



Guillain-Barre Syndrome (GBS)



To diagnose GBS, patients may have the following tests:

- ▶ **Spinal tap (lumbar puncture):** A sample of cerebrospinal fluid is removed from the spinal canal and tested in a laboratory for specific signs of the disease.
- ▶ **Electromyography:** Thin, needle-like electrodes are used to test the nerve function within muscle fibers.
 - ▶ Nerve conduction exam

▶ **Guillain-Barre Syndrome** ◀ **Treatment**

Most patients are treated in hospital. The main treatments are:

- ▶ Treatments to reduce symptoms such as painkillers.
- ▶ Treatments to support body functions.
- ▶ Intravenous immunoglobulin (IVIG)
 - ▶ Plasma exchange

▶ **Diet Therapy for Guillain-Barre** ◀ **Syndrome**

The goals of nutrition support for the patient with GBS are the same as any other patient in the critical care unit. Enteral or parenteral feedings are required for patients on mechanical ventilation to ensure that adequate caloric needs are met when the metabolic demand is high. Patients are hypermetabolic and hypercatabolic because of endocrine, infectious, and inflammatory components of the disease.



High-energy (40 to 45 nonprotein kcal/kg), high-protein nutrition support appears to exert a favorable effect on visceral protein repletion, nitrogen balance, and resistance to pulmonary infection.

- ▶ Vitamin B12 which deficiency leads to damage of myelin sheath is essential for GBS patients. Foods sources of vitamin B12 include fish, meat, egg, milk.
- ▶ Vitamin B6 is essential for GBS patients, but more of it becomes toxic to nerves. Food sources of vitamin B6 include Sweet potato, banana, potatoes, avocado, and pistachios.
- ▶ An anti-inflammatory diet is recommended, containing many essential fatty acids, found in oily fish, nuts, seeds and their oils and olive oil.
- ▶ Foods rich in vitamin A such as fruits and vegetables, and vitamin E avocados, sesame seeds, can help to reduce inflammation.
- ▶ A low saturated fat diet slows down deterioration of the myelin sheath.



Guillain-Barre Syndrome



Guillain-Barre syndrome

▶ Guillain-Barre Syndrome Symptoms ◀

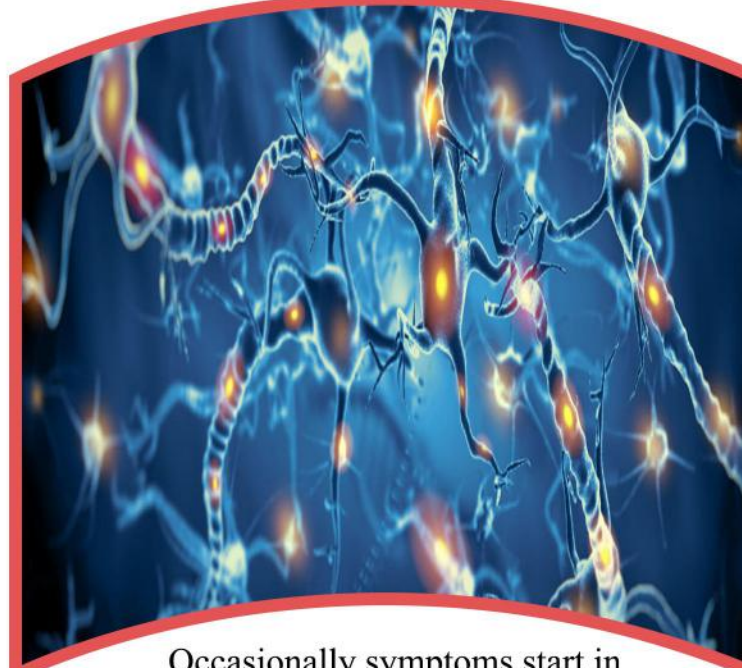
The first symptoms of GBS are usually tingling and muscle weakness that begins in the lower extremities. Symptoms often affect the arms, breathing muscles, and even the face, reflecting more widespread nerve damage.

▶ Guillain-Barre syndrome ◀

It is a rare neurological disorder in which the body's immune system mistakenly attacks part of its peripheral nervous system (the network of nerves located outside of the brain and spinal cord). Damage to these nerves makes it hard for them to transmit signals. As a result, your muscles have trouble responding to your brain. Its exact cause is unknown.

The three most common types of GBS are as follows:

- ▶ Acute inflammatory demyelinating
 - ▶ polyradiculoneuropathy
 - ▶ Acute motor axonal neuropathy
- ▶ Acute motor and sensory axonal neuropathy
 - ▶ Miller Fisher syndrome



Occasionally symptoms start in the upper body and move down to the legs and feet. At first patients may have:

▶ pain

▶ muscle weakness

▶ pins and needles

▶ problems with balance

These symptoms may continue to get worse over the next few days or weeks before they start to slowly improve. In severe cases, patients may have:

▶ Difficulty moving, walking, breathing or swallowing.

▶ Guillain-Barre Syndrome Diagnoses ◀

Diagnosis is based on symptoms and findings on neurological examination.