뇌신경재활

게시일시 및 장소: 10월 19일(토) 08:30-12:30 Room G(3F)

질의응답 일시 및 장소: 10월 19일(토) 11:00-11:30 Room G(3F)

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## A case report, Neuromyelitis optica(NMO) with TB meningitis

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## **Back ground**

Neuromyelitis optica(NMO) is an idiopathic autoimmune inflammatory disorder of CNS which predominantly involves optic nerves and spinal cord. Here we present a rare case of Tb meningitis which later was <br/>
sconfirmed to be accompanied with NMO.

## Present illness

52 years old woman, who worked as health personnel in public health office first visited emergency department due to aggravating fever and headache. Multiple CSF tappings were performed to analyze the cause, which revealed WBC level of 310 with lymphocyte being 94%, Protein of 14, ADA of 12.3IU/L, which then lead to considering tuberculosis meningitis. Anti-Tb medications (HERZ) were administered afterwards. After a week, the patient developed a new symptom of left homonymous hemianopsia. Brain MRI demonstrated high signal intensity of right temporal, occipital lobe and sub cortical white matter of left hemisphere. Further CSF tapping showed 8.6 of ADA and Beta-D-glucan. Serum blood test also revealed positive for IGRA which lead to consideration of Tb or fungal meningitis. Despite of two weeks of antibiotics and anti Tb medication, her leg weakness and urinary difficulty worsened along with abulic feature. Brain, C-spine MRI and CSF tapping were performed again to analyze exacerbating symptoms, along with aquaporine antibody test.. C-spine MRI displayed rim like enhancement in cervical and upper thoracic level and steroid pulse therapy was applied for 5 days under diagnosis of demyelinating disease. After 2 weeks, serum blood test showed 1:10(weak positive) to aquaporine antibody. The patient's neurologic symptoms and weakness seemed to be maintained stably after two months of diverse treatments. Her mental state was observed to become stuporous and AEDs were added after EEG and MRI analysis, with correlated to clinical seizure. Neuropathic pain upon upper extremity was observed and several pain killers were used including Lyrica, Neurontin, Vimovo, Ultracet and even fentanyl patch. Her symptoms including motor weakness, mildly impaired mental state and neuropathic were well managed and the patient was transferred to another hospital to be further treated. After half a year, her neuropathic pain aggravated. Topiramate, Pregabalin, Sentil along with AEDs including Levetiracetam, valproic acid were applied

## Conclusion

NMO is difficult to be suspected owing to the possibility of delayed appearance of it's key symptoms of optic neuritis and acute myelitis. Serial diagnostic tools including imaging tests like MRI and serum blood tests including several autoimmune antibodies need to be performed to verify the diagnosis. After initial treatment of the attack, remaining sequelae should further be managed through continuous rehabilitation and medical management.