



Winging Guillain-Barre

Gagandeep Chera, MD and Jeremy Scheidt MD
Connecticut Institute For Communities

Introduction

- Guillain-Barre syndrome (GBS) is a debilitating neuromuscular disease.
- GBS affects 1.2-2.3 per 100,000 per year and is usually preceded by some infection or in some cases vaccination or operation has been reported [1, 2].
- GBS is rapidly progressive with maximal weakness reaching peak within 4 weeks, with recovery taking 6 months in severe cases.
- Patients unable to walk at time of presentation can last for years and sometimes never recover [3].

Case Description

- 61-year-old right-handed male with no significant past medical history who presented due to bilateral lower extremity weakness that started 3 days prior to presentation.
- Four days prior to presentation, patient states that he had an episode of loose stools after eating hot wings at a restaurant.
- Upon waking up the next day, patient stated to have bilateral lower extremity weakness, difficulty ambulating, progressing to episodes of falling down.
- Patient's symptoms also included: numbness/tingling from lower extremities progressing to bilateral hands.

Diagnostic

- Diagnostic work up: Lumbar puncture: Elevated protein at 121g/L, without elevated WBC count.
- EMG/NCS consistent with demyelinating generalized neuropathy with associated axonal features [Figure 2].
- NIF and FVC q4h.
- Anti-Campylobacter Antibody: Negative.

Diagnostic features	
•	Progressive weakness in both arms and legs, often starting with legs
•	Reduced or absent tendon reflexes
Strongly indicative features	
•	CSF protein raised (>0.4 g/L), with normal WCC
•	Relative symmetry of symptoms
•	Progression of symptoms up to 4 weeks
•	Recovery
•	Absence of fever at presentation
•	Mild sensory symptoms or signs
•	Facial weakness or other cranial nerve involvement
•	Pain

[FIGURE 1]

Results/Treatment

- Day 1: Patient shows 4/5 motor strength symmetrically in bilateral lower extremities, MEGOS score 7 [Table 1]. Areflexia of both upper and lower extremities bilateral. Started treatment with IVIG due to clinical symptoms/albuminocytologic dissociation CSF.
- Day 3: Improvement of lower extremity strength with return of deep tendon reflexes of upper and lower extremities bilateral.
- Day 5: Completion of IVIG treatment with significant improvement of patients symptoms and discharged to inpatient rehab.
- Completed 12 days of inpatient rehab with progression to modified independent for mobility and ADL's.

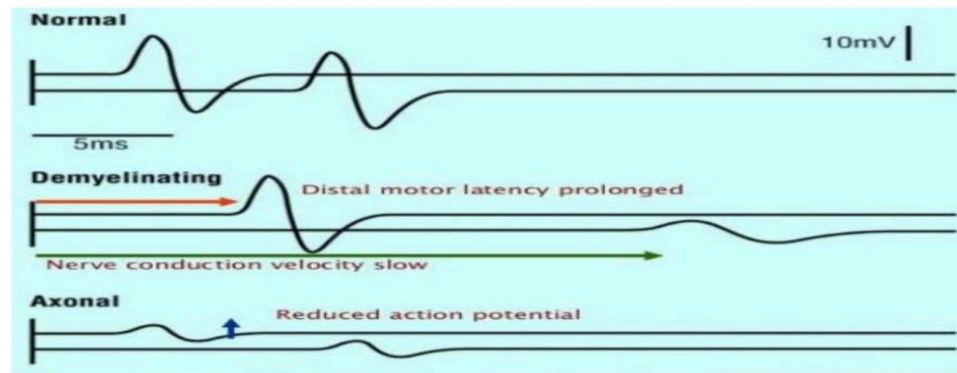


Figure 2. [5]

MEGOS score	7
Percent able to walk unaided after 4 weeks	20%
Percent able to walk unaided after 3 months	50%
Percent able to walk unaided after 6 months	63%

Table 1. mEGOS scoring. [6]

Discussion

- Guillain-Barre can be classified into two categories: Acute inflammatory demyelinating poly-neuropathy (AIDP) or Acute motor axonal neuropathy (AMAN).
- In the case of AIDP, patients usually respond better to treatment and have better prognosis.
- AMAN have longer recoveries, but in a few cases patient can have rapid recoveries. [7].
- mEGOS score predicts the percentage of patient that will be able to walk independent at 4 weeks, 3 months, and 6 months.
- Based on our patients presentation and finding he was predicted to have only a 20% chance of walking unaided at 4 weeks [Table 1].
- IVIG started before patients were unable to walk unaided showed faster recovery times with almost all patient having the ability to walk unaided by 6 months [4], as seen in our patient.

Conclusion

- In our case, the patient shows a very interesting mixture of patients with EMG that show suggestion of axonal damage or AMAN, but also seems to have rapid recover.
- Due to our patient never having reached bed bound status, and receiving IVIG early in his presentation, it seems patient had avoided permanent damage, and seems to be progressing more rapidly to full recovery compared to most patients with his mEGOS score.
- This shows the importance of early diagnosis and treatment in GBS, to curb the destruction in both forms of GBS.

References

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