Abstract

Introduction: Sensory ganglionopathies result from damage to the sensory nerve cell bodies in the dorsal root ganglions. In more than half of the cases, the disorder remains idiopathic but extensive evaluation for paraneoplastic manifestations and underlying systemic autoimmune diseases is crucial in deciding treatment options.

Case presentation: A 22-year-old man who had no significant past medical history presented with rapidly progressing bilateral lower and upper limbs paresthesia with facial numbness and myalgia. The patient had impaired joint position sensation, vibration sense, light touch perception, and global areflexia. However, muscle strength was preserved. Nerve conduction studies (NCS) revealed pure sensory neuronopathy/ganglionopathy without motor involvement. Electromyography (EMG) was normal. Even though ANA was positive, tests for anti-dsDNA antibodies and extranuclear antigen panels were negative. Malignancy screening is also negative because paraneoplastic neuropathy also needs to be excluded. Thus, a diagnosis of immune-mediated ganglionopathy was made. Therapeutic plasma exchange showed dramatic response both clinically and electrophysiologically, leading to notable improvements in a short time.

Conclusion: Immune-mediated sensory ganglionopathy is a rare presentation of autoimmune diseases. Prompt diagnosis and early commencement of immunosuppressive therapies such as IV immunoglobulins, IV methylprednisolone, or therapeutic plasma exchange will halt the disease progression and cause speedy recovery.