Myasthenia Gravis: An Autoimmune Neuromuscular Disorder

WHAT IS MYASTHENIA GRAVIS?
Myasthenia gravis (MG) is a chronic autoimmune neuromuscular disorder characterized by fluctuating weakness of the skeletal muscle groups.1

The term "myasthenia" comes from Greek and Latin words meaning "muscle weakness."2 The term "gravis" comes from a Latin root meaning "serious" or "heavy."

MC affects approximately 700,000 people worldwide and is associated with a heavy disease burden.

Symptoms differ from person to person, and may fluctuate or only affect certain muscles.1 MG can affect people of all ages and races. Common disease onset ages are between 20 and 30 years for women and between 50 and 70 years for men.

Common Symptoms Can Include:4
- Drooping eyelids
- Muscle weakness
- Difficulty breathing or swallowing
- Mental and physical fatigue

CAUSES
The immune system normally defends the body against diseases, but sometimes, itcan turn against the body, leading to an autoimmune disease like MG.2

In healthy individuals, nerves release a neurotransmitter called Acetylcholine, which binds to acetylcholine receptors (ACHR) on muscles, causing the muscle to contract normally.1

In most cases, MG occurs when the immune system produces AutoAll(pathogenic AAb that lead to functional and structural impairment of the neuromuscular junction. About 5% of people with MG have antibodies against the ACHR in their blood.6

TREATMENTS
There is no cure for MG. However, various treatments are used today to relieve symptoms. Treatments vary based on disease severity, affected muscle groups, patient age, and comorbidities.1,8

Medications are primarily non-specific and include symptomatic treatments, immunosuppression, and immune modulation. In some circumstances, thymectomy, the surgical removal of the thymus gland, is recommended to help relieve symptoms.7
References


