Case Report

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A Case of Recurrent Guillain-Barre Syndrome

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Abstract

Guillain-Barré syndrome (GBS) is an acute fulminant polyradiculoneuropathy that is autoimmune in nature. It manifests as a rapidly evolving areflexic motor paralysis with or without sensory disturbance. Weakness typically evolves over hours to a few days and is frequently accompanied by tingling dysesthesias in the extremities. Approximately 70% of cases of GBS occur 1-3 weeks after an acute infectious process. Although GBS is considered to be monophasic, recurrences are reported in 2–5% of patients [1,2]. We describe a case of 20 year old male who presented with ascending limb weakness along with difficulty in swallowing and speaking since 12 hours. He further developed respiratory failure requiring mechanical ventilator support and was diagnosed as a case of Guillain-Barre syndrome. Patient had history of similar episode 15 years back for which he was hospitalized for 4 months and had complete recovery.

Keywords: Ascending Weakness; Immune Response; Peripheral Neuropathy; Respiratory Failure; Recurrent Guillain-Barre Syndrome.

Introduction

Guillain-Barre Syndrome (GBS) is an immune polyradiculoneuropathy that presents with ascending bilateral lower extremity weakness and areflexia and that affects all age groups with a slight male predisposition. It is currently the most frequent cause of acute flaccid paralysis worldwide, and constitutes one of the serious emergencies in neurology. The most frequent signs and symptoms are paresthesias, weakness, and myalgias.

Recurrent Guillain-Barre Syndrome (RGBS) can recur in 1–6% of patients, though it has been reported to occur in 1–10% of patients after asymptomatic period of several months to several years [3].

We describe a case of 20 year old male who presented with Recurrent Guillain-Barre Syndrome.

Case Report

A 20-year-male patient presented to our hospital with complaints of difficulty in swallowing and speaking since 12 hours. It was gradual in onset and increased in severity within a short period of time. It was associated with feeling of heaviness in the throat along with drooling of saliva and nasal regurgitation of the food.

Patient also complained of weakness in both the lower limbs. Rapid in onset, increased in severity. It was associated with difficulty in rising up from sitting position and feeling of heaviness of both the lower limbs while walking. It was followed by weakness in both the upper limbs. No history of trauma, headache, seizure or altered intellect. No history of recent vaccination. He had history of fever along with sore throat and cough 3 weeks back which was relieved on taking medication.

Patient has history of similar episode 15 years back for which he was hospitalised for 3 months and was on ventilator support for 20 days. During that time, he was diagnosed as Guillain-Barre Syndrome. No past history of diabetes mellitus, hypertension, tuberculosis, asthma, polio and diphtheria. Patient is a non-alcoholic, non-tobacco chewer, non-smoker and is on mixed diet. There was no significant family history.

On neurological examination, patient had dysarthric speech, complete ophthalmoplegia, depressed gag reflex, decreased tone and power in all muscles with high stepping gate and absent superficial and deep reflexes.

CSF Analysis showed albumino-cytological dissociation with proteins- 500 mg/dl and total leukocyte count- 0 cells. Electro diagnostic studies were not done as the facility was not available. MRI brain with contrast was normal. All other investigations were within normal limits.

Patient was managed conservatively in ICU. On day 1 of admission he developed shortness of breath followed by respiratory failure for which endotracheal intubation was done and patient was put on mechanical ventilator. Subsequently he had pure motor paralysis along with complete ophthalmolegia. Patient received intravenous immunoglobulins (IVIg) for 5 days but no improvement. On Day 10, tracheostomy was done. He improved gradually on conservative management. On Day 80, patient was weaned off from ventilator and tracheostomy tube was removed. Patient is gradually regaining muscle tone and power in all the limbs.

Discussion

Recurrent Guillain-Barre Syndrome (RGBS) can recur in 1–6% of patients [2]. Risk factors for RGBS include age less than 30, milder symptoms, and history of Miller Fisher Syndrome variant. There appears to be no significant difference between RGBS and GBS episodes with respect to similar clinical symptoms and similar or different triggering events. Episodes are generally shorter in RGBS than in GBS [4].

The following characteristics of RGBS may be sufficiently distinctive from those of chronic relapsing polyneuropathy to justify their nosological separation: rapid onset of symptoms with subsequent complete or near complete recovery, high incidence of an antecedent illness and lack of an apparent response to immunosuppressive therapy. Results of cerebrospinal fluid (CSF) analysis and nerve conduction studies during recurrences were those expected in typical monophasic GBS [1].

Generally the recurrence comes months to years after the initial episode. Respiratory or intestinal infections often precede the second episode. Patients who had one recurrence of GBS usually return to their previous level of function while those with multiple recurring episodes of GBS accumulated small neurological deficits.

References

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