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Myasthenia Gravis

National Institute of Neurological Disorders and Stroke (NINDS)

Source

National Institute of Neurological Disorders and Stroke (NINDS). *Myasthenia Gravis Information Page*.

Myasthenia gravis is a chronic autoimmune neuromuscular disease characterized by varying degrees of weakness of the skeletal muscles of the body, which are responsible for breathing and moving parts of the body. In myasthenia gravis, the immune system--which normally protects the body from foreign organisms--mistakenly attacks itself. Symptoms vary in type and intensity. The hallmark of myasthenia gravis is muscle weakness that increases during periods of activity and improves after periods of rest. Certain muscles that control eye and eyelid movements, facial expression, chewing, talking, and swallowing are often, but not always, involved. The muscles that control breathing and neck and limb movements may also be affected. Myasthenia gravis is caused by a defect in the transmission of nerve impulses to muscles. Normally when impulses travel down the nerve, the nerve endings release a neurotransmitter substance called acetylcholine. In myasthenia gravis, antibodies produced by the body's own immune system block, alter, or destroy the receptors for acetylcholine. The first noticeable symptoms of myasthenia gravis may be weakness of the eye muscles, difficulty in swallowing, or slurred speech. Other symptoms may include blurred or double vision, drooping eyelid(s), and weakness in the arms, hands, fingers, legs, and neck. Myasthenia gravis is not directly inherited nor is it contagious.