A Rare Case Report of Guillian Barre Syndrome Presenting with Unilateal Facial Nerve Palsy

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Abstract- Guillian Barre Syndrome is an acute diffuse post infectious demyelinating disorder of spinal roots and peripheral nerves and occasionally cranial nerves. Bilateral facial nerve palsy is the most common pattern of cranial nerve involvement in GBS. However, unilateral facial palsy, although uncommon, can be seen in GBS. We report a rare case of unilateral facial palsy in a patient with Guillian Barre Syndrome.

Index Terms- Guillian Barre Syndrome, facial nerve palsy, Acute Inflammatory Demyelinating Polyneuropathy.

I. INTRODUCTION

The Guillian - Barre Syndrome is one of the commonest forms of polynephrathy. The reported incidence rates for GBS are 1-2 per 1 00,000 population. The lifetime likely hood of any individual acquiring GBS is 1 in 1000. Available Indian literature indicates a peak incidence between June, July and September - October. In the Western Countries GBS is common in the 5th decade, but in India it occurs more commonly in younger age. GBS is equally common in men and women and can occur at any age. There is a male preponderance among the hospitalized population.

Gullian Barre Syndrome also known as an Acute Inflammatory Demyelinating Polyneuropathy (AIDP) is an acute demyelinating polyradiculopathy of uncertain aetiology which may present with facial nerve involvement in 27-50% of cases, often bilaterally2.

Over half of Gullian Barre syndrome patients experience symptoms of viral respiratory or gastrointestinal infections during the 1-3 weeks prior to the onset of neurological symptoms. Clinical criteria, spinal fluid protein elevation, and nerve conduction abnormalities are the mainstay of diagnosis3.

II. CASE PRESENTATION

A 70 year old male patient presented with weakness of both upper limbs and lower limbs, inability to close left eye, history of pins and needle sensation on both hands and feet of 1 week duration.

Past History: No History of trauma, Hypertension, Diabetes, CAD, Dog bite, recent vaccination and no previous significant neurological problems.

Personal History: Takes mixed diet, smoker, occasional alcoholic.

General Examination: About 70 year old Lean male with pulse rate 80/mt regular, temperature normal, no neck stiffness, Respiratory Rate 18/mt, BP – 130/80 mm Hg.

Neurological Examination: Intellectual functions normal, slurring of speech present, Bells phenomenon on left eye, deviation of angle of mouth to right while talking suggestive of left lower motor nerve type facial palsy, all other cranial nerves are normal.

Motor system: Bulk – Normal; Hypotonia of all 4 limbs, with Power 2/5 in all four limbs.

Superficial reflexes: Corneal, conjunctival, abdominals are present, plantars flexors through out the course of illness.

Deep tendon reflexes are absent in all four limbs, sensory system examination is normal, fundus is normal; No bladder and bowel involvement.

No Cerebellar signs, skull & spine are normal. No signs of meningeal irritation

Patient was treated with high dose IV steroids for 5 days with which power in all four limbs improved and power in all limbs at discharge is 4/5. Patient is advised regarding protection of eye during sleep and massage of the weakened muscles. Patient is on regular follow up. Patient is able to walk without support but unable to close the left eye is persisting.

Investigations:


HIV and HBsAG negative

CSF analysis : Proteins – 51 mg/dL ; Sugar - 80 mg/dL ; ADA – 06 U/L ; No cells seen; culture – negative

MRI BRAIN – Normal Study.

Nerve Conduction Studies: Sensory Motor Axonal Demyelinating neuropathy with Radicular involvement

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Bells Phenomenon of left eye

Deviation of Angle of Mouth to Right & loss of Nasolabial fold on left side

Electro physiological Studies (Nerve Conduction Report)
III. DISCUSSION

The Guillain Barre Syndrome produces a relatively symmetrical areflexic tetraparesis. In three quarters of patients, the first neurological symptom is of paraesthesiae in the toes, less often in the fingers.

Muscle weakness usually starts in the legs and ascends to the arms. Proximal muscle weakness may be prominent from the onset. The weakness is fairly symmetrical and usually involves the trunk musculature. Maximal weakness generally develops within 12-14 days of the onset of neurological symptoms. Although cessation of symptom progression within 4 weeks is often regarded as a necessary criterion for the diagnosis of Guillain–Barre Syndrome (Asbury and Cornblath 1990).

Tendon reflexes are usually lost early in the disease. Total areflexia occurs in over 80 per cent of patients at some stage of the illness. Approximately half the patients develop cranial – nerve palsies, usually in the wake of severe ascending limb weakness (Loffel Rossi, Mumenthaler, et al 1977; Winer, Hughes, and Osmond 1988). Isolated unilateral or bilateral facial palsy is the commonest cranial – nerve lesion in Guillain–Barre syndrome.

Bulbar palsy and weakness of the muscles of mastication are the next commonest cranial nerve abnormalities. Ocular palsy only occurs in about 10 per cent of patients.

Laboratory Findings: The most important laboratory aids are the electro diagnostic studies and the CSF examination. The weakness is fairly symmetrical and usually involves the trunk musculature. Maximal weakness generally develops within 12-14 days of the onset of neurological symptoms. Although cessation of symptom progression within 4 weeks is often regarded as a necessary criterion for the diagnosis of Guillain–Barre Syndrome (Asbury and Cornblath 1990).

Case Reports:

1. Unilateral facial palsy in Guillain Barre Syndrome (GBS) : A rare occurrence, Department of Neurology, Chhatrapati Shahuji Maharaj Medical University, Lucknow, Uttar Pradesh, India. Case reports : 01 / 2012; 2012, DOI : 10.1136 / BCR – 2012 – 007077.

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