

# Case from Taiwan

Ho Jun Lee

Severance Hospital

Seoul, Korea

1885 Chejungwon

1904 Severance Memorial Hospital

1913 Severance Medical School

2005 Main building of the Severance Hospital



Admission history:

1st admission: 20090714

2nd admission: 20121212

3rd admission: 20130219

First admission history (2009/07/14)

Chief Complaint:

Headache and unstable gait for 2 weeks

Present illness:

This 44 years old man had histories of hydrocephalus and prior craniotomy for unknown cause. He suffered from headache and unstable gait for 2 weeks. Dizziness and intermittent ataxia to right side were also noted. Headache would be noted if he thought things. Insomnia and relative blurred vision (compare with before) was noted, too.

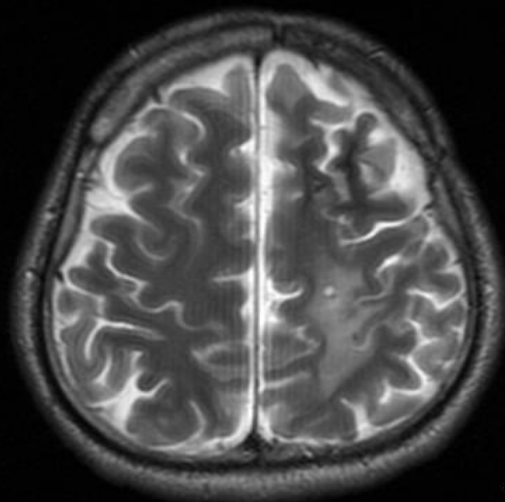
- T/P/R : 36.8 / 97 / 16, BP : 126/84 mmHg
- GCS E4V5M6
- NE:  
CN : (-)  
Motor system : muscle power symmetrical(-), weakness(+)L>R  
Romberg's test : abnormal/positive(+)

#### Surgery history:

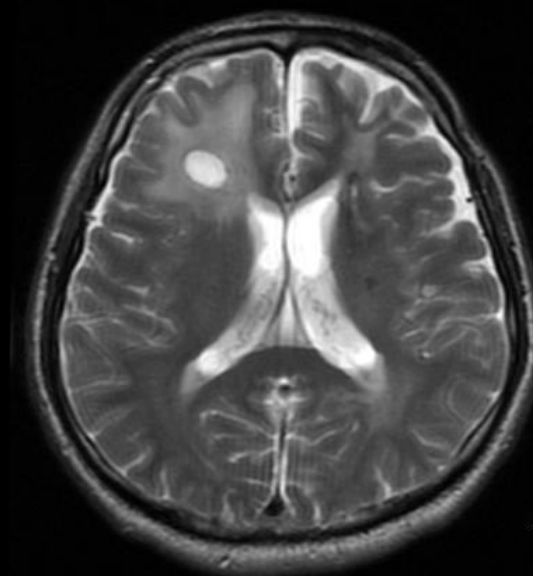
2009-07-22 Craniectomy, cerebellar mass excision

2012-12-17 Craniectomy, right frontal mass excision

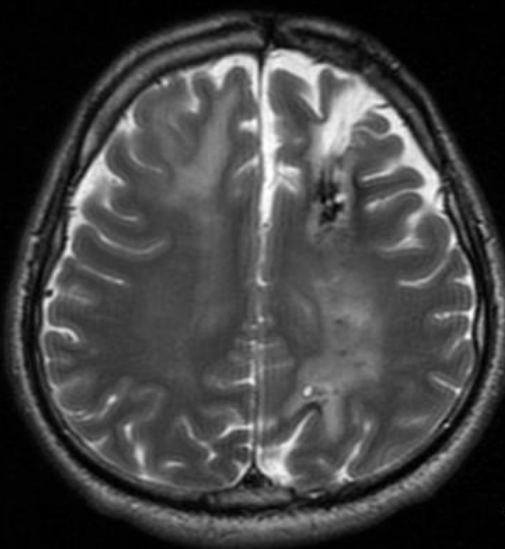
2009-07-13 CT / 2009-07-15 MRI



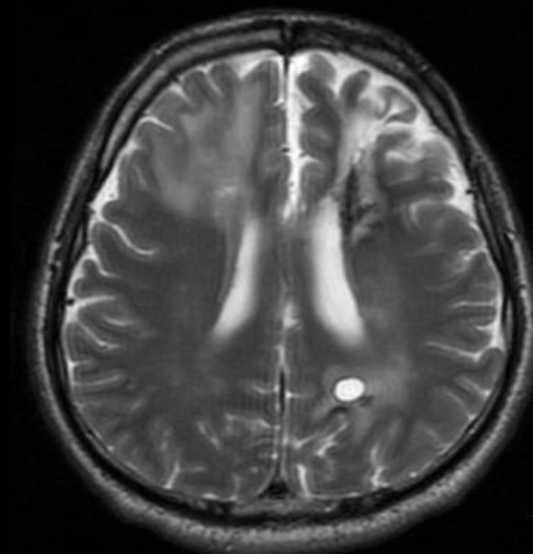
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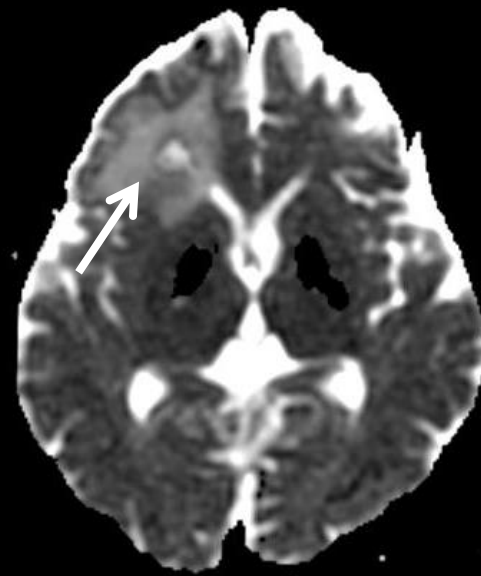
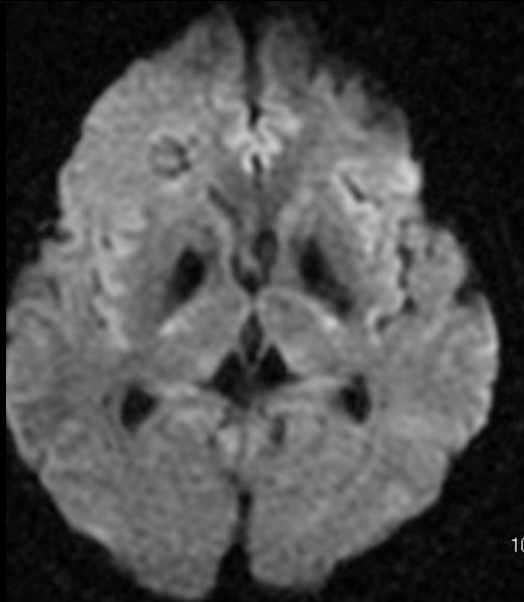
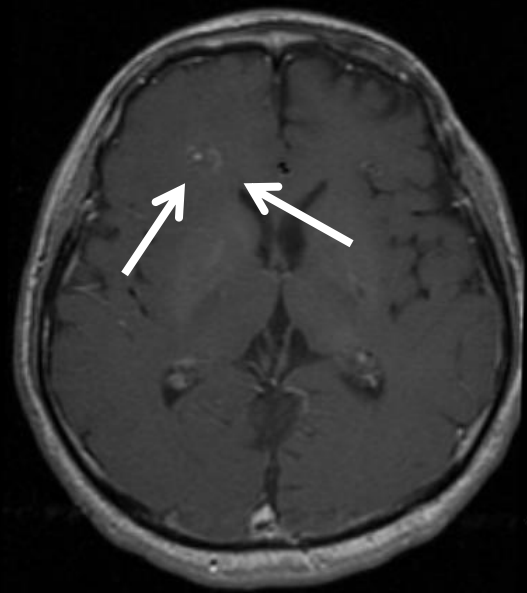
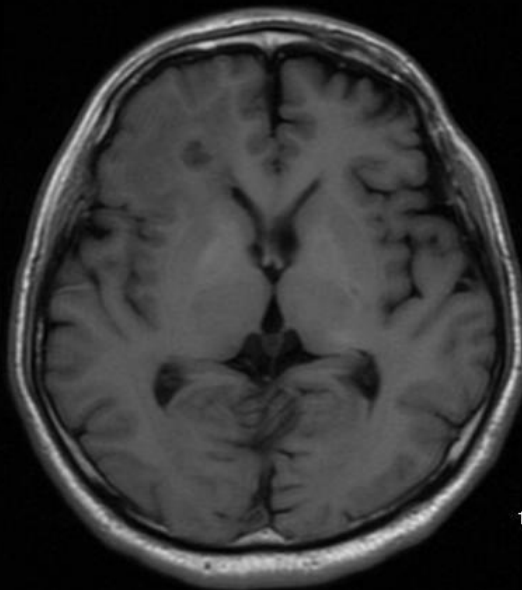
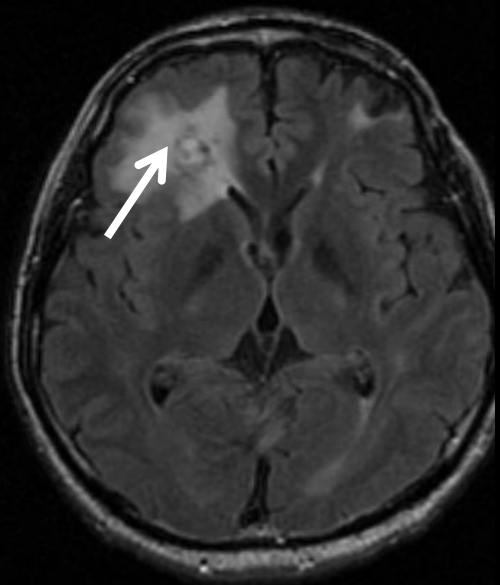


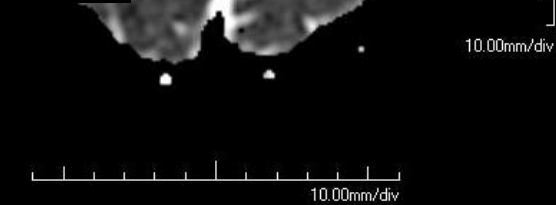
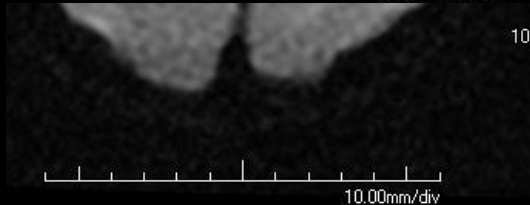
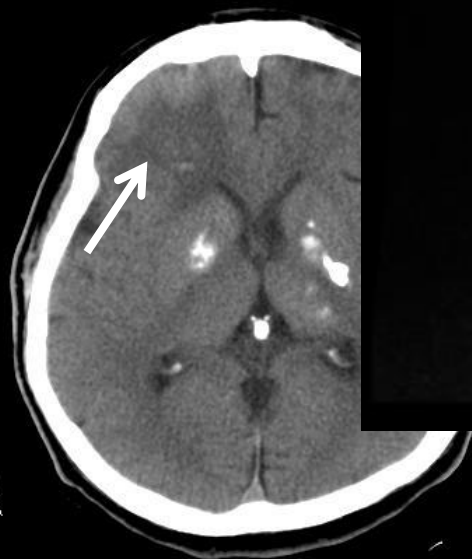
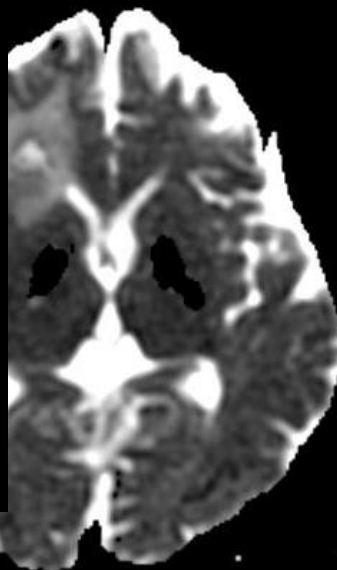
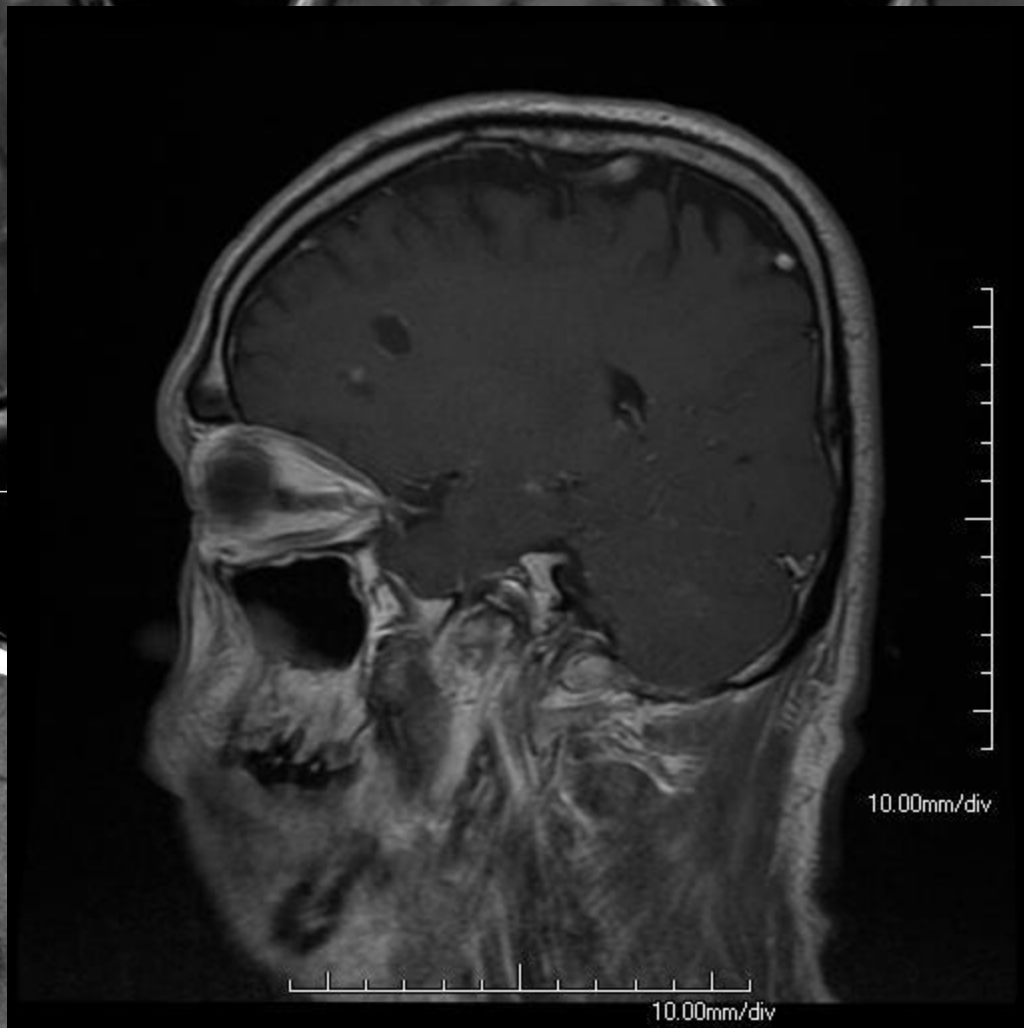
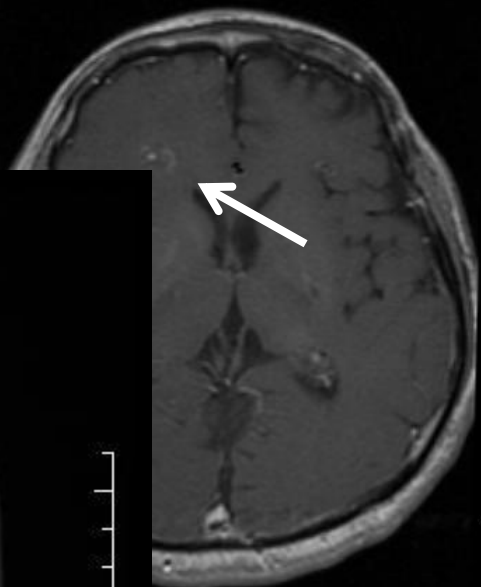
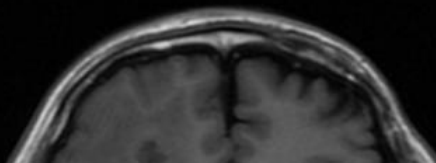
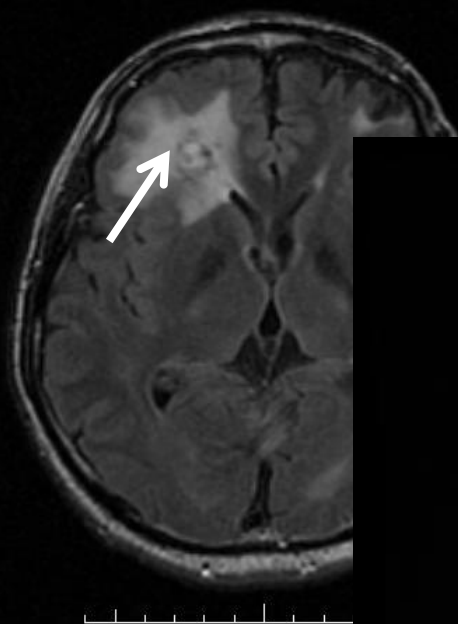
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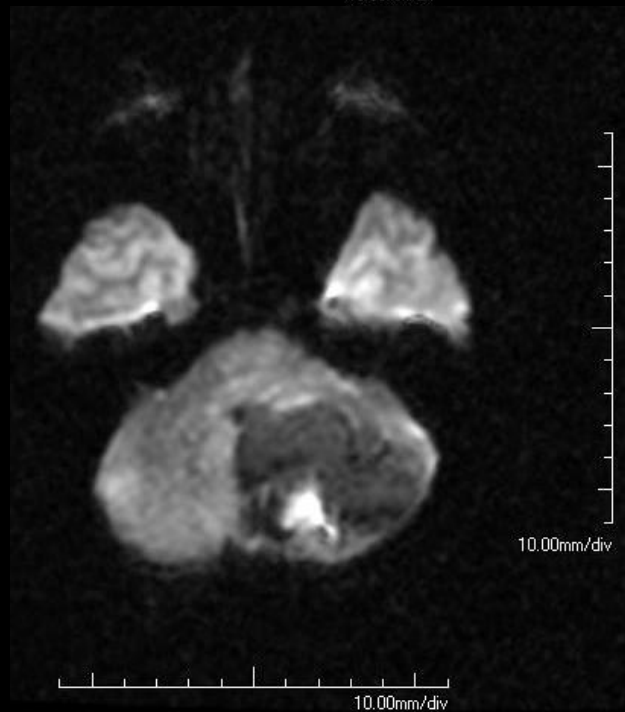
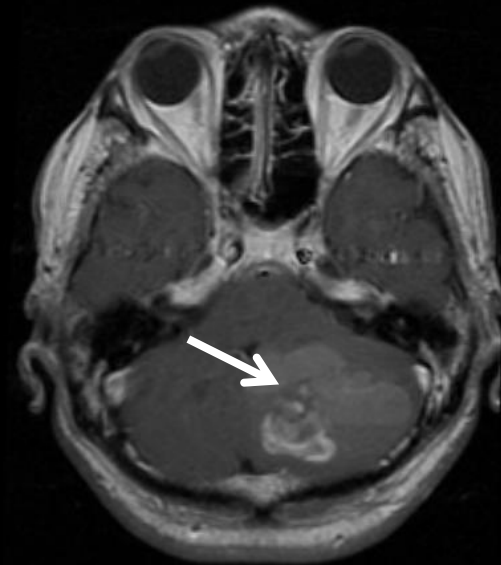
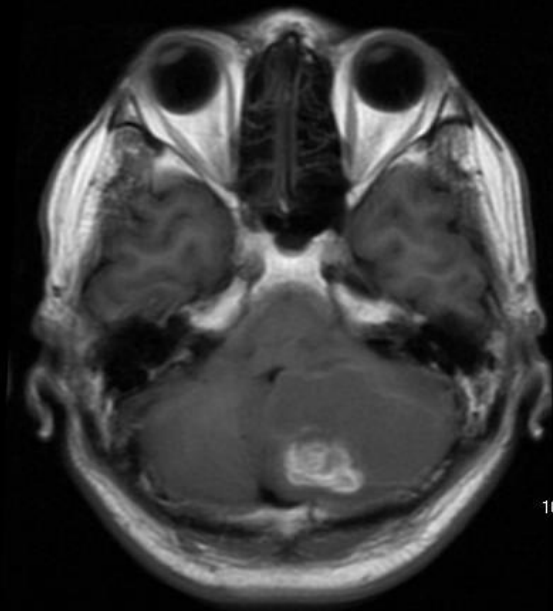
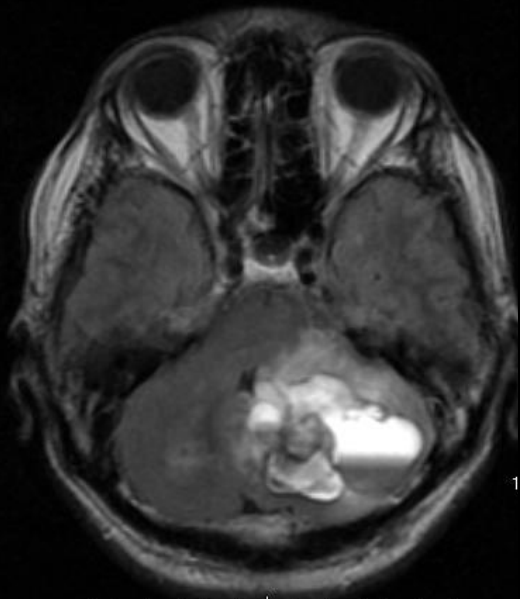


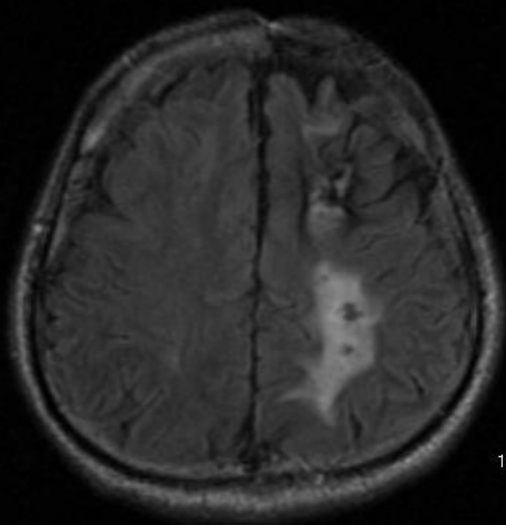
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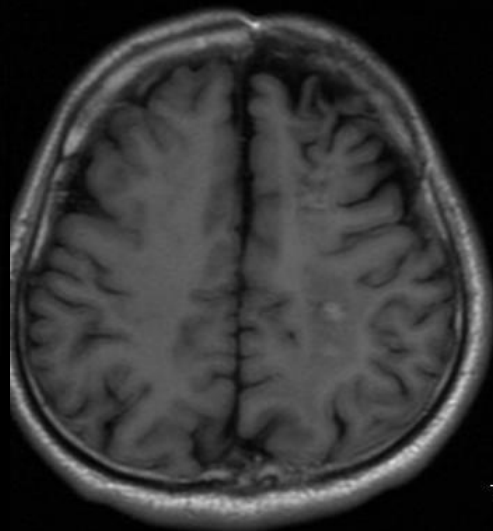




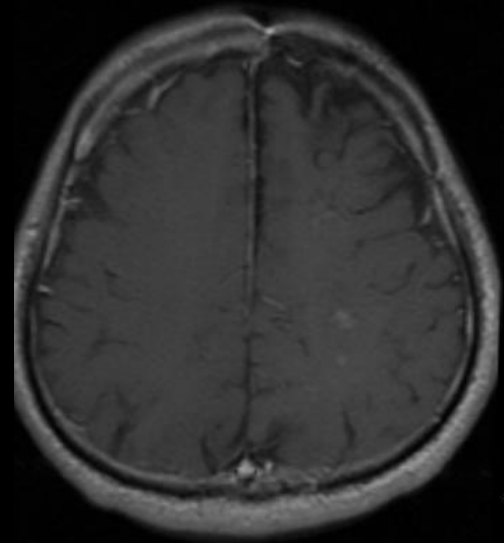




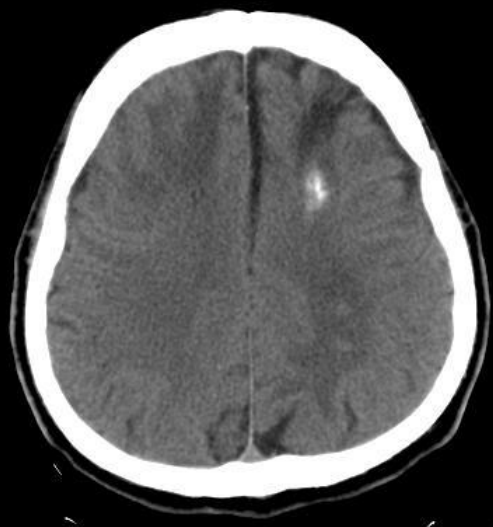
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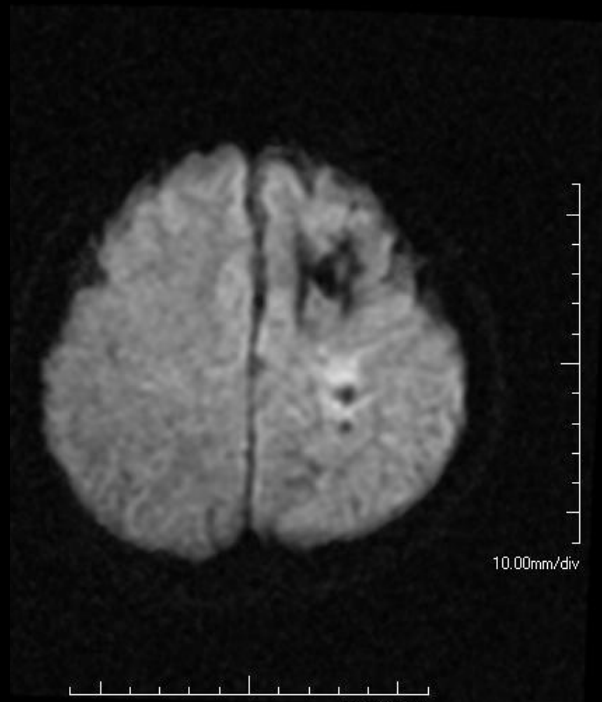
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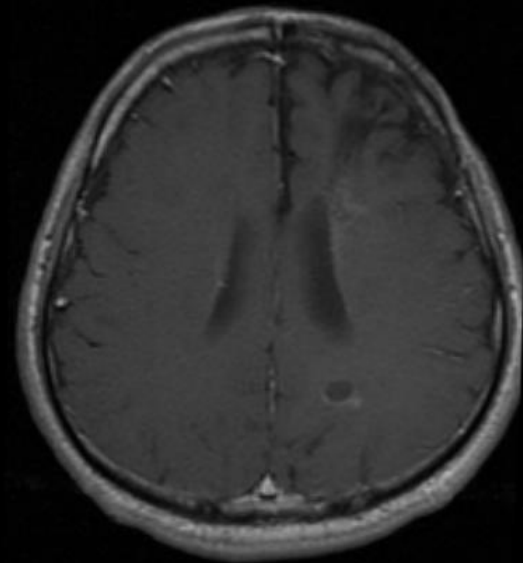
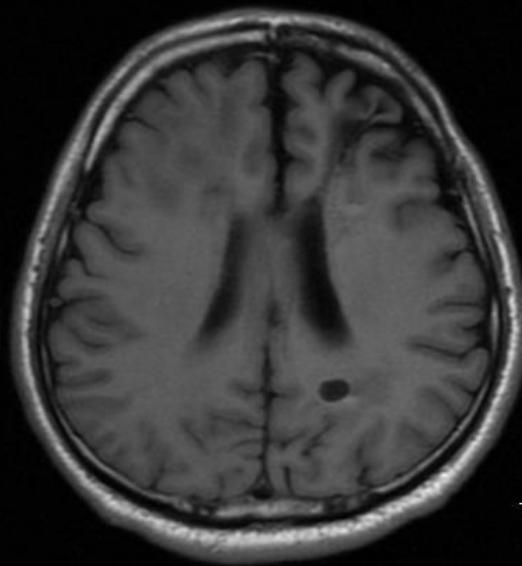
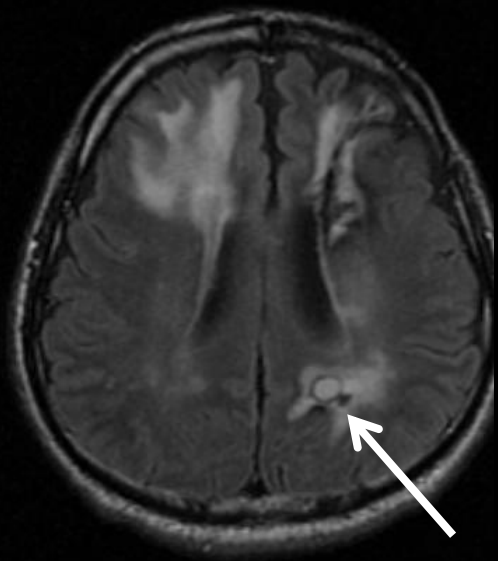


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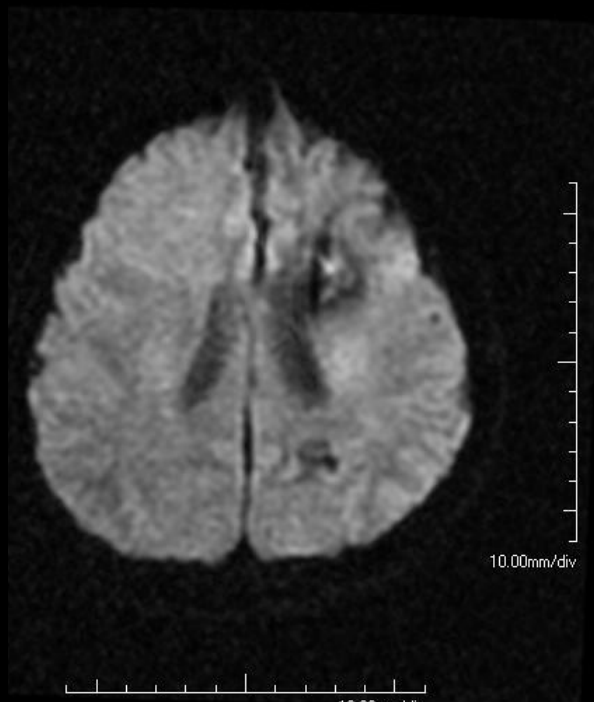
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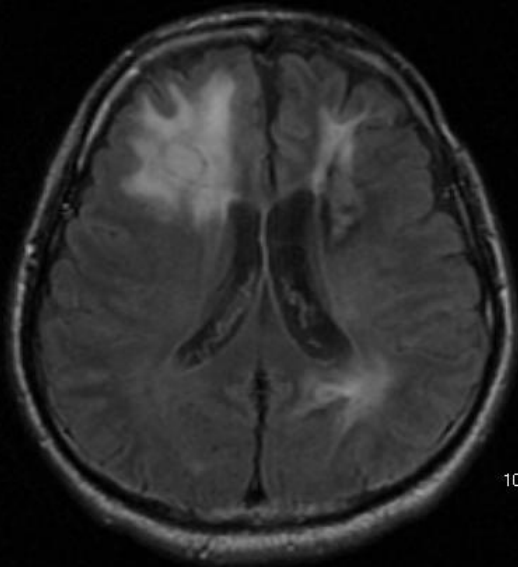


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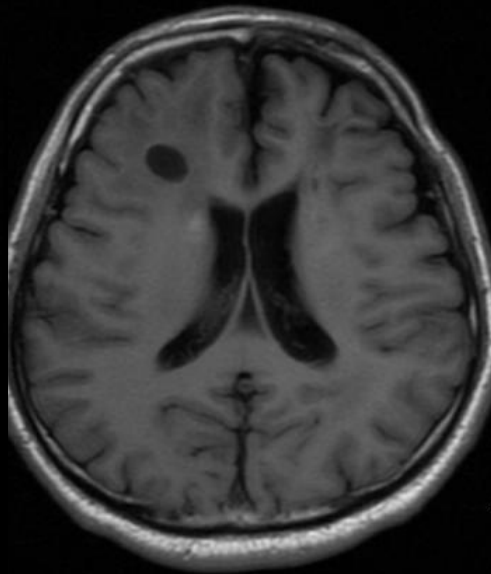
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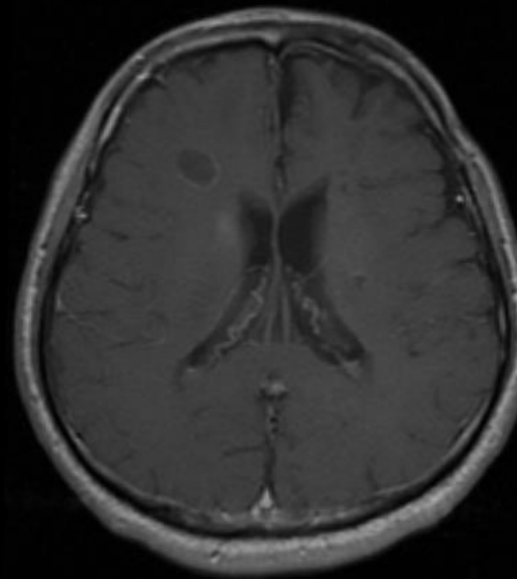
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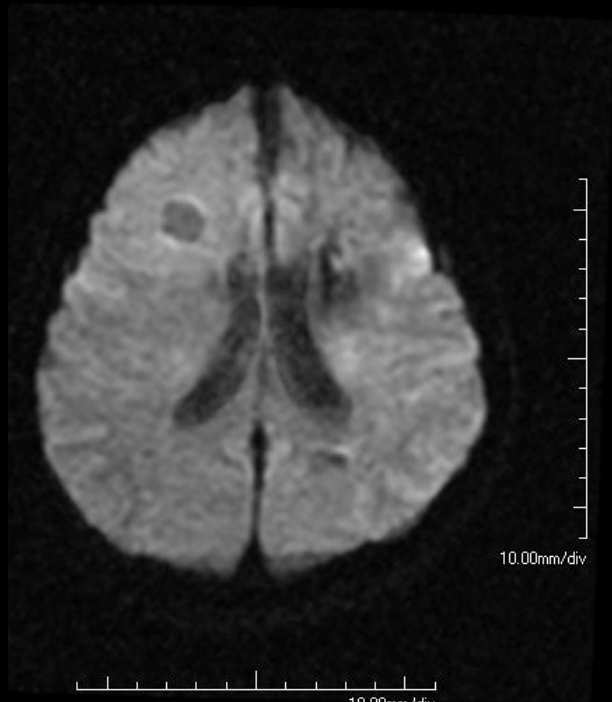
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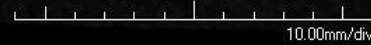
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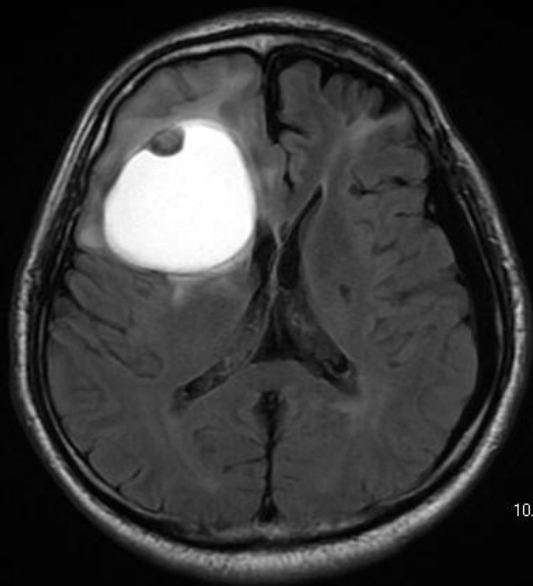
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# Image Findings

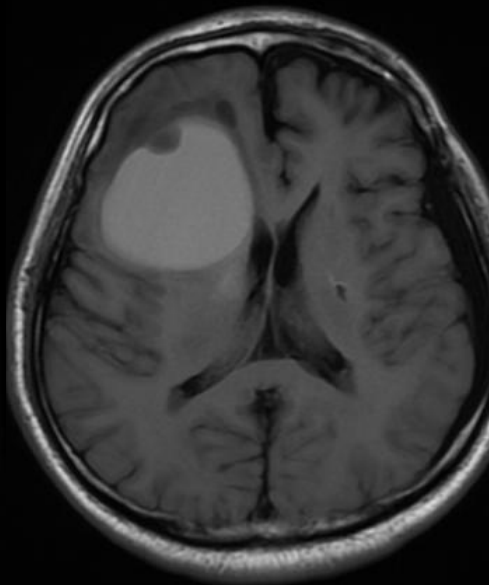
- Multiple cystic hemorrhagic lesion
  - Intra-axial location
  - No calcification
  - Some with tiny mural nodule? (equivocal)
- Enhancement
  - Focal dot like enhancement
  - Some peripheral enhancement?
- Surrounding white matter signal change

- Underwent surgery for cerebellar hemorrhage
- And came back with...



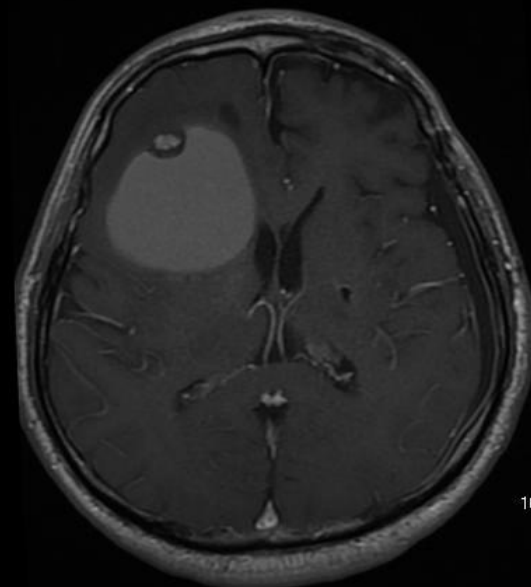
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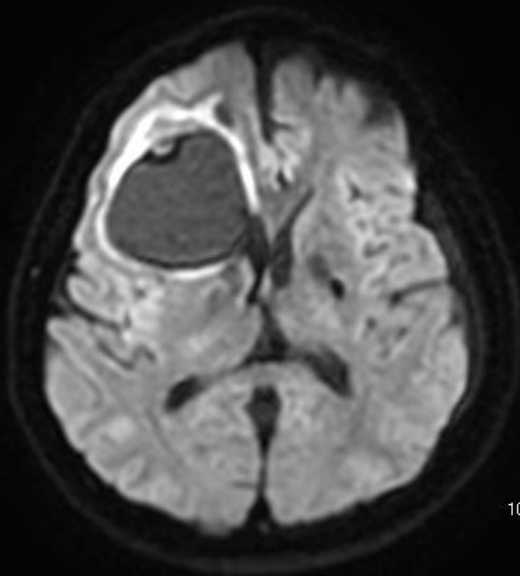
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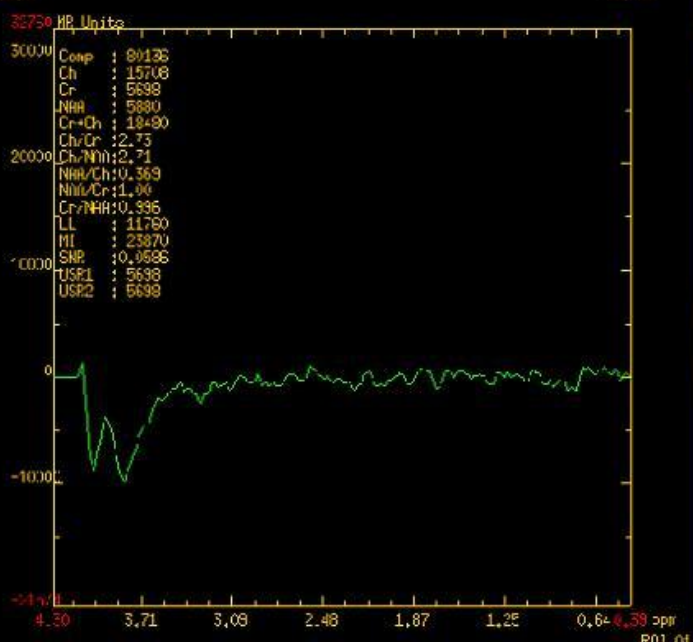
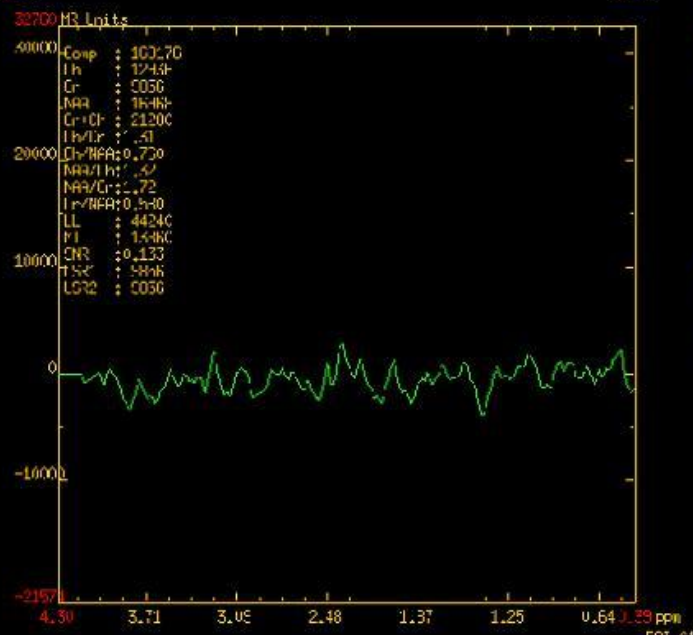
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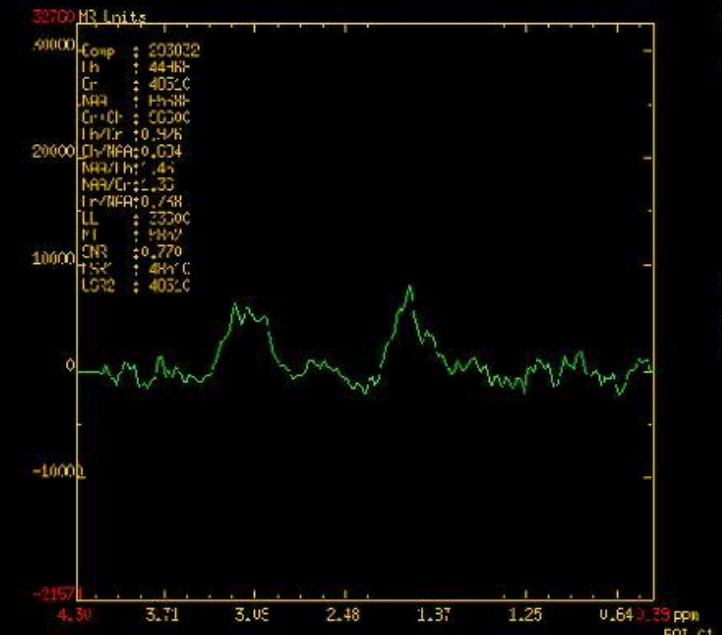
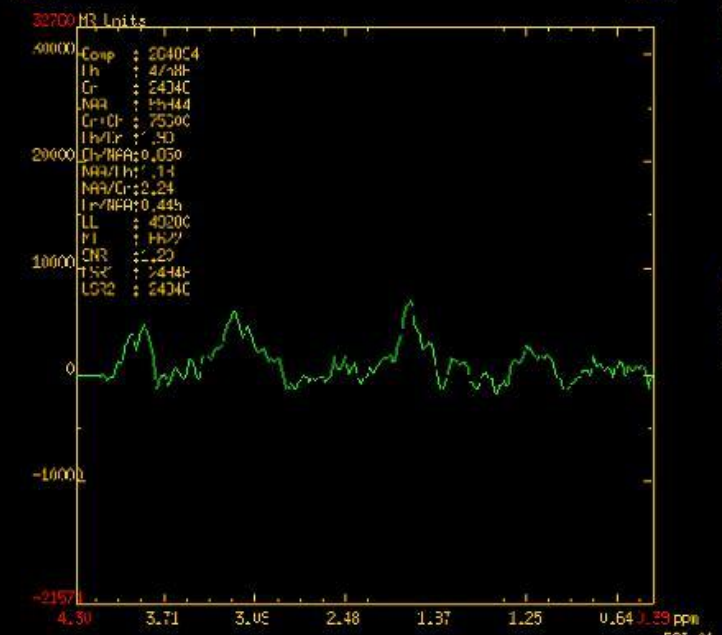


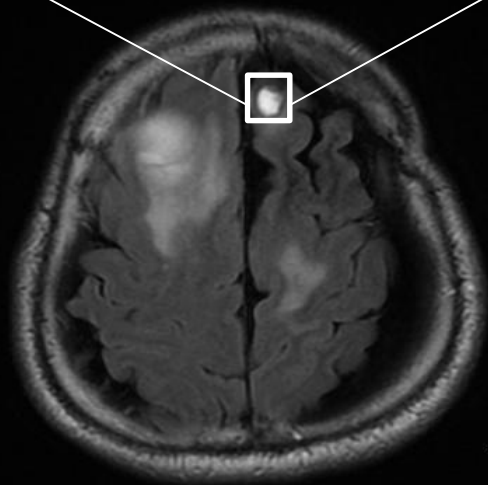
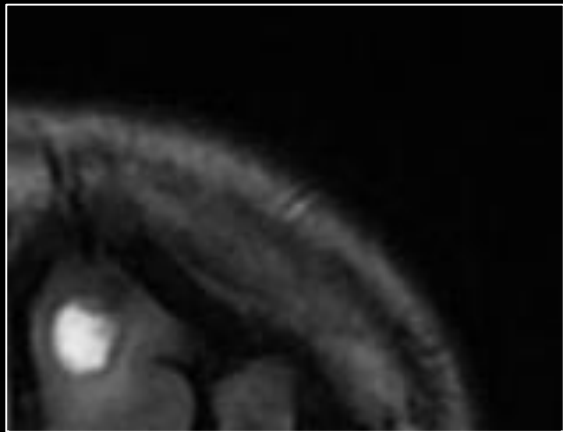
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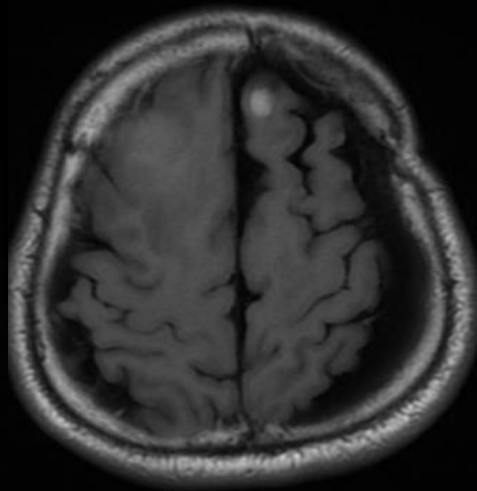
2012-12-11 CT / 2012-12-12 MRI



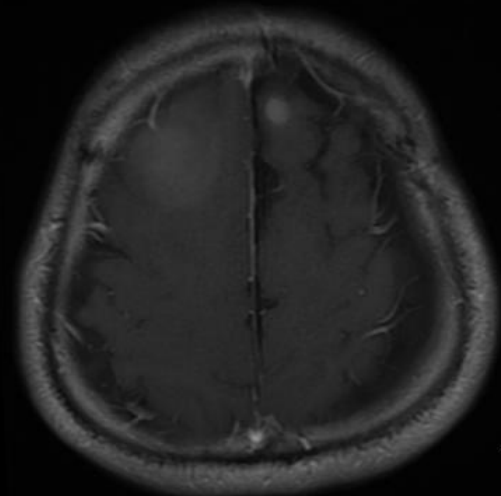




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# Additional Imaging Features

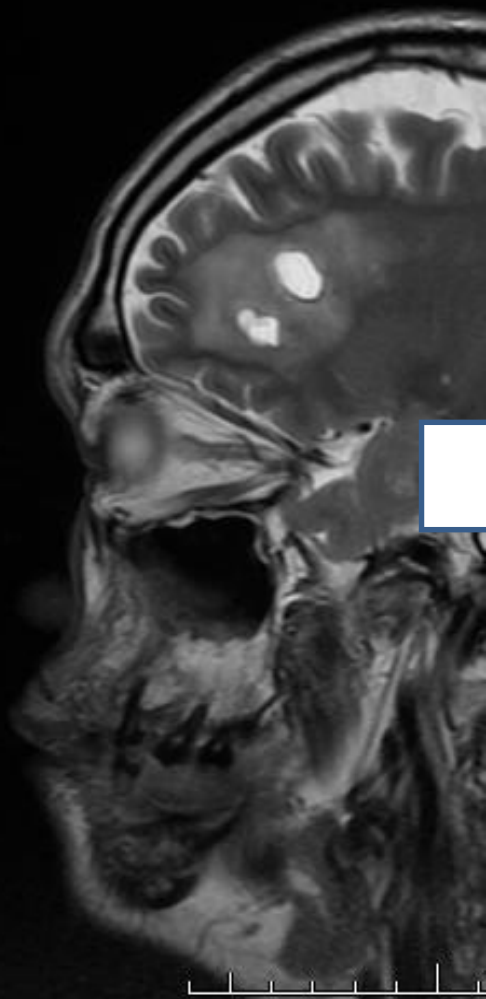
- Enlargement of cystic lesion at frontal lobe with definite mural nodule
  - Strong enhancement of mural nodule
  - High density on CT of the mural nodule
- Slight enlargement of other cystic lesions
  - Various stage of hemorrhage
- No remarkable findings on MRS (low metabolite state)
- Still no calcifications even after 3 years

# Differential Diagnosis

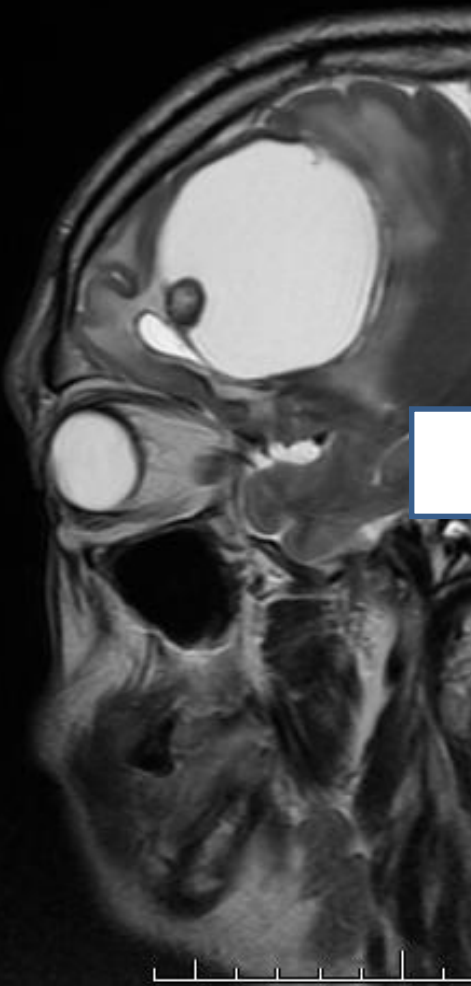
- Neoplastic
  - Pilocytic astrocytoma
  - Hemangioblastoma
  - Ganglioglioma
  - Pleomorphic xanthoastrocytoma
  - Ependymoma
  - Meningioma
- Hemorrhagic metastasis
- Infection/parasitic cyst
  - Neurocysticercosis – colloid vesicular stage
- Vascular malformations
  - Cystic cavernous angioma (malformation)
- Unusual leucoencephalopathy with necrosis and hemorrhage

- Underwent surgery for right frontal lesion

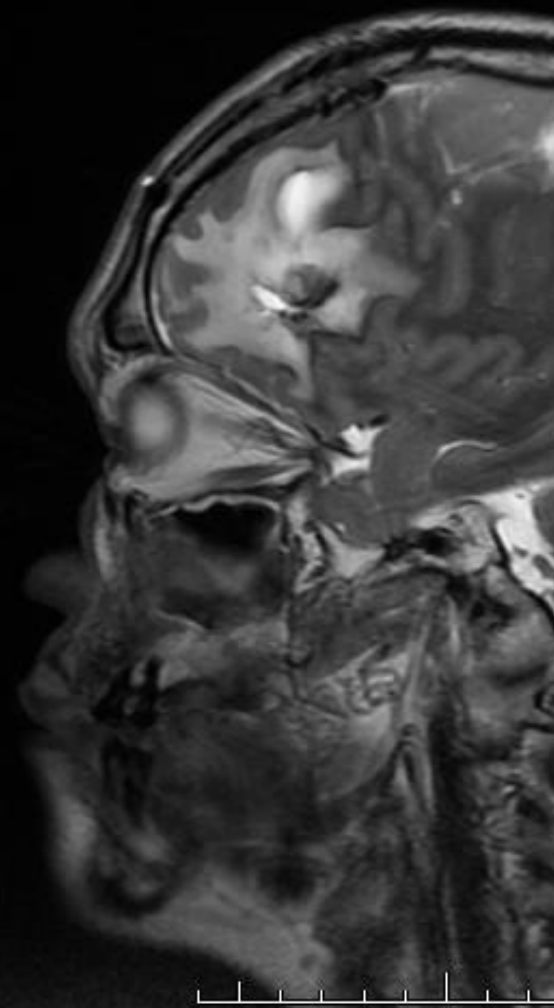
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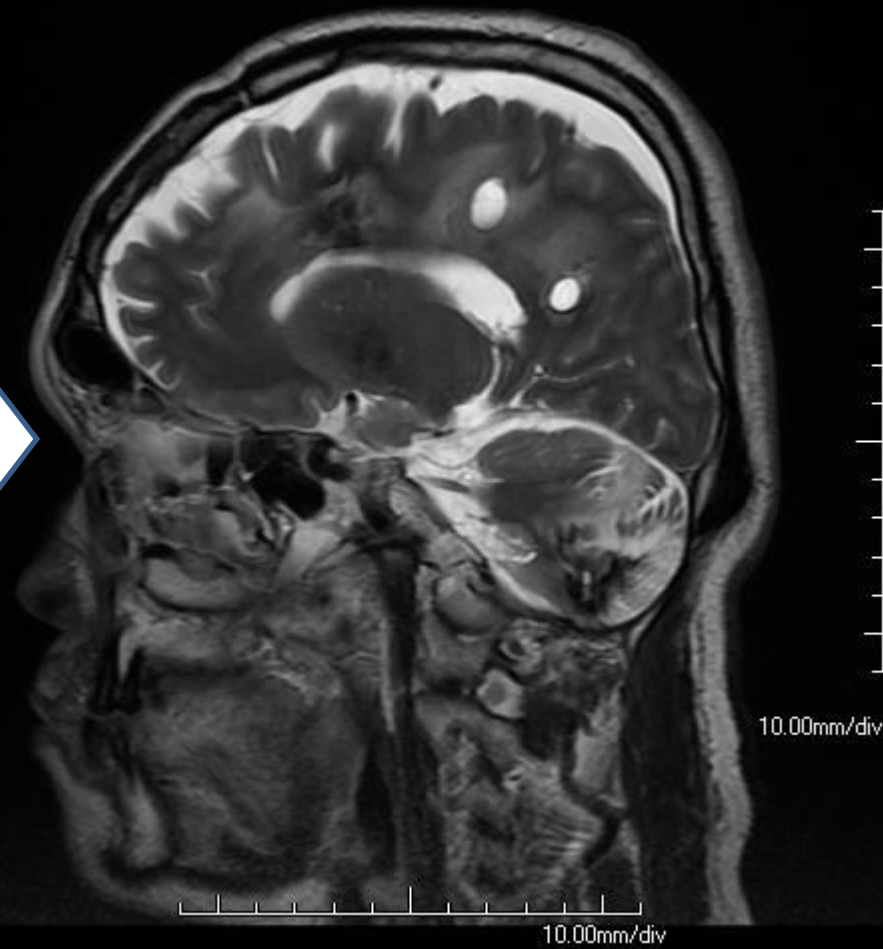
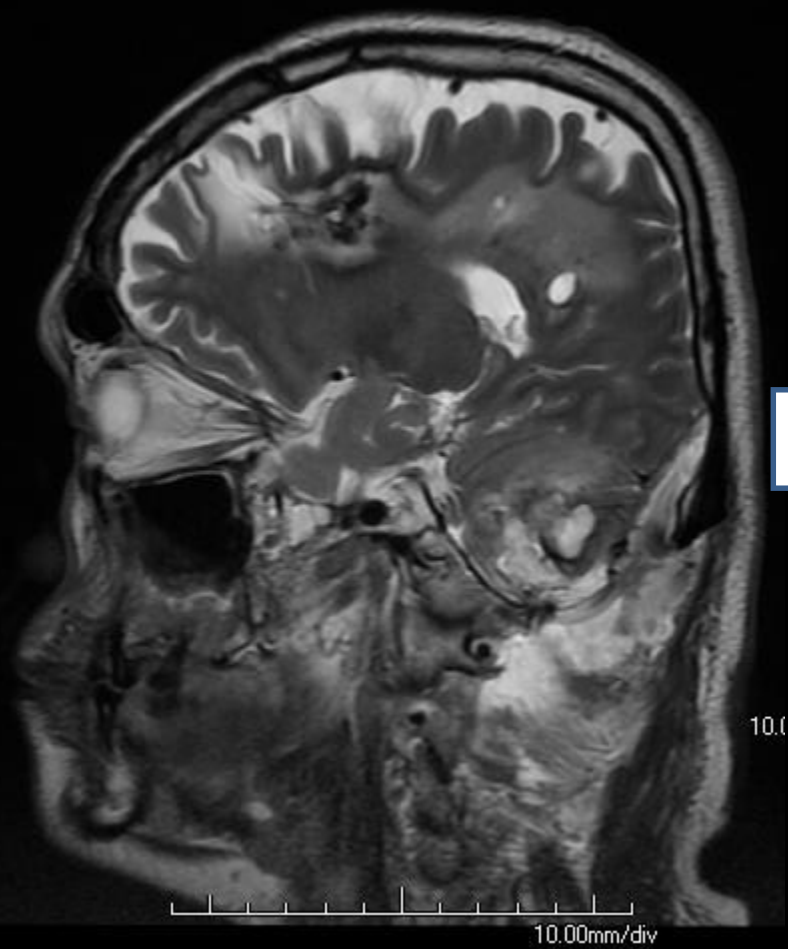


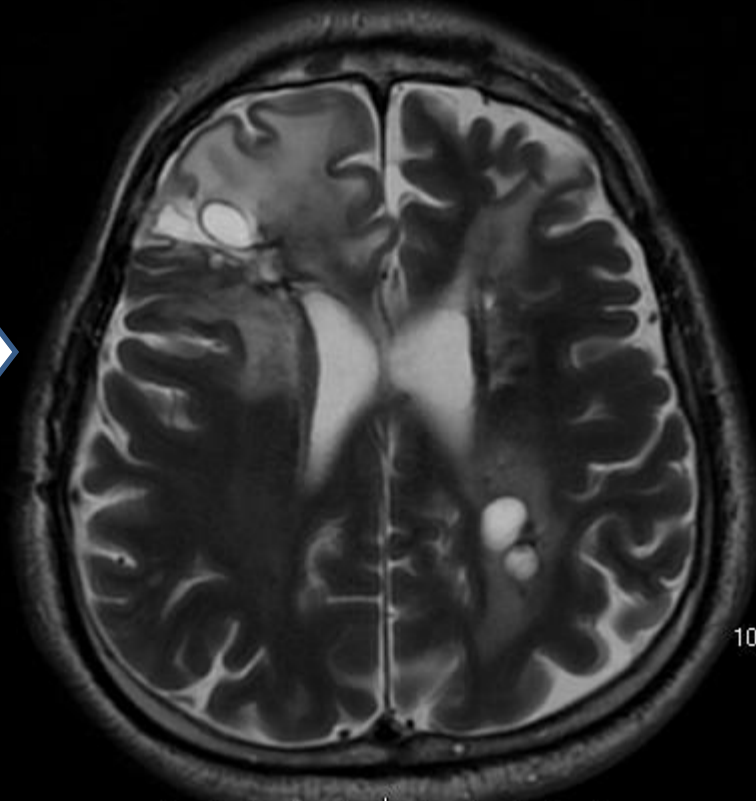
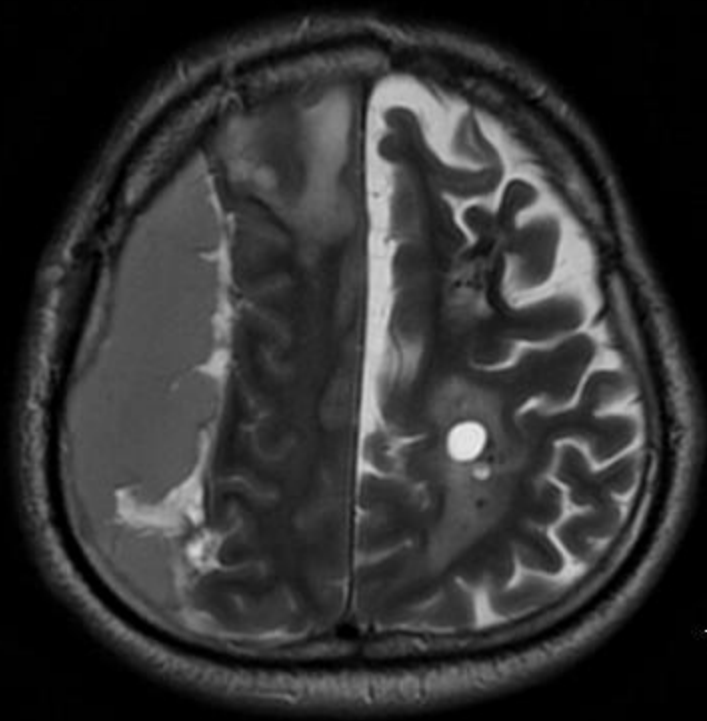
2012-12-12



2013-02-19







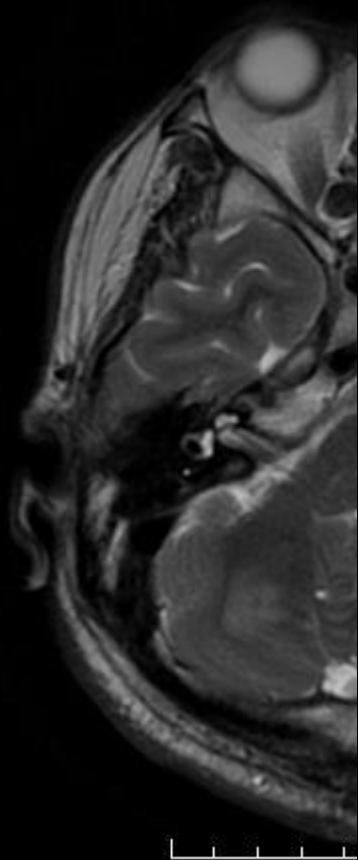
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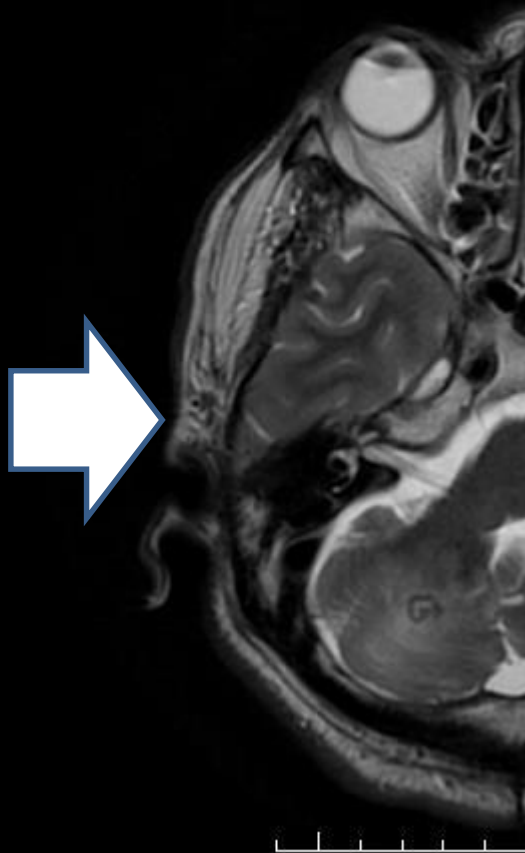
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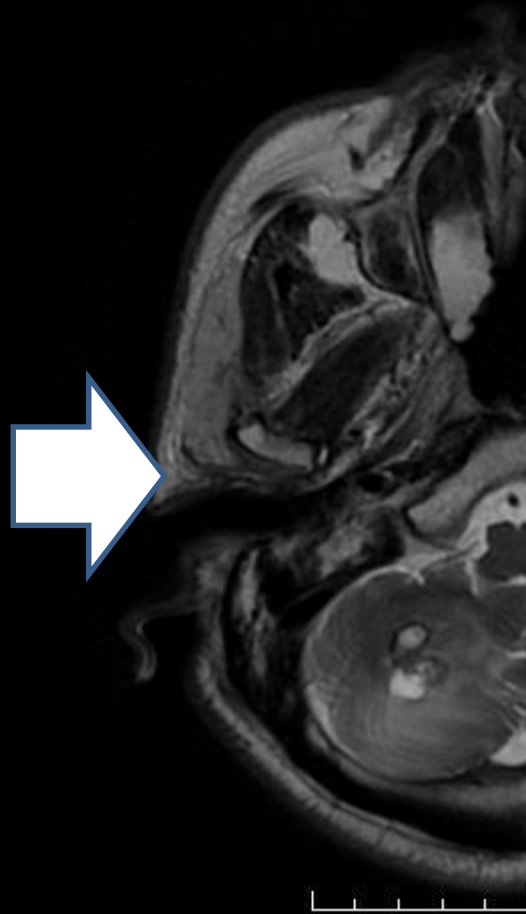
2009-07-15



2012-12-12



2013-02-19



- Our final presumed diagnosis
  - Cystic cavernous angioma with hemorrhage
  - Could be familial form?



경사합시다.