

# A Case Study of Guillain-Barre Syndrome

Haseef T A<sup>1</sup>, Muhammed Nishad P<sup>2</sup>, Jasil N K<sup>3</sup>, Ajmal K K<sup>4</sup>

Pharm D Intern, Department of Pharmacy Practice, Cherraan's College of Pharmacy, Coimbatore, Tamilnadu, India

Corresponding Author: Haseef T A

**Abstract:** *GUILLAIN-BARRE SYNDROME (GBS) is a rare, serious neurological auto-immune disorder that affects the peripheral nervous system and can lead to weakness and paralysis may last for months or years which is triggered by an acute bacterial or viral infection, which causes weakness and tingling at different parts of the body joints and spread later. The exact cause of Guillain-Barre Syndrome is still unknown; also there is no known cure. The mortality rate varies from 4% to 7%. A female patient aged 63 was admitted with complaints of pain in all the joints since 20 days. History of weakness and burning sensation in all limbs and also not able to walk. Central Nervous System showed weakness in all limbs. The Magnetic Resonance Imaging (MRI) scan of Brain with Spine showed acute infarct seen in the left thalamus and mild diffuse age related cerebral atrophy. Patient felt comfortable and walks with support at the time of discharge.*

**Keywords:** MRI, GBS, Auto Immune Disorder

## 1. Introduction

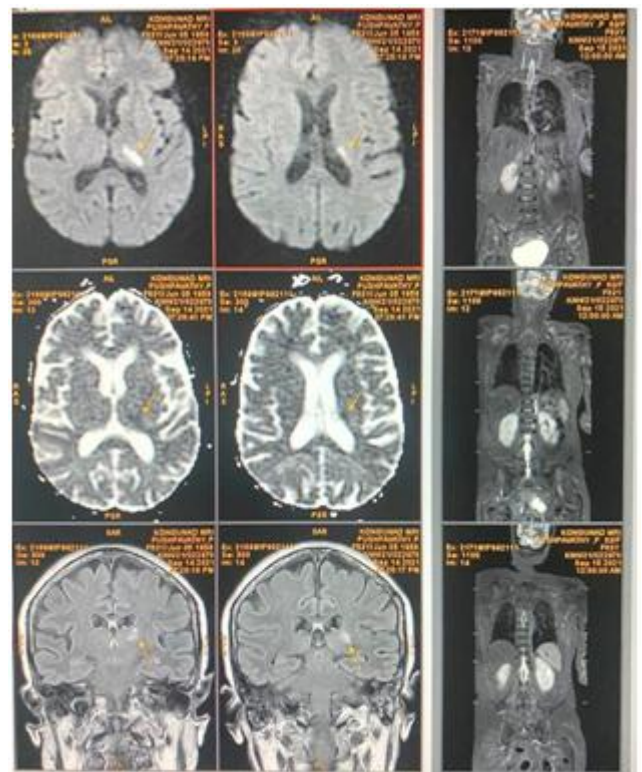
Guillain-Barre syndrome is a rare disorder in which your body's immune system attacks your nerves. Weakness and tingling in your extremities are usually the first symptoms. These sensations can quickly spread, eventually paralyzing your whole body. In its most severe form Guillain-Barre syndrome is a medical emergency. Most people with the condition must be hospitalized to receive treatment. Guillain-Barré syndrome can affect anyone. It can strike at any age (although it is more frequent in adults and older people) and both sexes are equally prone to the disorder. The exact cause of GBS is not known. Researchers don't know why it strikes some people and not others. It is not contagious or inherited.

## 2. Case Report

A 63 year old female patient was admitted with chief complaints of pain in all joints, H/O weakness in all limbs and not able to walk since 20 days, H/O weakness and burning sensation in all limbs. No history of Drug/Food/Dust allergy. On examination patient was conscious, oriented, afebrile, no pallor, no icterus, no pedal edema. On systemic examination all the values were normal except CNS, it has weakness in all limbs. MRI Brain with Spine with whole spine screening showed.

- Disc desiccation with reduced disc height and diffuse posterior disc bulge seen at C5 -C6, C6 -C7 and C7 - D1 levels, occluding the anterior thecal space and barrowing both neural foramen, impinging on bilateral C6, C7 & C8 exit nerve roots respectively. No evidence of compressive cervical myelopathy.
- Minimal posterior disc bulge seen at C3 - C4, C4 - C5 levels.
- Endplate corner degeneration seen at the anterior corner of the dorsal and lumbar vertebral bodies.
- Diffusive posterior disc bulge with bilateral facet hypertrophy seen at L2 - L3 and L5 - S1 levels.
- Bilateral sacroilitis noted as evidenced by joint space narrowing articular margin irregularity and subcondral edema on either side of both sacroiliac joints.

- There is also evidence of arthritic changes seen in the both hips as evidenced by marrow edema in the both femoral head as well as both acetabulum with reduced bilateral hip joint space and mild joint effusion.



Lumbar puncture done to diagnosis or treat this condition on second day of admission.

Patient started medication of Prednisolone 10mg, combination of Rosuvastatin and Clopidogrel (10mg + 75mg) and Pantoprazole 40mg on admission. Combination of Inj Gabapentin and Methylcobalamin and Alpha lipoic acid (300mg + 0.5mg + 100mg) and Tab Amisulpride 100mg for 3 days.

### 3. Discussion

GUILLAIN-BARRE SYNDROME (GBS) is a rare disorder in which your body's immune system attacks nerves. There was an unremarkable previous background in our patient's case. Patient experienced condition of pain in all joints and weakness.

A degree of clinical suspicion is required for the diagnosis of GBS, and it should be verified by imaging diagnostic method. We done MRI on the first day of admission and it showed acute infarct in right thalamic region and Nerve conduction study and screening of whole spine showed mild diffuse posterior disc bulge at C5- C6 and C6- C7 and diffuse posterior disc bulge with bilateral facet hypertrophy seen at L2- L3 and L5- S1, bilateral sacroilitis noted by joint space narrowing articular margin irregularity and subcondral edema on either side of sacroiliac joints and possibility of ankylosing spondylitis to be excluded made the diagnosis easy and faster.

The exact cause and treatment of GBS is unknown. In this case, patient was treated with medications and patient was feeling better and comfortable, walks with support during discharge.

Patient was treated with medication of Prednisolone which was used to treat pain. Combination of Gabapentin and Methylcobalamin was used for neuropathic pain and Amisulpride is a dopamine D2 receptor antagonist and also physiotherapy and supportive care has been advised on discharge.

### 4. Conclusion

Guillan Barre Syndrome should be considered in patients with tingling and weakness, this will start with feet and legs and eventually paralyzing whole body. The exact treatment is unknown and the treatment is done on the basis of symptoms found out. Early diagnosis and treatment prevent from whole body paralyzing.

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