

Yo Han Son, Sung Jin Kim, In Ho Jung, Jae Woo Chung, Jung Ho Yun, Jung Ho Ko, Young Jin Kim, Chun Sung Cho, Sang Koo Lee

Department of Neurosurgery Dankook Univ. College of Medicine





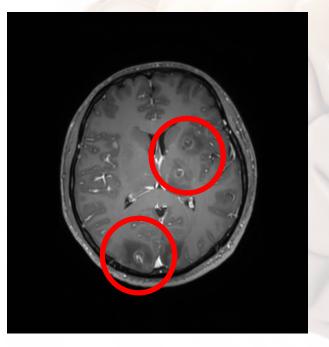


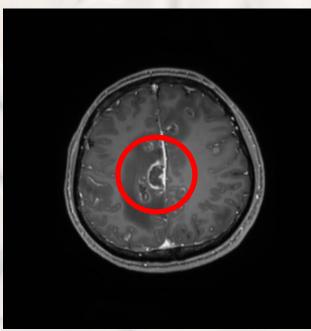
CASE

- M / 34yrs
- Thai
- Chief Complaint (2022/12/31)
 - ✓ Headache without traumatic event
 - √ Vomiting
- N/Ex.
 - ✓ M/S Drowsy
 - ✓ GCS E4M56V4
 - ✓ Pupil 3mm 3mm prompt
 - ✓ Motor all gr 4
- Past medical history
 - ✓ HIV Infection



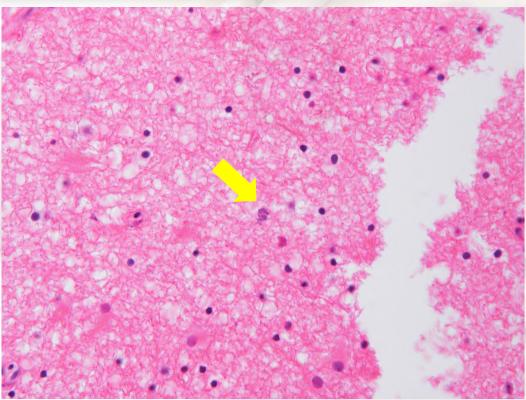
PRE OP BRAIN MRI(T1 ENHANCED) (23/01/09)





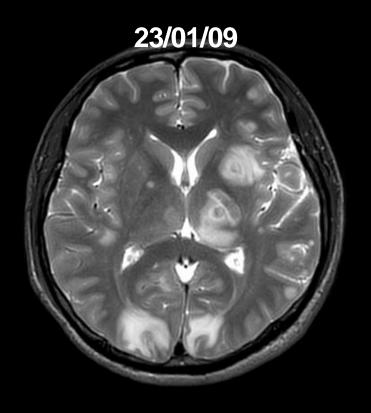
POST OP





Toxoplasma gondii cyst in brain tissue. Hematoxylin-Eosin stain (original magnification X400)

BRAIN MRI T2











CNS TOXOPLASMOSIS

- Symptom: HA(m/c), focal neurological deficit, fever and altered M/S
 - ✓ Seizures, psychomotor or behavioral changes, cranial nerve palsy, ataxia, and visual abnormalities
- Imaging : MRI preferred
 - ✓ CT : multiple hypoattenuating or isoattenuating lesions representing abscesses with surrounding vasogenic edema and mass effect.
 - ✓ MRI: hypointense lesions on T1WI, high or mixed signal intensity on T2WI and FLAIR, rim-enhancement with surrounding hypointense areas on contrastenhanced T1WI
 - ✓ Rarely solitary lesions, calcifications (Common in congenital toxoplasmosis)

CNS TOXOPLASMOSIS

- Treatment
 - ✓ Prevention : Trimethoprim/Sulfamethoxazole
 - ✓ Treatment : Pyrimethamine + Sulfadiazine
 - Atovaquone for the latent phase
 - √ Course
 - Clinical improvement in 7 days of treatment: 86%
 - Radiographic improvement in 14 days of treatment: 95%
 - ✓ Start combined antiretroviral therapy(cART) within 2 weeks after the initiation of cerebral toxoplasmosis treatment



CNS TOXOPLASMOSIS

Conclusion

- ✓ Currently, about 13,000 patients suffer AIDS in South Korea
- ✓ Neurologic manifestation with such immunocompromised patient should go through minute CNS examination including brain images
- ✓When multiple, typically over 5 lesions, bilateral, ring enhanced and
 edematous lesions are found in the brain, CNS toxoplasmosis may be
 possible and should be treated immediately even if other conditions have
 not been excluded

