Brain Neoplasm

• Benign
  – May have aggressive tendencies
  – May transition to more aggressive lesion
  – Tends to be slower growing
• Primary malignant
  – Age distribution for various tumors
  – Impact due to mass effect or invasion
• Metastatic
  – History of pre-existing neoplasm
  – May be primary presentation
• Brain MRI modality of choice
Astrocytoma

- Irregular low attenuation lesion (CT)
- Isodense to gray matter central area
- Relatively ‘low grade’
- Surrounding edema (black)

Astrocytoma

- MRI
- Parietal lesion
- White representing surrounding edema on T2 images
- Contrast enhancement on T1+C
Meningioma

- Medial posterior mass adjacent to the meninges
- Slow growing
- Minimal mass effect
- Intense enhancement

Meningioma

- Extra-axial lesion
- Impact based on mass effect
- May be quite large without symptoms
Cystic Astrocytoma

- Cystic mass in posterior fossa
- Rim and mural nodule enhancement on contrast – far right image at arrows

Metastatic Brain Tumor

- Multiple ring enhancing lesions
- Brain edema (white rim T2)
- Known lung cancer
Lung Neoplasm

- Nodule upper right lung field
- Patient with brain metastases