



RELAPSING ACUTE TRANSVERSE MYELITIS IN A YOUNG MALE-A CASE REPORT

Neurology

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KEYWORDS

Longitudinally Extensive Transverse Myelitis (LETM), Neuromyelitis Optica Spectrum Disorder NMO, Multiple sclerosis (MS), Myelin Oligodendrocyte Glycoprotein antibody (anti MOG antibody)

BACKGROUND

Transverse Myelitis is a clinical syndrome of demyelinating myelopathy, which may be acute to subacute in onset. It can be idiopathic or disease-associated. The presence of longitudinally extensive transverse myelitis with typical radiological features should prompt the suspicion of relapsing diseases like Neuromyelitis Optica and Multiple Sclerosis.

Aims/Objective

- To study nature and course of Relapsing Acute Transverse Myelitis
- To study the effects of immunosuppression on relapsing Acute Transverse Myelitis

Methods

An 18-year-old male presenting to tertiary care hospital for complaints suggestive of transverse myelitis was subjected to the following tests.

Detailed history and clinical examination with focus on neurological examination

Lab tests: CBC, LFT, RFT, RBS, PT, INR, ESR, TSH, VIT B12 levels serum, ANA, Serum NMO, MOG, HIV, HBSAG, HCV

Urine routine and microscopy

Cerebrospinal fluid analysis including routine and microscopy

CSF for unique oligoclonal bands, csfACE levels

Radiological examination

Fresh MRI dorso-lumbar spine

MRI Whole spine dated one year back

MRI brain Plus Orbits- plain and contrast study

Fundus examination

Visual Evoked Potentials (VEP)

Case Discussion

Relapse of ATM in a young male- A case report

An 18-year-old male came to tertiary care hospital with complaint(s) of weakness of bilateral lower limbs. Sudden in onset. Bilaterally equal. Static. Distal more than proximal, Extensor more than flexors.

Complaint of decreased sensation in bilateral lower limbs below umbilicus

Left more than right

Associated with tingling and numbness

Complaint of involuntary passage of urine

Sudden in onset

Not associated with pain or burning micturition or blood in urine. Past history of similar episode 1 year ago for which the patient was treated with plasmapheresis and high-dose steroids.

On general examination, he was vitally stable, fairly built and well-nourished.

On neurological examination, higher mental functions, cranial nerves normal.

Cerebellar signs absent

Neurological examination of upper limbs was normal

Sensory examination

Decreased sensation below umbilicus

Bilateral lower limbs

Tone slightly decreased

Power flexors +4

Extensors +3

Superficial reflexes

Abdominal reflex absent below umbilicus

Reflexes exaggerated +3 in bilateral knee joint

Bilateral ankle clonus present

Bladder sensation lost

Bowel sensation intact

Lab investigations

RBS, CBC, LFT, RFT, INR, Lipid profile S B12, S TSH, ESR, all within normal range

S.ANA, HIV, HBsAg, HCV, NMO MOG all negative

CSF routine and microscopic examination normal

CSF ACE levels normal

Unique oligoclonal bands absent

Lab investigations

RBS, CBC, LFT, RFT, INR, Lipid profile S B12, S TSH, ESR, all within normal range

S.ANA, HIV, HBsAg, HCV, NMO MOG all negative

CSF routine and microscopic examination normal

CSF ACE levels normal

Unique oligoclonal bands absent

Radiological examination

MRI brain with orbits normal

MRI spine s/o longitudinally extensive transverse myelitis extending from D6-D11

Past MRI dated 1 year back suggestive of similar changes extending from D3 up to conus.

Fundus n Visual evoked potentials normal

RESULTS

The patient was diagnosed as a case of Relapsing Acute Longitudinally Extensive Transverse Myelitis due to NMO-negative Neuromyelitis Optica Spectrum disorder.

He was started on high-dose steroids plus 7 cycles of plasma exchange therapy. He improved with partial recovery.

CONCLUSION

Transverse myelitis is a demyelinating myelopathy with acute to subacute onset. Patients present with typical spinal cord involvement with a sensory level, characteristic pattern of weakness and frequent bowel and bladder involvement. Relapsing Attacks of Acute Long Segment Transverse Myelitis should raise a suspicion of relapsing diseases like MS or NMO and the patient should be put on chronic immunosuppressants to prevent further relapses and disability.

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