Guillain-Barré syndrome (also known as ‘acute inflammatory polyradiculoneuropathy’ or ‘post-infective polyradiculoneuropathy’) is a rare but serious disease of the peripheral nervous system (nerves outside of the brain and spinal cord, which deal with our body’s senses and movements). In common with multiple sclerosis (MS), the immune system starts to destroy the myelin sheath that surrounds the nerve fibres of many peripheral nerves, or even the nerve fibres themselves. This damage affects the messages being passed from the brain to the body.

A similar, but longer-lasting illness is CIDP (chronic inflammatory demyelinating polyradiculoneuropathy), once known as ‘chronic Guillain-Barré syndrome’, is now usually regarded as a separate but related condition. Like Guillain-Barré syndrome, CIDP can improve without treatment. However, recovery may be very slow and the illness can either get progressively better or worse, or can follow a relapsing remitting course.

Guillain-Barré syndrome is rare. It affects about 1,500 people in the UK every year. It is slightly more common in men than women, and can affect people of any age, including children.

First symptoms are usually tingling and numbness in the fingers and toes with progressive weakness in the arms and legs during the next few days. In the mildest of cases, the weakness may cause only moderate difficulty in walking. In more serious cases, the weakness progresses and leads to complete paralysis of the legs. The arms and chest area may also be affected. If the chest is affected, medical assistance may be required to help control breathing. Equally, if the throat or face are affected, assisted feeding may be necessary. A common early symptom is pain that is often a backache, which occurs due to inflammation being localised to area of nerves as they leave the spinal canal.

Guillain-Barré syndrome can improve in many cases without treatment, though it can be longer lasting and symptoms might come and go.
It is still unclear what causes Guillain-Barré syndrome. However, about 60 per cent of patients have a throat or intestinal infection, the flu or stress symptoms in the previous two weeks. These infections trigger an incorrect response in the immune system which then attacks the nerves.¹

When the onset of Guillain-Barré is preceded by a viral or bacterial infection like this, it is thought that the virus has changed the nature of cells in the nervous system so that the immune system treats them as foreign cells.²

Guillain-Barré is called a syndrome rather than a disease because it is not clear that a specific disease-causing agent is involved. A syndrome is a medical condition characterised by a collection of symptoms (what the patient feels) and signs (what a doctor can observe or measure). The signs and symptoms of the syndrome can be quite varied, so doctors may, on rare occasions, find it difficult to diagnose Guillain-Barré in its earliest stages.

A neurologist will examine and question you fully, and will note whether the symptoms appear on both sides of the body (most common in Guillain-Barré) and the quickness with which the symptoms appear (in other disorders, such as MS, muscle weakness may progress over months rather than days or weeks). The neurologist may also carry out a number of tests which may include testing your reflexes or a lumbar puncture (spinal tap) where a needle is inserted into the lower back to draw a sample of spinal fluid.²

There is no known cure for Guillain-Barré syndrome. However, there are therapies that lessen the severity of the illness and accelerate recovery in most people.

**Plasma exchange (plasmapheresis)**
Plasma is the clear, yellowish fluid part of the blood. This treatment involves removing the plasma and separating it from the actual blood cells. The blood cells are then put back into the body without the antibodies in the plasma that helped attack the nerves. These cells then go on to produce healthy plasma to replace what was taken.

**Intravenous immunoglobulin (IVIg)**
Immunoglobulin is another name for antibodies, the parts of the blood that are produced by the immune system to destroy harmful bacteria and viruses. High doses of healthy immunoglobulin from blood donors can block and destroy these harmful parts of the blood.

**Counselling**
Because Guillain-Barré syndrome can have sudden and unexpected onset with likely slow recovery, talking therapies or counselling can be a useful tool to reassure and encourage.
Useful organisations

Guillain-Barré Syndrome Support Group
Support and information to those affected by Guillain-Barré syndrome and CIDP throughout Britain and Ireland.
Telephone: 0800 374 803 (UK) 01529 415 278 (RoI)
www.gbs.org.uk

GBS/CIDP Foundation International
A US site which provides information and support for patients, family members, and healthcare professionals.
Telephone: 610-667-0131
www.gbsfi.com

References and other information

1 Quick guide. The GBS support group. www.gbs.org.uk/quick-guide

2 Guillain-Barré Syndrome Fact Sheet (NIH Publication No. 05-2902) National Institute of Neurological Disorders and Stroke.

MS Society publications

The MS Society has publications on a wide variety of topics, including information for people newly diagnosed, types of MS, managing relapses, and social services. For a publications list and order form visit the website www.mssociety.org.uk or call 020 8438 0799. (Monday to Friday, 10am-3pm.

MS Helpline

The award winning MS Helpline offers confidential emotional support and information to anyone affected by MS, including family, friends, carers, newly diagnosed or those who have lived with the condition for many years. Information about MS is available in over 150 different languages by speaking to a Helpline worker via an interpreter. Call freephone 0808 800 8000 Monday to Friday, 9am-9pm, except bank holidays, or email helpline@mssociety.org.uk

Authors and contributors

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Suggestions for improvement in future editions are welcomed

Please send them to infoteam@mssociety.org.uk

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