گزارش صبحگاهی

1400/9/6

استاد دکتر شاکر

دکتر تبرائی

Patient history

- بيمار آقاى 39 ساله كه در روز سى آبان ماه با وسيله شخصى مراجعه كرده است.
- از بعد از ظهر روز مراجعه به طور ناگهانی دچار احتباس ادر اری شده، احساس دفع ادر ار داشته ولی قادر به دفع نبوده است.
- تروما نداشته، داروی خاصی مصرف نمی کند، سابقه شرایط مشابه نداشته، بیماری زمینه ای خاصی ندارد.
 - سابقه جراحی نداشته.

Patient history

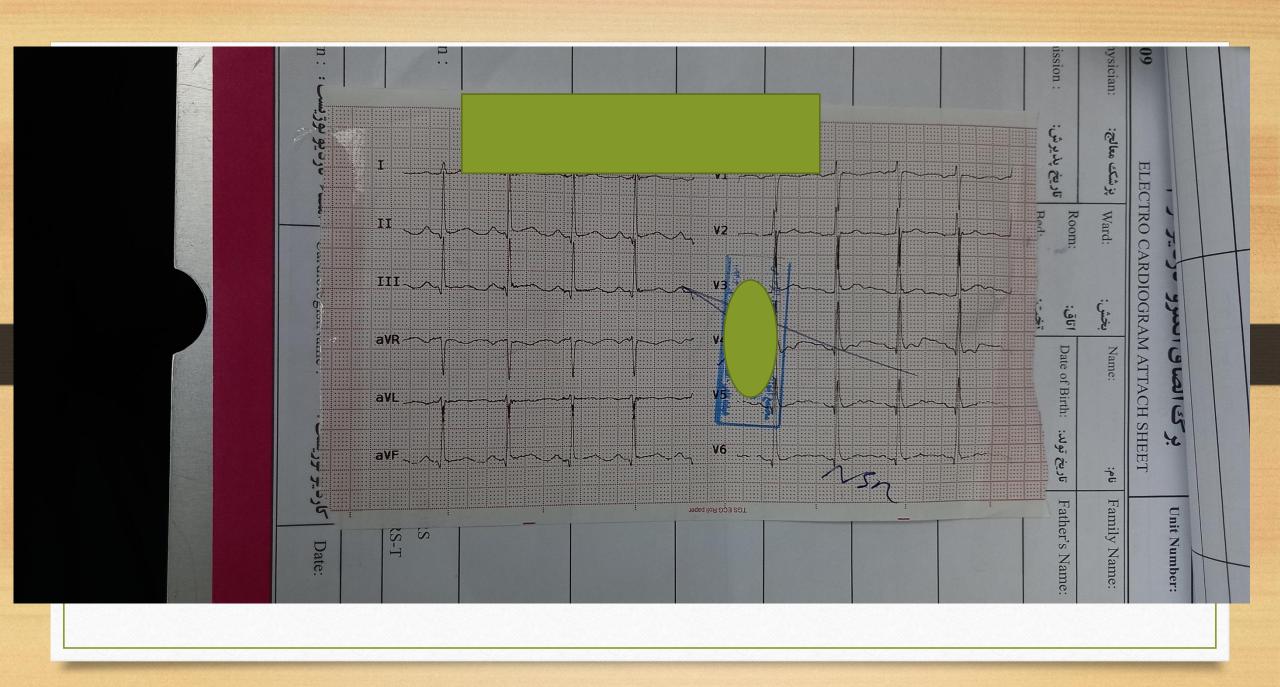
- در روز شانزدهم ماه گذشته دوز اول واکسن آسترازنکا را دریافت کرده است
- روز بیست و دوم ماه گذشته تهوع، ضعف، بی حالی و سردر د داشته که ماهیت آن بدون نبض، در دو طرف پیشانی، غیر برق آسا، وضعیتی بوده است.
 - تاری دید، فتوفویی، فنوفویی، سکسکه، استفراغ، تشنج نداشته.
 - از 5 سال قبل كاهش شنوايي گوش چپ داشته.

What else you want to know?

Patients additional history and Ph/E

- گزگز و پاراستزی اندام تحتانی تا زانو و اندام فوقانی تا مچ با سیر ثابت
 - ضعف پروگزیمال اندام تحتانی
- رفلکس عمقی اندام تحتانی در قسمت های فوقانی +2 و در قسمت های تحتانی +3
 - ساير معاينات نرمال

Question: what will you do?



Laboratory assessment results

• CBC: normal study

• BS:136

• BUN: 16

• Cr: 0.8

• LDH: 202

• Ca:11

• Na:141

• K: 4.2

• P: 2.5

• Mg: 1.6

• CPK: 35

• AST: 19

• ALT: 21

• ALK.P: 162

• CK-MB: 7

• INR: 1.1

• VBG: normal study

• ESR: 17

• CRP: 6

• U/A: WBC: 4-6, RBC: 8-10

MRI report

• Brain: NL

• Spine: ALL NL

MRI Report Cervical MRI without contrast Reveals. Spinal alignment is normal. Discal spaces are normal without any herniation. Neural foramina are normal bilaterally. Vertebral body and posterior element are normal MRI Report Dorsal MRI without contrast Reveals: Spinal alignment is normal. Discal spaces are normal without any herniation. Neural foramina are normal bilaterally. Vertebral body and posterior element are normal MRI Report Lumbar MRI without contrast: Reveals: Spinal alignment is normal. Discal spaces are normal without any herniation. Neural foramina are normal bilaterally. Vertebral body and posterior element are normal in shape and signal. Central canal diameter is normal. Cord signal and shape is normal./* dr soltani

Patients emergency radiologic assessment

Primary emergency care

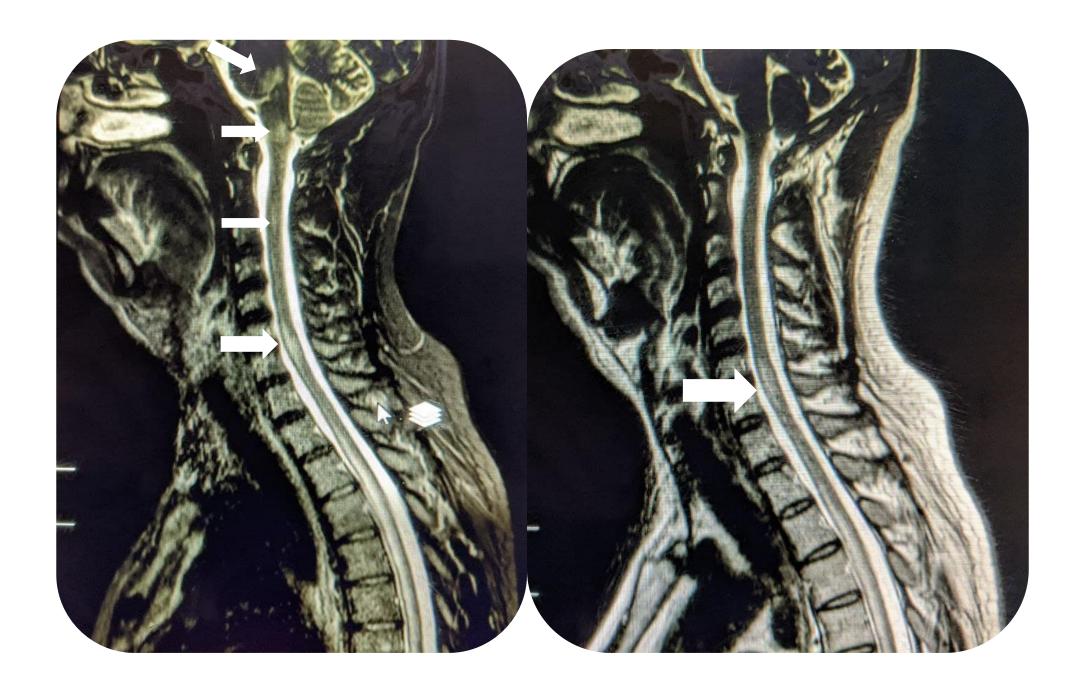
- Urinary catheter inserted
- Laboratory assessment (all normal until now)
- Whole CNS MRI: Brain, thoracic, cervical, lumbosacral
- Apotel/Ketorolac/Ondansetron
- ECG
- Neurologic consultation

Neurologic consultation response:

- ICU added
- Routine workup
- Ca-D tab po daily
- Vit D3 50000 IU po weekly
- PPD, SE
- Initiation of Methylprednissolon injection protocol

• بیمار به ICU نورولوژی منتقل شد ۵ روز بعد MRI تکرار شد

Spine MRI Report Cervical, dorsal MRI with & without contrast: Reveals: abnormal T2 (high in T2 signal as longitudinally extensive spinal cord lesion with central cord, involvment with cord swelling also abnormal T2 signal in pons and medulla are seen no restriction or pathological enhancement detected this findings suggestive for demyelinating disease (device disease) differential diagnosis less more likely vasculitis /* dr soltani MRI Report



MRI Report

Cervical, dorsal MRI with and without Contrast:

- **Abnormal T2** (High in T2 signal as longitudinally extensive spinal cord lesion with central cord, involvement with cord swelling also abnormal T2 signal in pons and medulla are seen)
- This findings are suggestive for demyelinating disease (device disease)

Patient clinical course in Neurology Ward

- بهبود توان اندام و تقریبا symptom free شدن
 - هم اکنون در بخش نورولوژی بستری است

Discussion

Neuromyelitis optica spectrum disorder (NMOSD)

Neuromyelitis optica (NMO) was previously referred to as Devic disease, and traditionally NMO was thought to have limited if any intracranial manifestations

Over the past decade, however, a far wider range of manifestations have been recognized as belonging together and thus the term NMOSD has been proposed to encompass them all

Neuromyelitis optica spectrum disorder are inflammatory disorders of the central nervous system characterized by severe, immune-mediated demyelination and axonal damage predominantly targeting optic nerves and spinal cord

CLINICAL FEATURES

Hallmark features of NMOSD include acute attacks of bilateral or rapidly sequential optic neuritis (leading to severe visual loss) or transverse myelitis (often causing limb weakness, sensory loss, and bladder dysfunction) with a typically relapsing course

Central nervous system involvement outside of the optic nerves and spinal cord is recognized in patients with NMOSD

Other suggestive symptoms include episodes of intractable nausea, vomiting, hiccups, excessive daytime somnolence or narcolepsy, reversible posterior leukoencephalopathy syndrome, neuroendocrine disorders, and (in children) seizures. While no clinical features are disease-specific, some are highly characteristic

Radiographic features

MRI is the modality of choice for NMOSD and the orbits, brain and spinal cord should be imaged in suspected cases

Optic
Brain
Spinal Cord

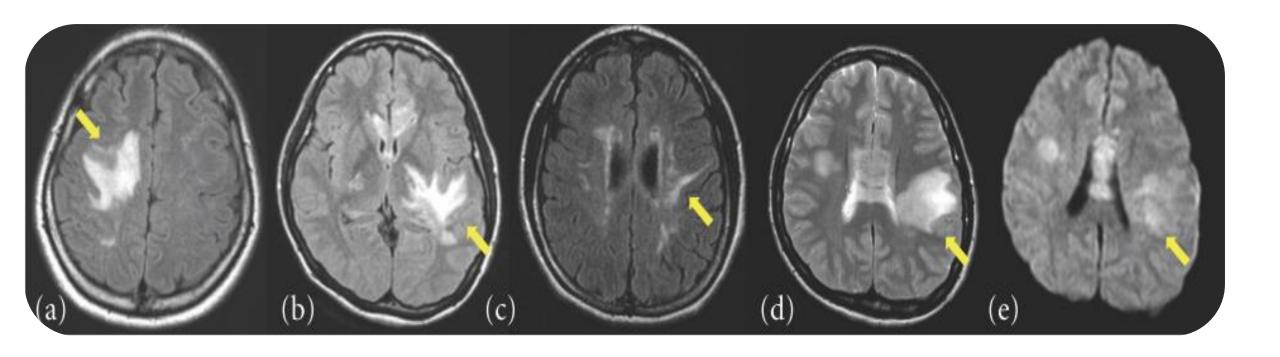
Radiographic features

Orbits

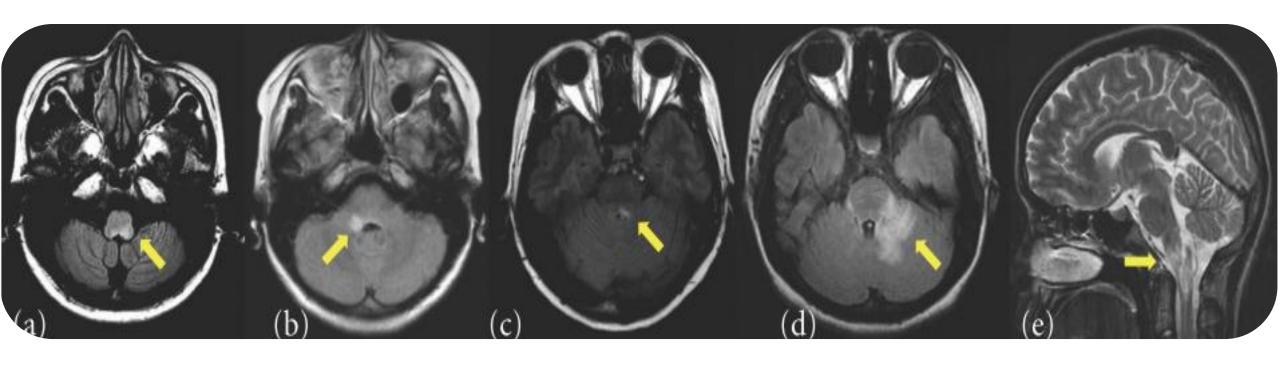
optic nerves appearing hyperintense and swollen on T2 and enhancing on T1 C+

Brain

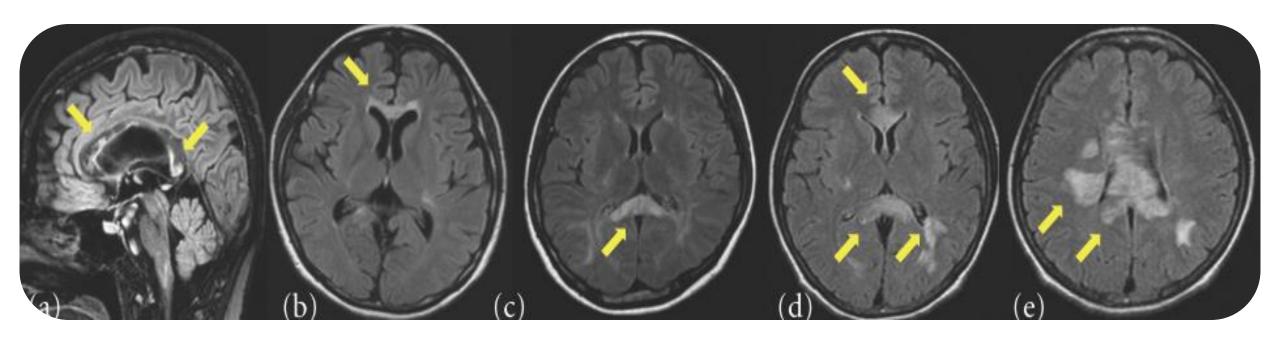
- Periependymal Lesions Surrounding the Ventricles and Cerebral Aqueduct
- Brainstem Lesions Adjacent to the 4th Ventricle
- Periependymal Lesions Surrounding the Lateral Ventricles
- Lesions Involving the Corticospinal Tracts
- Extensive Hemispheric Lesions
- Cortical Involvement and Leptomeningeal Enhancement.



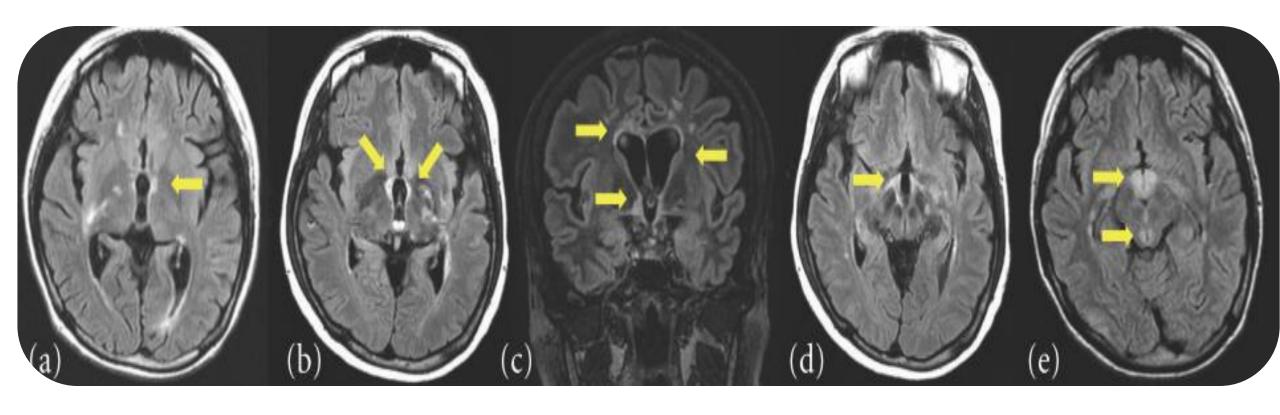
Extensive and confluent hemispheric white matter lesions



Brainstem lesions adjacent to the fourth ventricle



Periependymal lesions surrounding the lateral ventricles.



Periependymal lesions surrounding the third ventricle and cerebral aqueduct

Spinal cord

Spinal cord involvement is extensive, with high T2 signal Enhancement in T1 C+ (Gd)





T1 T2





T1 T2

Thank You For Your Attention

