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Sensory Motor Chronic Inflammatory Demyelinating Polyneuropathy in Upper Limbs

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Abstract: ***Chronic inflammatory demyelinating polyneuropathy (CIDP) is a rare neurological disorder in which there is inflammation of nerve roots and peripheral nerves and destruction of the fatty protective covering (myelin sheath) of the nerve fibers. Myelin allows nerve fibers to transmit signals very rapidly (40-60 meters/second). Loss or damage to myelin can cause slowing or blockage of the nerve signals and can lead to loss of nerve fibers. This causes weakness, paralysis and/or impairment in motor function, especially of the arms and legs. Sensory disturbance may also be present. The motor and sensory impairments usually affect both sides of the body (symmetrical), and the degree of severity and the course of disease may vary from person to person. Some affected individuals may follow a slow steady pattern of symptoms while others may have symptoms that stabilize and then relapse.***

Keywords: CIDP, Myelin, Chronic inflammatory demyelinating polyneuropathy

1. Introduction

CIDP is a rare autoimmune disorder with prevalence of 5 cases/ 1 lakh individuals with a M: F (2: 1). In CIDP usually the motor symptoms are more predominant than sensory & lower limbs are more involved.

2. Case History

A 48 year old male patient, a chronic smoker having the history of numbness, paraesthesia, tingling sensations, clumsiness in both upper limbs for 3 months got admitted. Patient was not able to lift the arm and heavy objects.

3. Clinical Examination

Temp-normal,
P-88/min,
BP-124/78mmHg,
SpO2-97% with room air.
On neurologic examination sensory symptoms like pain, tactile stimulation, temperature discrimination and propioception in upper limb were totally absent and fine & gross motor functions were normal.
Tone was decreased, power 4/5, plantar was flexors,
Deep tendon reflexes: upper limbs-ABSENT
Lower limbs – normal

4. Investigations

Routine blood investigations were done and found to be normal.
CSF examination shows
Raised protein (101),
Sugar (60),
TC 2 cells,
Lymphocytes 100,
NCS shows multifocal demyelinating sensory motor polyneuropathy,
EMG shows sensory motor polyneuropathy with sensory predominance,
MRI brain and spine were normal. Other investigations like HIV, HbSAg, S. TSH, ANA, APLA, ESR, S. electropheresis were normal

5. Diagnosis

The symptoms of tingling, numbness, paraesthesia, with proximal muscle weakness that is billaterally symmetrical, CSF showing raised protein, and EMG-NCS showing electrophysiologic pattern of multifocal demyelination makes the diagnosis of CHRONIC INFLAMMATORY DEMYELINATING POLYNEUROPATHY. Nerve biopsy may be added.

6. Treatment

Initially patient was given trial of oral steroids, inj. Methylcobalmine, oral gabapentin for 7 days but did not improved. Then patient was given IV methyl prednisolone for 5 days but still there was no response in sensation. At last the patient had gone for 5 cycles of plasmapheresis as patient was unable to afford inj. IVIG. Symptoms were improved afterwards and was discharged on maintenance dose of steroids with advise to follow up after a month.

7. Discussion

Although CIDP is rare and difficult to diagnose, once it is accurately diagnosed, there are treatment options. CIDP can be treated with a variety of immunomodulatory therapies, including FDA-approved IVIG. Fortunately, CIDP can be managed to help patients live relatively normal and healthy

lives, and there are many patient-to-patient support groups that include oversight by experts in neuromuscular disorders.

8. Conclusion

CIDP can be diagnosed with proper history, neurological examination, CSF study and EMG-NCS study and should be ideally managed by intra venous immunoglobulin

References

[1] Neurophysiologie Clinique/Clinical Neurophysiology, 45, 2, (131), (2015).
[2] Practical Neurology, 16, 6, (488), (2016).
[3] Journal of the Peripheral Nervous System, 19, 1, (2-13), (2014).
[4] Diagnosis and treatment of chronic acquired demyelinating polyneuropathies, Nature Reviews Neurology, 10, 8, (435), (2014).