

## An observational study of steroid in the treatment of Guillain-Barre syndrome- A Therapeutic Challenge

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**Abstract-** Steroids have been used for the treatment of Guillain-Barré Syndrome (GBS) since the 1950s, while their clinical efficacy remains poorly defined. To date, there is still no strong evidence proving or denying the efficacy of high-dose methylprednisolone, and further studies are still merited for issues regarding steroids for GBS. In this study patients of GBS are treated with steroid as IVIG could not be given and the patients showed significant improvement. Thus this study states successful use of steroid in GBS, a therapeutic challenge.

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### I. Introduction-

Guillain-Barre syndrome (GBS) is an acute, frequently severe, and fulminant polyradiculoneuropathy that is autoimmune in nature. It occurs year-round at a rate of between 1 and 4 cases per 100,000 annually; in the United States, ~5000–6000 cases occur per year. Males are at slightly higher risk for GBS than females, and in Western countries, adults are more frequently affected than children.

### II. Materials And Methods-

64 year old female non hypertensive and non diabetic, known case of hypothyroidism on tab levothyroxine 25 microgram daily admitted with c/o progressive weakness of all 4 limbs for 10 days associated with sensory involvement f/b difficulty in deglutition and respiratory distress for last 2 days. Weakness started from lower limbs involving simultaneously f/b both upper limbs involvement. It was also associated with bowel and bladder involvement in the form of constipation and urinary incontinence. There was no h/o facial asymmetry. At the time of admission she was conscious but drowsy. She was afebrile, PR- 76/min, BP- 130/80. CNS examination revealed hypophonic speech, bilateral sluggish gag and palatal reflex, generalised hypotonia, power was 3/5 in UL and 0/5 in LL with absent deep tendon reflexes and b/l non responsive planter reflex. Sensation was diminished but exact sensory level could not be elicited. Single breath count was 8. Saturation 97% with oxygen.

A clinical diagnosis of atypical GBS made and patient was planned for IvIg therapy. Lumber puncture tried for CSF examination but failed. As weight of the patient was approx 75 kg. She was planned for 6 vials of IvIg each containing 5gm daily for 5 days. But unfortunately we could arrange for 10 vials only. So she was infused 5 vials on D1. On D2 she showed no signs of improvement. So pulse methylprednisolone therapy with 1gm started on D2 along with 5 vials of IvIg infusion. On D3 patient showed response. single breath count and sensorium improved. She was given 1gm pulse therapy for 2days more and put on 60 mg prednisolone continuation therapy. Patient condition improved. She became able to take orally with improvement of motor function and discharged in stable condition.

### III. Discussion

Guillain Barre Syndrome is an acute immune mediated polyneuropathy. Although most patients begin to recover spontaneously within 2 weeks after maximum weakness is reached, symptoms which range from fatigue to complete paralysis may persist in some cases.

Steroids are affordable and user-friendly making them the theoretically reasonable agents for the treatment of GBS, while they have not produced the anticipated efficacy during their application for nearly 60

years. Continued studies on issues regarding steroid therapy for GBS are still merited, i.e. whether intravenous methylprednisolone is superior to symptomatic supportive therapy; whether intravenous methylprednisolone and IVIG exhibit synergistic effects and what the specific mechanisms of action underlying the effects are etc.

#### **IV. Conclusion**

Steroid in the treatment of GB syndrome is not well proved. But in a resource poor country like us where IVIg can't be afforded or any other complication arise due to IVIg, steroids may be used as a rescue drug in life saving emergency.

#### **References**

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