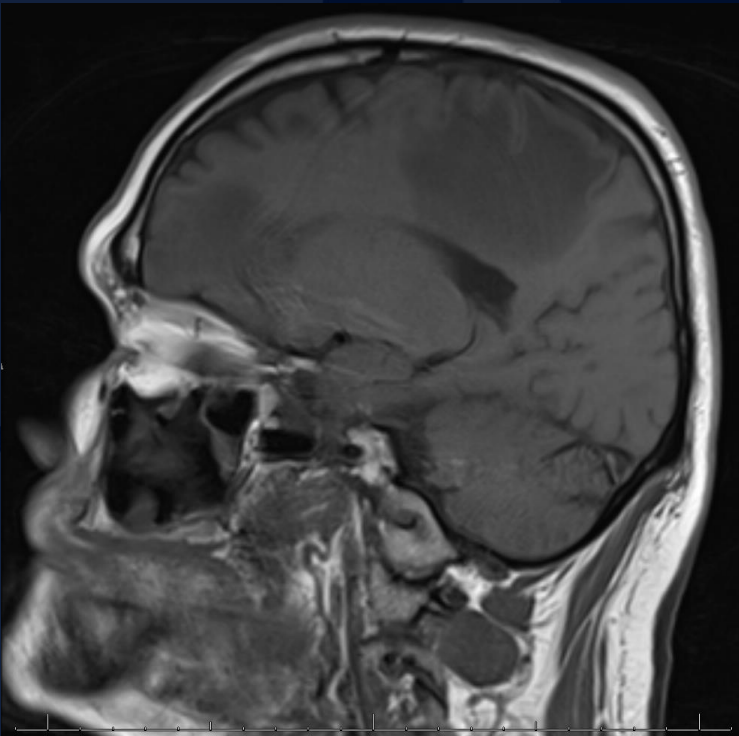




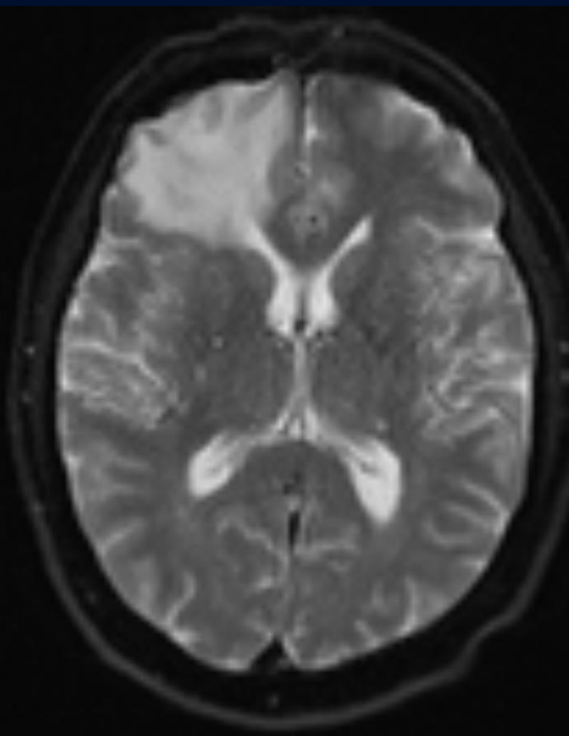
# Non-contrast CT



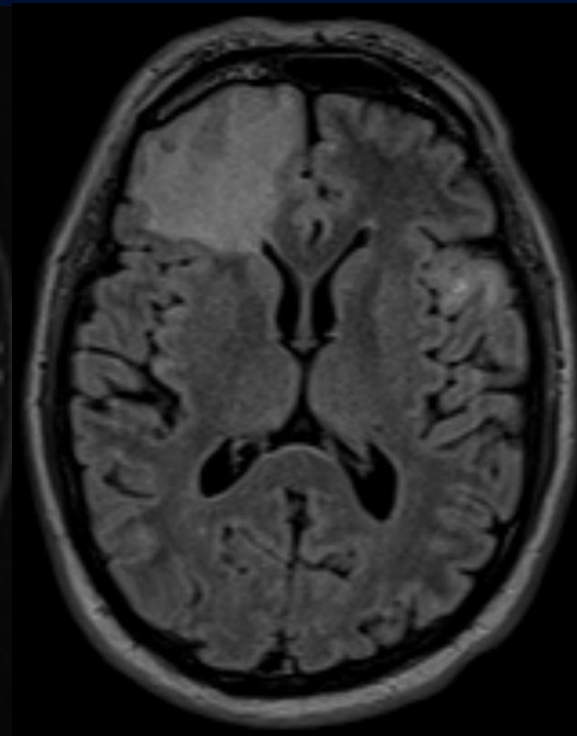
Sagittal T2



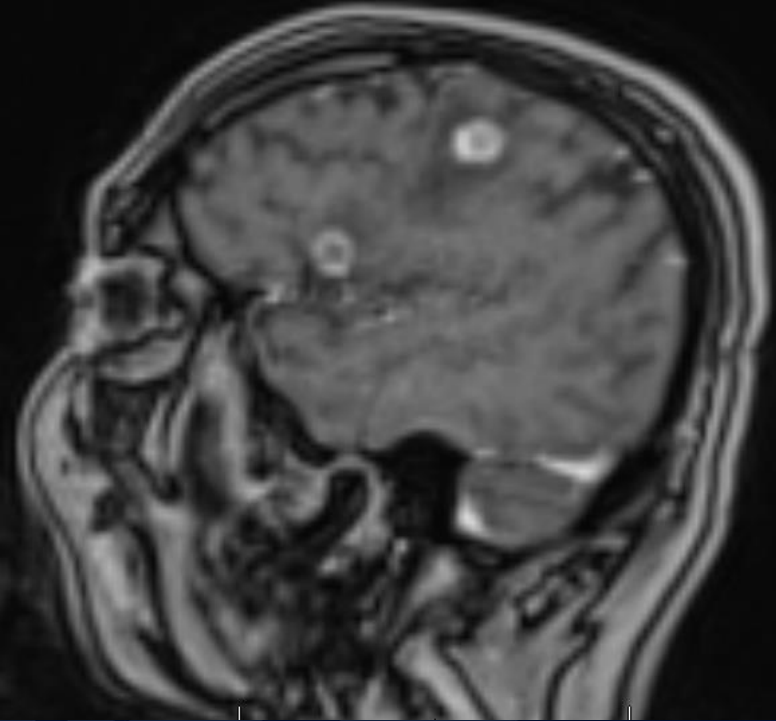
Axial T2 FS



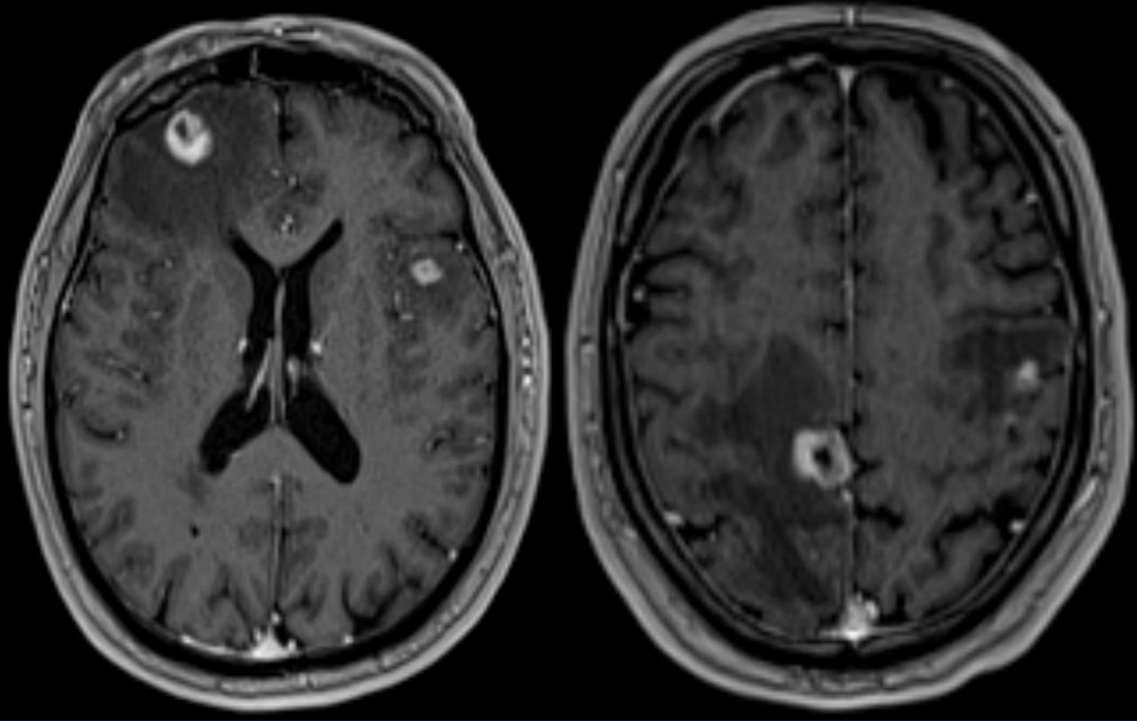
Axial T2 FLAIR



Sagittal T1 Post-contrast



Axial T1 Post-contrast



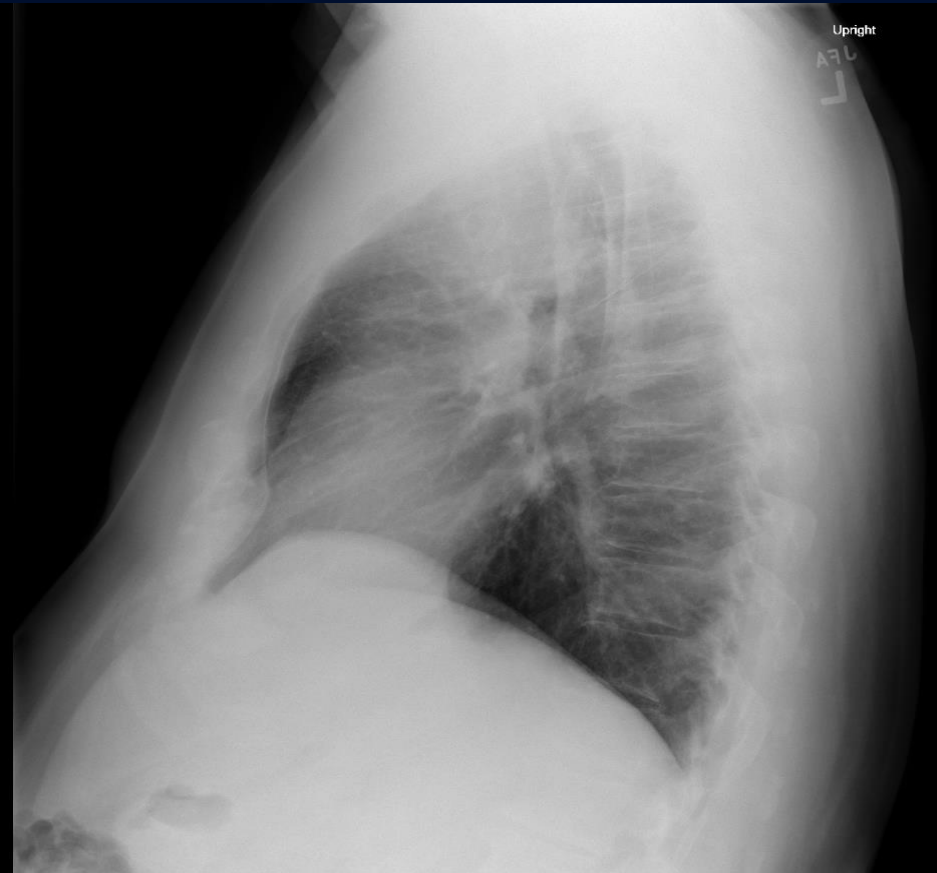
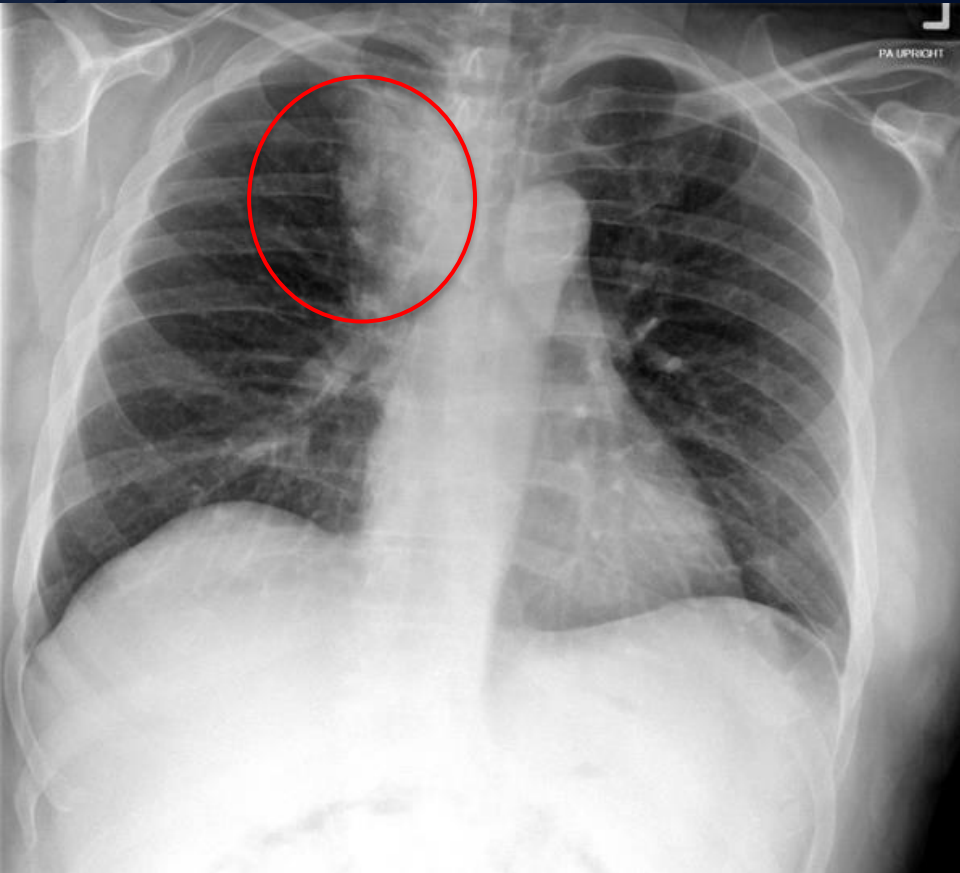


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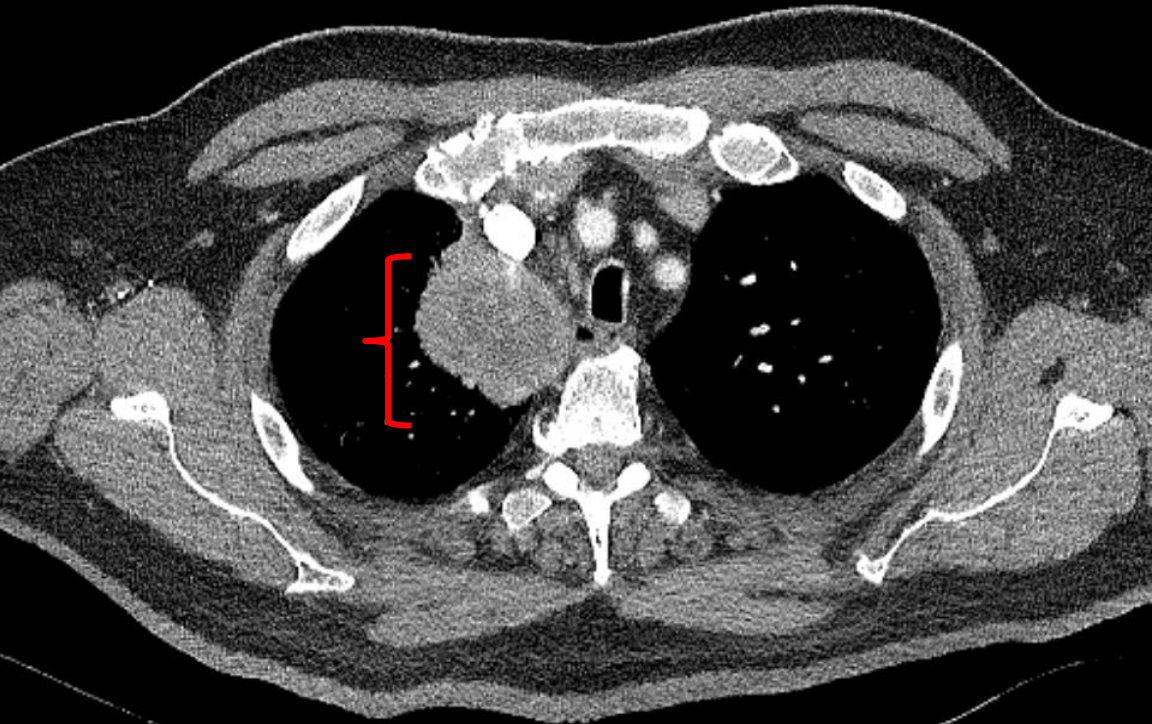
# Metastatic Lung Cancer

# Radiographs

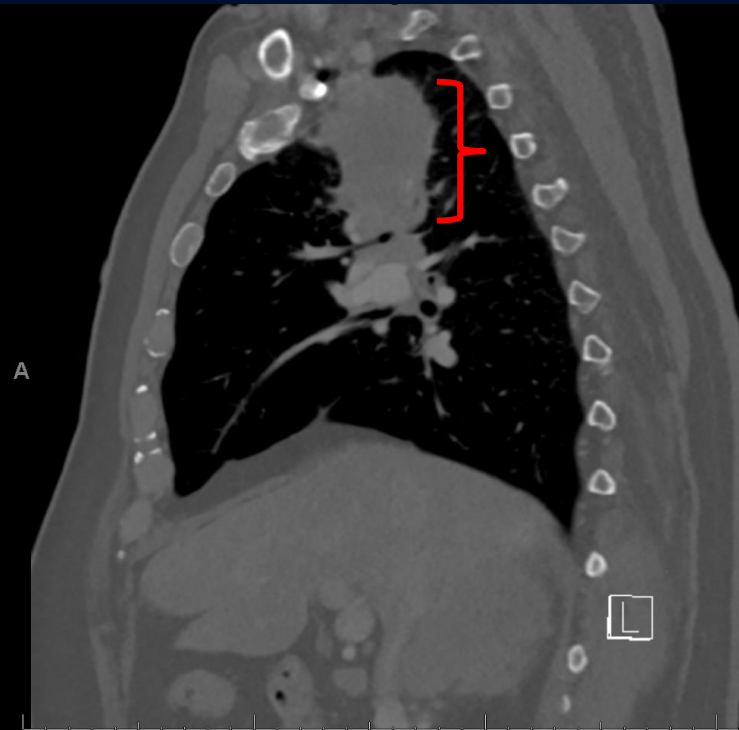


Right upper lobe opacity along the  
right paratracheal stripe

# CT IV Contrast



Right upper lobe soft tissue mass  
abutting the upper mediastinum



Irregular right upper lobe soft tissue  
mass with spiculated borders

# Non-contrast CT



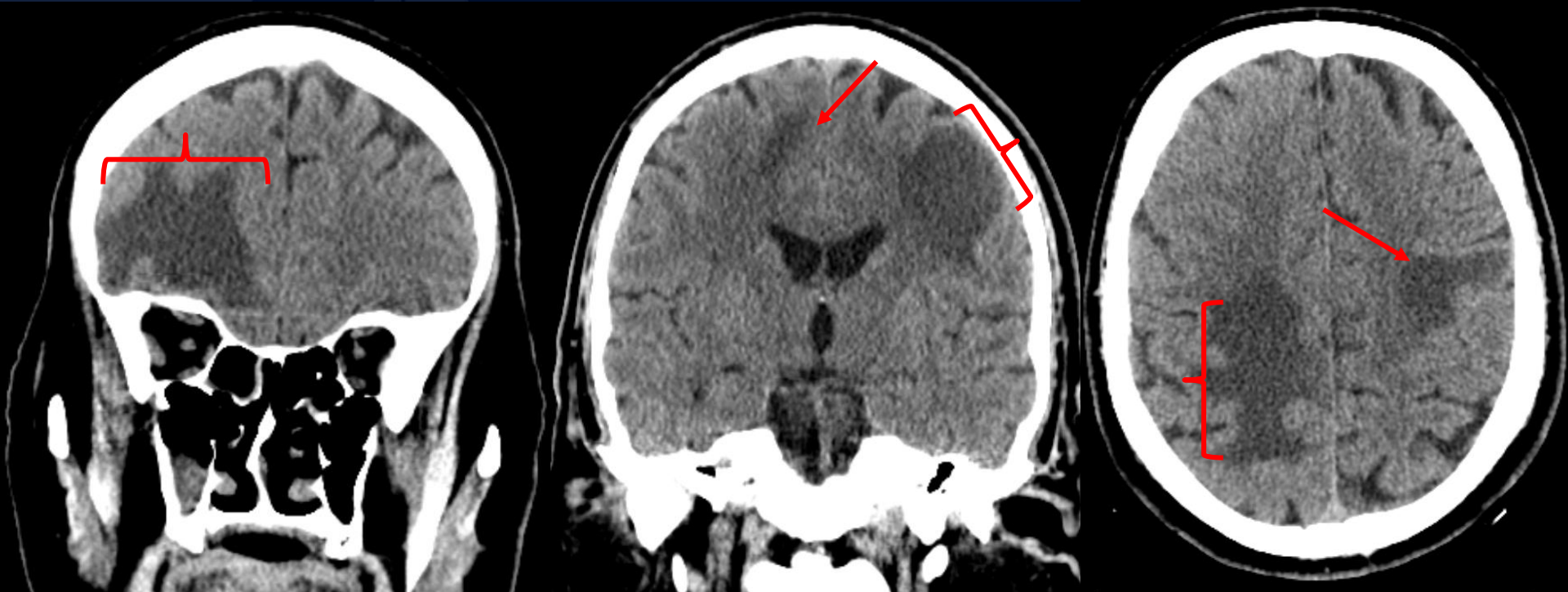
Vasogenic edema



Soft tissue lesion with  
surrounding vasogenic edema



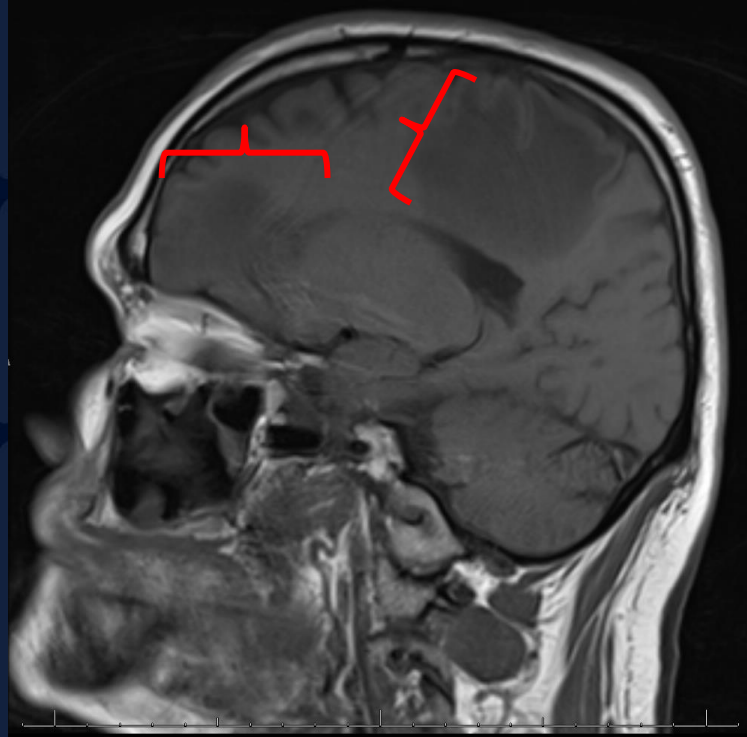
# Non-contrast CT



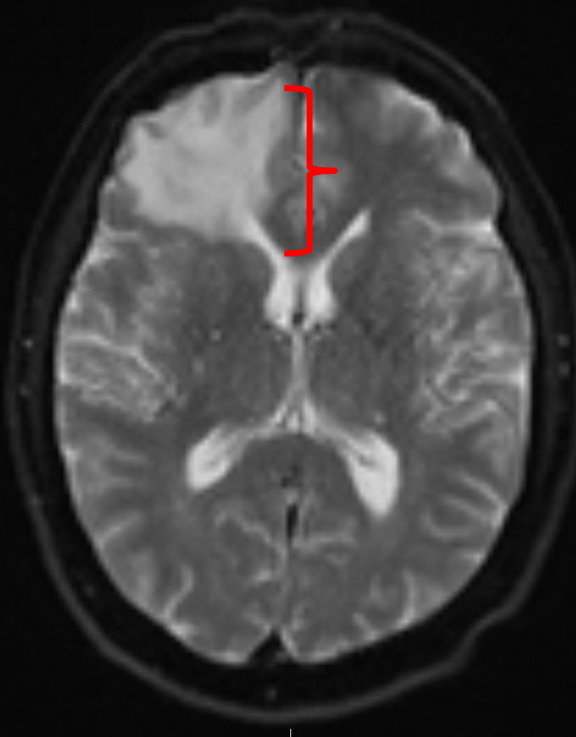
Vasogenic edema



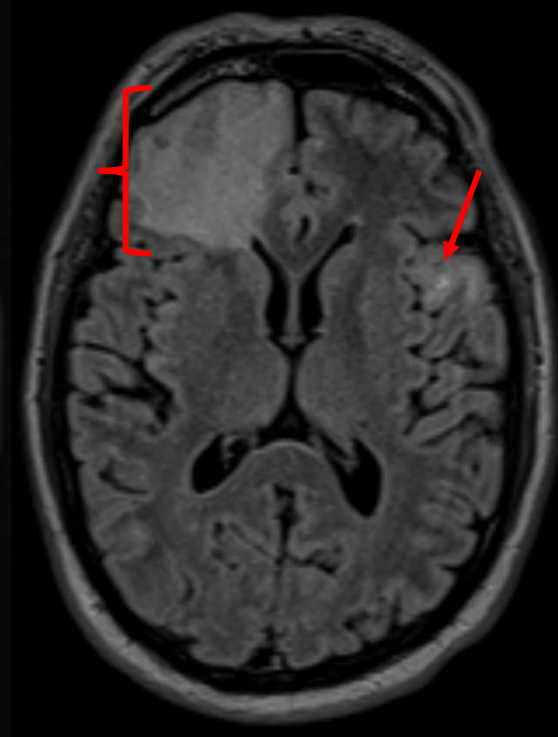
Sagittal T2



Axial T2

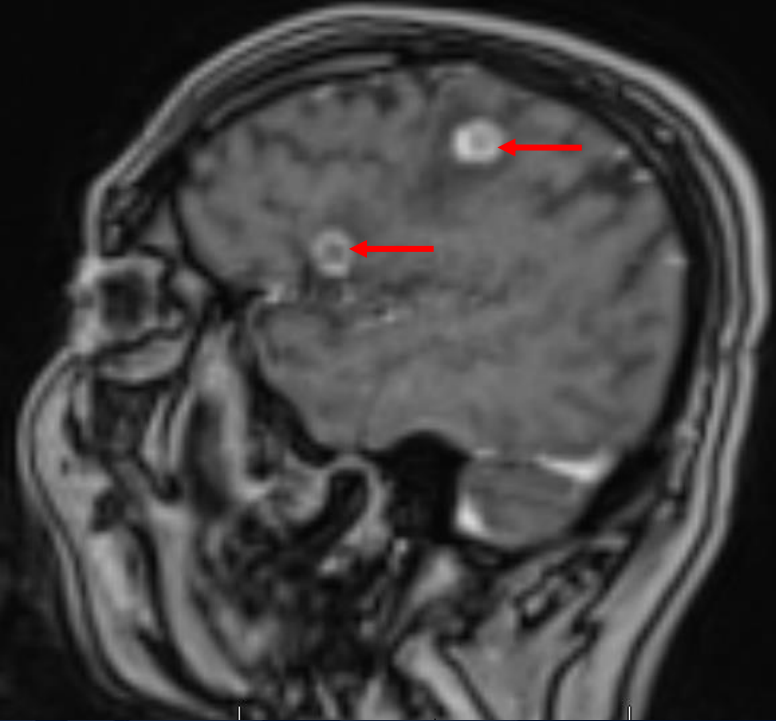


Axial T2 FLAIR



Vasogenic edema

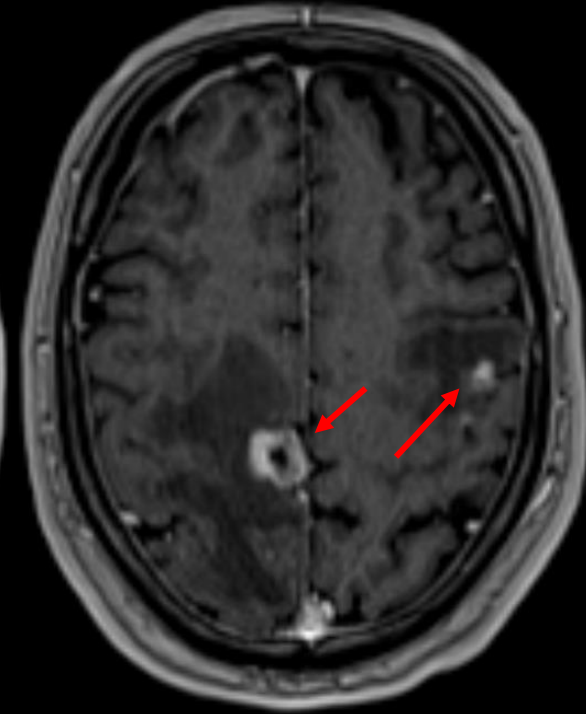
Sagittal T1 Post-contrast



Axial T1



Axial T1



Multiple intra-axial ring-enhancing centrally necrotic lesions within the frontal and parietal lobes with peritumoral vasogenic edema

# Brain Metastasis

## Clinical Presentation

- Headaches, seizures, mental status alterations, ataxia, nausea, vomiting and visual disturbances

Five primary malignancies account for 80% of brain metastasis

- Lung cancer, renal cell carcinoma, breast cancer, melanoma, gastrointestinal adenocarcinomas

## Features

- Relatively well-demarcated from surrounding parenchyma, usually with a zone of peritumoral edema out of proportion to tumor size
- Often found at the grey-white matter junction or arterial watershed areas
- Certain malignancies are more susceptible to hemorrhage
  - Metastases that classically hemorrhage include melanoma, renal cell carcinoma, choriocarcinoma and thyroid cancer
  - Lung and breast cancer can also hemorrhage and are far more common than the classically hemorrhagic tumors

## Differential diagnosis

- CNS neoplasm
- Brain abscess
- Post-treatment effects (post-surgical or post-radiation)

# References

Bokhari, Maria R, and Fassil B Mesfin. "Brain Abscess." *NIH*, <https://www.ncbi.nlm.nih.gov/books/NBK441841/>.

Michinaga, Shotaro, and Yutaka Koyama. "Pathogenesis of Brain Edema and Investigation into Anti-Edema Drugs." *International Journal of Molecular Sciences*, U.S. National Library of Medicine, 30 Apr. 2015, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4463627/#:~:text=Vasogenic%20edema%20is%20due%20to,of%20brain%20volume%20and%20ICP>.

Sharma, Rohit. "Brain Metastases." *Radiopaedia*, <https://radiopaedia.org/articles/brain-metastases?lang=us>.