

CASE 4

78 Y/O WOMAN

Brief history

- **Past history**

Hypertension & hyperurecemia

- **Chief complain**

Recent cognitive decline, personality change & memory impairment for 2 weeks

Imaging studies

Brain CT (2020.03.19)

Brain MRI (2020.03.25)

Brain MRI (2020.04.01)

Brain MRI (2020.04.23)

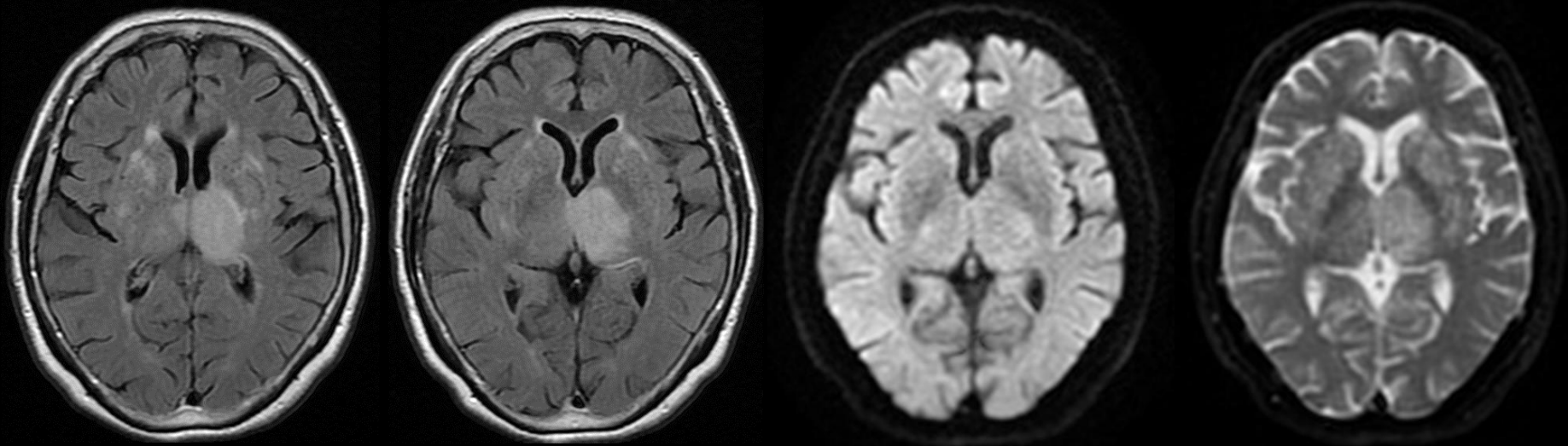
Brain CT (2020.03.19)

- ✓ Decreased attenuation of the left thalamus with mild mass effect



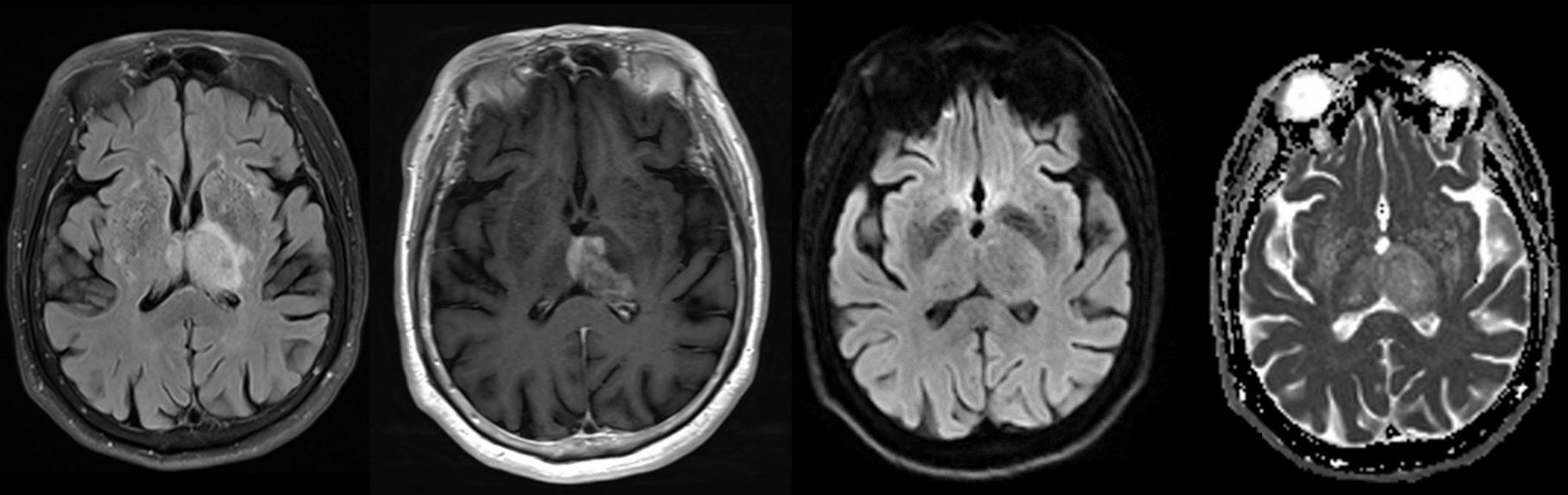
Brain MRI (2020.03.25)

- ✓ A 2-cm enhancing tumor in the left thalamus with invasion of the massa intermedia and possibly the right thalamus



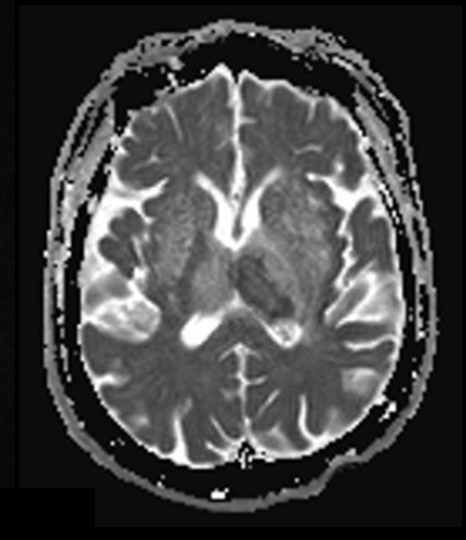
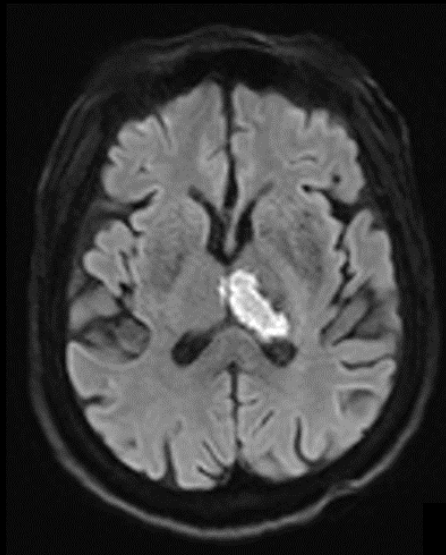
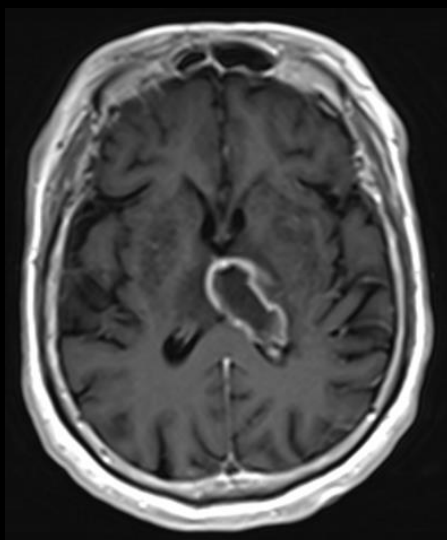
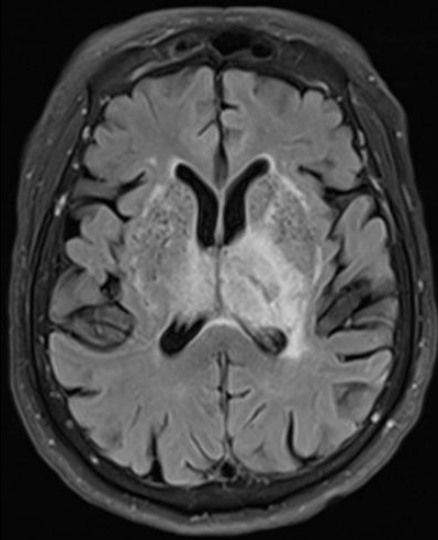
Brain MRI (2020.04.01)

- ✓ Bilateral thalamic lesions, predominantly on the left with adjacent prominent venous drainage, present with heterogeneous enhancement; no increased choline peak and not restricted diffusion



Brain MRI (2020.04.23)

- ✓ Bilateral thalamic lesions, predominantly on left thalamus with adjacent prominent venous drainage and peripheral rim enhancement

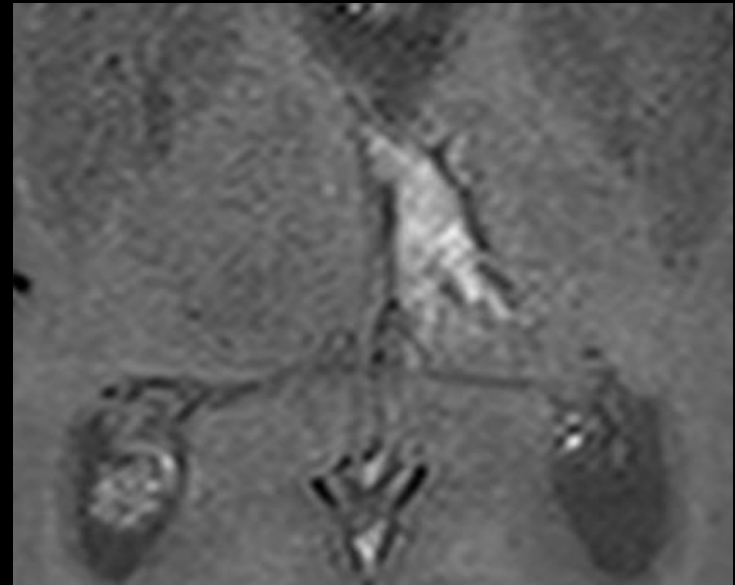
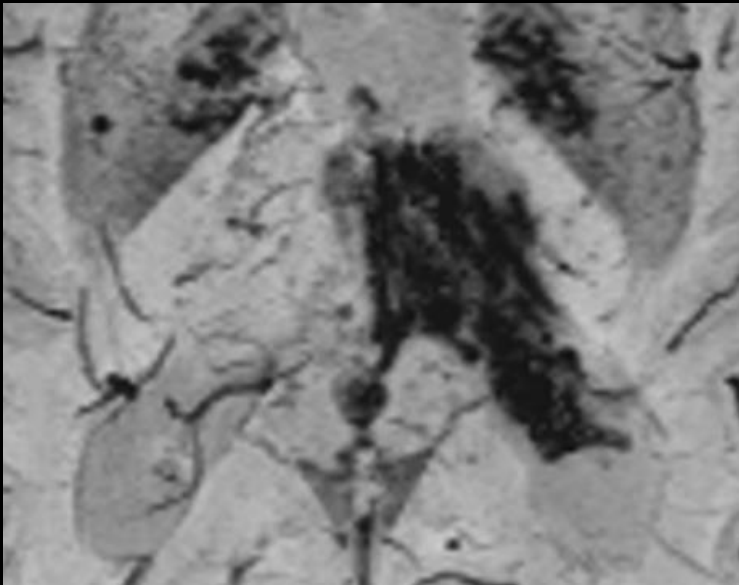


Differential Diagnoses

- Venous cerebral infarction due to occlusion of the internal cerebral veins and straight sinus
- Low grade glioma with venous occlusion
- CNS lymphoma

Brain MRA (2020.09.09)

- ✓ Encephalomalacia with hemosiderin deposition involving left thalamus
- ✓ Partial occlusion of left internal cerebral vein is noted at vessel wall images, with prominent venous channels at the left medial temporal lobe and bilateral parasagittal frontal lobes.



Differential Diagnoses

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Cerebral venous infarction

- **Uncommon form of stroke** most commonly secondary to **cerebral venous thrombosis**
- 10% due to **thrombotic occlusion of deep cerebral veins** (internal cerebral veins, vein of Galen, straight sinus)
- NECT:
 - **Hyperdense veins & sinus**
 - **Hypodense thalami/basal ganglia**
 - **loss of gray-white matter interfaces**
- MRI:
 - **Acute clots hypointense on T2WI, "bloom" on T2***
 - **Deep (medullary) WM veins prominent, tortuous on SWI**

Venous cerebral infarction

