Guillian Barre Syndrome (GBS)
Information Guide

INDIAN ACADEMY OF
NEUROLOGY

A Public Information Initiative

Causes

Guillian Barre syndrome (GBS) is term used to describe weakness of limbs which is usually rapidly ascending from the lower limbs to the upper limbs and develops within days to weeks. It is caused by an attack by the body's immune system on the nerves. The exact cause of GBS is unknown, but it is often preceded by an infectious illness, such as respiratory infection or diarrhoea.

Symptoms and signs

The initial symptoms of this disorder include weakness or tingling sensation in the feet and legs followed by hands (the order is not always strictly like this). In many instances, the symmetrical weakness and abnormal sensations spread to the arms and the upper body. These symptoms can increase in intensity until certain muscles become completely powerless. In severe cases, the person is almost totally paralyzed and swallowing and breathing may also be affected. This becomes a life threatening medical emergency.

Most patients complain of sensation of pins and needles and/or numbness. Paresthesia is a sensation of tingling, burning, tickling, or pricking of a person's skin. Paresthesias generally begin in the tips of toes and fingers, and ascend upward. Apart from the classical presentation of ascending acute flaccid weakness of all limbs, they may also present with facial weakness, double vision, difficulty is speaking and swallowing.

Diagnosis

GBS is called a syndrome rather than a disease because there is no specific disease-causing agent.

> A syndrome is defined as a medical condition characterized by a collection of symptoms and signs.

Since the signs and symptoms of the syndrome can be quite varied, the diagnosis can occasionally be a challenge. On examination by the physician, flaccidity and attenuation of reflexes may provide a clue to this diagnosis. Absence of bladder and bowel involvement, and absence of a sensory level may provide further clue. The confirmatory tests are Nerve Conduction studies (NCS), which point towards the first changes in a still evolving disease. Cerebrospinal Fluid (CSF) examination changes may be obvious only after one week into the onset of illness. MRI of the spine may be done to exclude other diagnoses in a doubtful condition, and enhancement of the nerve roots may reinforce the diagnosis of GBS.

Treatment

The treatment modalities consist of supportive and definitive treatments. Both plasmapharesis and intravenous immunoglobulin (IVIG) have shown efficacy in clinical trials. These treatments target the antibodies (infection-fighting proteins) produced by the immune system, and prevent further damage to peripheral nerves.

Symptomatic treatment for pain in the toes, legs or fingers may be helpful.

Non-pharmacological remedies

Supportive treatment in the form of monitoring of vitals and assessment of bulbar functions is required. Patients may occasionally require ventilatory support due to weakness of respiratory muscles. Therapies such as counselling, physiotherapy, occupational therapy, and speech and language therapy aid in recovery.

Precautions

Since the disease may progress within four weeks after symptom-onset, the disease needs to be monitored for worsening of weakness, especially in swallowing and weakness of respiratory muscles. Any change in speech, choking while eating, or shortness of breath should not be ignored.

Disclaimer:

This brochure is for the general information of the public and the patients. People should not self-medicate themselves with the medicines and treatments mentioned here. Before taking any of the medications mentioned in the information brochure, please consult your neurologist.

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