Guillain-Barré Syndrome

Guillain-Barré syndrome (GBS) is a rare autoimmune neurological disease in which the body’s immune system produces antibodies against its own nerves, resulting in damage to them. It is named after 2 French doctors who described this syndrome for the first time in 2 soldiers during World War I. Cases of GBS may develop after an infection (for example, an upper respiratory or gastrointestinal illness). It is thought that the body makes antibodies to protect itself against an invading bacterium or virus. However, certain bacteria and viruses have protein coverings that resemble some normal proteins on the sheath that wraps around nerves (myelin sheath). This can lead to the body’s immune system attacking one’s own nerves. The swine flu vaccine used in 1976 was associated with several cases of Guillain-Barré syndrome. The new types of flu vaccines have not had such an effect.

**SYMPTOMS**

Guillain-Barré syndrome symptoms include weakness, numbness, and tingling sensations in the legs and arms that can lead to paralysis. It sometimes affects breathing muscles such that patients need to be put on a ventilator. All these sensory and muscle symptoms can develop and progress either very quickly (within hours) or much more slowly (within 3-4 weeks).

**RISK FACTORS FOR GUILLAIN-BARRÉ SYNDROME**

- Viral infections, such as HIV/AIDS, herpes, respiratory infections, and mononucleosis
- Bacterial infections
- Hodgkin disease, a malignant disease of the lymphatic system
- Systemic lupus erythematosus, an autoimmune disease of the skin and other organs
- Recent surgery

**DIAGNOSIS AND TREATMENT**

Symptoms of Guillain-Barré syndrome sometimes require emergency treatment, especially when breathing muscles are affected. If you notice numbness, tingling, and muscle weakness in your legs you should contact a physician for an evaluation to determine the cause. Your physician will perform a physical examination, obtain laboratory tests, and possibly perform a lumbar puncture (spinal tap) to collect spinal fluid, which can help diagnose the problem. Treatment of Guillain-Barré syndrome consists of support and monitoring body functions to facilitate recovery of the nerves.

**PROGNOSIS**

There is no cure for Guillain-Barré syndrome but several treatments can alleviate the symptoms and accelerate recovery of the affected nerves. In the majority of cases, the symptoms resolve completely or almost completely within weeks.