CASE 1

- 6 y-o female with headaches and vomiting for 2 months.
- Headaches are worse in the morning.
- Spinal MRI: no evidence of enhancement.
Non contrast CT

T2

ADC

FLAIR

DWI
Medulloblastoma

- Most common malignant brain tumor in children.
- Peak of incidence 3-4 and 8-9 yo; 2M: 1 F.
- 75-90% occur in the midline.
- 11-43% present subarachnoid seeding.
- High cellular: hyperdense on CT and hyperintense on DWI with reduced ADC.
- Calcifications (20%) and/or necrosis (50%) can be seen.
- Contrast enhancement is usually present.

CASE 2

- 75 y-o male with septic shock and delirium,

- Previous history of SCC in the left external year 11 years ago that recur; patient received radiation treatment. SCC in the right ear 4 years ago, SCC in a vocal cord followed by a SCC in the left lateral tongue 3 years ago and SCC in the left post-auricular region 1 year ago.

- Chest x-ray Diffuse infiltrate –diagnosed as parainfluenza 3 pneumonia.
Case 2-Continuation

- Clinical condition worsened: persistent delirium, respiratory and renal insufficiency, anasarca and the patient had a cardiopulmonary arrest.

- Autopsy has been request.
Intravascular large B cell lymphoma of brain
Intravascular large B cell lymphoma

- IVBCL is categorized as a subtype of diffuse large B-cell lymphoma.
- A rare disease—incidence less than one per one million.
- Age range from 34-90 years, with a median of 70 years.
- Any organ can be involved, with brain and skin commonly involved.
- Intravascular growth but peripheral blood involved in under 10% of patients.
- Brain involvement usually manifests as subacute encephalopathy, dementia, seizures, or multifocal cerebrovascular events.
- Common brain MR findings are multiple cortical or subcortical T2 hyperintensities but study may be normal as in our patient.
- Initial diagnoses considered are usually stroke, encephalomyelitis, Guillain-Barré syndrome, vasculitis, and multiple sclerosis, and it is not uncommon that the diagnosis of IVL is not established until autopsy.

CASE 3

- 50 y-o female with left cranial nerve III palsy.
Hemangioma
Hemangioma

- Extra-axial hemangioma has quite different clinical and imaging characteristics from intra-axial cavernous hemangioma.
- Located at cavernous sinus or cerebellopontine angle.
- Usually misdiagnosed as meningioma.
- Prominent hyperintensity on T2-weighted images.
- Enhancement from the periphery to central portion on post-contrast images.
- As dense vascular lesion presents a high bleeding surgical risk making pre-operative diagnosis quite important.

Hasilogly ZI et al. 2013: 37: 744
CASE 4

- 28 y-o male with back strain who developed radicular pain radiating to his left leg with a L3-L4 dermatomal distribution.

- Only non contrast (outside) MRI study is available.
Myxopapillary ependymoma
Myxopapilary ependymoma

- Grade I (WHO) tumor.
- More common in adults than in children.
- Occurs almost exclusively at the conus/cauda equina.
- Relapse incidence is high.
- Usually are centrally located, tend to be well-margined, and can present hemorrhage.
- There usually is contrast enhancement.

Case 5

- 22 y-o female, headaches 2 months ago, followed by nausea, and vomiting. One month ago suffered loss of vision in both eyes without light perception.
Case 5-Continuation

- Chest and abdomen CT are normal.

- Patient had a brain craniotomy.
Hemangioblastoma
Hemangioblastoma

- Benign tumor.
- Can occur anywhere in the CNS, mainly cerebellum, medulla, spinal cord, and retina.
- Median age of presentation: 40 years.
- Sporadic or associated with Von Hippel Lindau disease, when they are usually multiple.
- Most common imaging presentation: cystic lesion with a solid mural nodule.

Hussein 2007; 88: 311