

Media centre

Guillain-Barré syndrome

Fact sheet

February 2016

Key facts

- Guillain-Barré syndrome is a rare condition in which a person's immune system attacks their peripheral nerves.
- People of all ages can be affected, but it is more common in adults and in males.
- Most people recover fully from even the most severe cases of Guillain-Barré syndrome.
- Severe cases of Guillain-Barré syndrome are rare, but can result in near-total paralysis.
- People with Guillain-Barré syndrome should be treated and monitored; some may need intensive care. Treatment includes supportive care and some immunological therapies.

Introduction

In Guillain-Barré syndrome, the body's immune system attacks part of the peripheral nervous system. The syndrome can affect the nerves that control muscle movement as well as those that transmit feelings of pain, temperature and touch. This can result in muscle weakness and loss of sensation in the legs and/or arms.

It is a rare condition with an overall incidence of 0.4 to 4.0 people per 100 000 per year. People of all ages can be affected, but it is more common in adults and in males. Even in the best of settings, 3%-5% of GBS patients die from complications, which can include paralysis of the muscles that control breathing, blood infection, lung clots or cardiac arrest.

Symptoms

Symptoms typically last a few weeks, with most individuals recovering without long-term, severe neurological complications.

- The first symptoms of Guillain-Barré syndrome include weakness or tingling sensations. They usually start in the legs, and can spread to the arms and face.
- For some people, these symptoms can lead to paralysis of the legs, arms, or muscles in the face. In 20%-25%¹ of people, the chest muscles are affected, making it hard to breathe.
- Severe cases of Guillain-Barré syndrome are rare, but can result in near-total paralysis. These cases are considered life-threatening, and affected individuals are typically treated in intensive-care units.
- Most people recover fully from even the most severe cases of Guillain-Barré syndrome, although some continue to experience weakness.

Causes

The cause of Guillain-Barré cannot always be determined, but it is often triggered by an infection (such as HIV, dengue, or influenza) and less commonly by immunization, surgery, or trauma.

Diagnosis

Diagnosis is based on symptoms, findings on neurological examination including diminished or loss of deep-tendon reflexes and lumbar puncture. Other tests, such as blood tests, may be required identify the cause of trigger of GBS.

Researchers are studying a potential - but unproven - link between the surge in GBS cases and Zika virus infection.

Treatment and care

- GBS patients are usually hospitalized so that they can be monitored closely.
- There is no known cure for GBS. But treatments can help improve symptoms of GBS and shorten its duration.
- Supportive care includes monitoring of breathing, heartbeat and blood pressure. In cases where a patient's ability to breathe is impaired, he or she is usually put on a ventilator and monitored for complications, which can include abnormal heart beat, infections, blood clots, and high or low blood pressure.
- Given the autoimmune nature of the disease, its acute phase is typically treated with immunotherapy, such as plasma exchange to remove antibodies from the blood or intravenous immunoglobulin. It is most often beneficial when initiated 7 to 14 days after symptoms appear.
- In cases where muscle weakness persists after the acute phase of the illness, patients may require rehabilitation services to strengthen their muscles and restore movement.

Reference

[¹ Guillain-Barré Syndrome](#)

Nobuhiro Yuki, M.D., Ph.D., and Hans-Peter Hartung, M.D N Engl J Med 2012. (accessed 5 February 2016).

[Microcephaly/Zika virus »](#)

This page links all WHO information to its response on the Public Health Emergency of International Concern.

Related links

Zika virus

[Fact sheet: Zika virus \(English version\)](#)

[Fact sheet; Zika virus \(Portuguese version\)](#)

[Q&A: Zika virus](#)
[WHO's work on Zika virus](#)

Microcephaly

[Key facts: Microcephaly](#)
[WHO's work on Microcephaly](#)
[Q&A: Women, microcephaly and zika virus \(English version\)](#)
[Q&A: Women, microcephaly and zika virus \(Portuguese version\)](#)

Guillain–Barré syndrome

[More on Guillain–Barré syndrome](#)

Epidemiological Update: Region of the Americas

[Neurological syndrome, congenital anomalies, and Zika virus infection](#)