

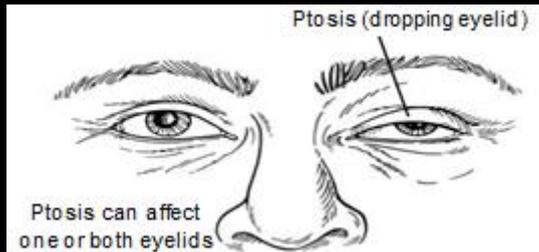
Myasthenia Gravis (MG)



Myasthenia gravis (my-us-THÉE-nee-uh GRAY-vis) is a nerve and muscle (neuromuscular) disorder, due to injury resulting from abnormal activity of the body's immune system (autoimmune mediated injury) leading to fluctuating muscle weakness and tiredness (fatigue). The weakness increases during periods of activity and improves after rest. Life expectancy is not shortened due to the disease.

Symptoms: The symptoms are not recognized earlier because the weakness improves after the period of rest. The disease may affect any muscle which performs action; can be localized (limited to one group of muscle performing action) or generalized (multiple group of muscles are involved)

- Drooping of one or both eyelids (ptosis)
- Blurred or double vision (diplopia), due ocular muscle weakness
- Unstable or waddling gait
- Weakness in arms, hands, fingers, legs, and neck
- Change in facial expression
- Difficulty in swallowing
- Shortness of breath due to the chest wall muscle weakness, which unable the chest to expand and obstructing the free flow of air through the lungs



The Diagnosis can be confirmed by:

- 1) **Edrophonium challenge test:** individuals with myasthenia gravis, muscle function will improve within 30 to 60 seconds after injecting a medicine - edrophonium (or neostigmine) into the vein
- 2) **Serology:** Type of blood test which analyzes a component of a blood constituent- serum, to detect an antibody which keeps acetylcholine from binding to the receptors in MG, but their absence does not rule out the disease

Treatment involves:

OPTIONS	DESCRIPTION
Treating the symptoms (symptomatic treatment)	Often individualized and based on functional impairment age and sex. Agents like cholinesterase inhibitors (Pyridostigmine, Neostigmine) are used initially to block acetylcholine esterase and prolongs the action of acetylcholine. Daily requirements may vary.
Immunotherapy	Agents such as prednisolone, azathioprine, cyclosporine and others are recommended when the disease is resistant, not responding to the initial treatment or increasing disability
Plasmapheresis	Is used to achieve quick relief; in severe form of MG leading to life threatening condition. It involves removing antibodies from the blood stream to treat the condition.
Human immune globulins (IVIG)	It down regulates the antibodies; benefits may be seen within a week lasting up to a month
Surgery	Thymectomy is done , to remove the thymus gland; which is suggested to produce the offending antibodies

For more information on myasthenia gravis and other diseases: visit at www.educateyourhealth.com