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Myasthenia Gravis

Image source: https://www.chop.edu/conditions-diseases/myasthenia-gravis

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All information above has been reviewed by Neurology specialists
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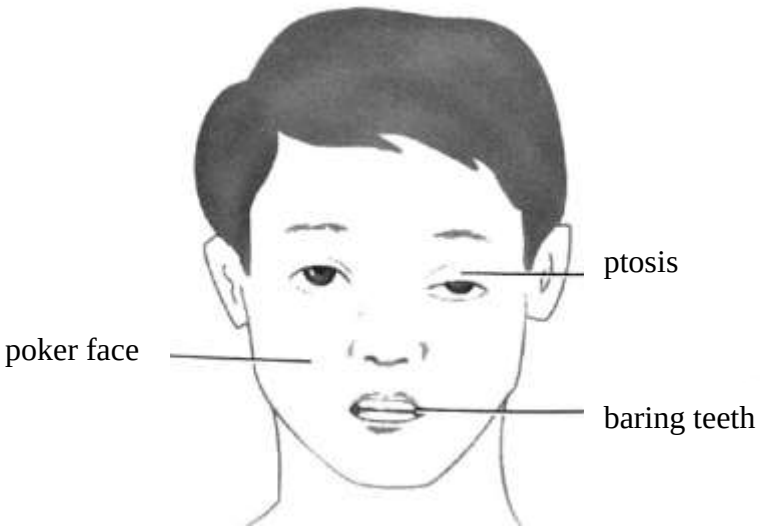
I. Introduction to Myasthenia Gravis

An autoimmune neuromuscular disease in which the nerves cannot effectively transmit signals to the muscles and affect muscle function, resulting in symptoms of weakness, such as the control of muscles such as the eyes, face, chewing, swallowing, limbs, or breathing. The predilection age for women is 20-40 years old, and the predilection age for men is 50-60 years old. Thymoma occurs in about 10% of cases.

II. Symptoms

Divided into ocular myasthenia and generalized myasthenia, about half of the patients will progress to generalized myasthenia within two years, the weakness symptoms are mild when getting up in the morning, and the weakness symptoms will become more severe at dusk and after activities; Muscles are violated. The activities and expressions of the face will change. You should have a smile, but what you see is a grinning appearance.



Types and Symptoms

Ocular Myasthenia Gravis

Eye muscle weakness, such as: double vision, drooping eyelids, more than half of the patients with initial symptoms of drooping eyelids, eye movement paralysis or blurred vision.

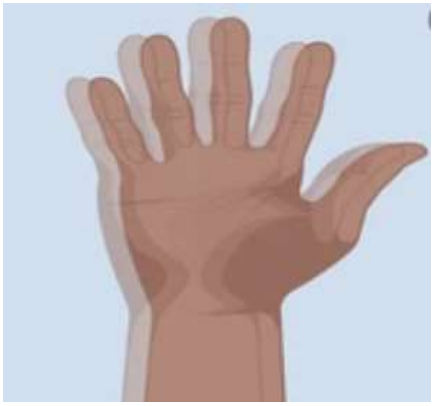


Image source: https://www.shutterstock.com/zh-Hant/image-vector/diplopia-double- vision-test-exam-brain-2124105089

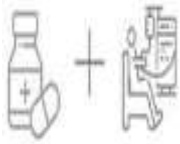
Generalized Myasthenia Gravis

In addition to eye muscle weakness, there may also be weakness of the face, neck, limbs, trunk, and even chewing and swallowing muscles and breathing muscles. If the breathing muscles are affected and respirator treatment is required, respiratory failure may occur and cause severe illness Myasthenic crisis.

Image source:https://zh-tw.ac-illust.com/

III. Treatment

Once the diagnosis of myasthenia gravis is confirmed, drug treatment will be taken to control the symptoms first, and then depending on the clinical symptoms of the patient, surgical thymectomy, plasmapheresis or intravenous immunoglobulin injection will be recommended.

Treatment		Side effect	Expense
Drugs 	☼ Treat with oral medications only ∗Mestinon： Increase muscle strength. ∗Steroids/immunosuppressants: Regulate immune function and improve symptoms of muscle weakness.	Abdominal pain, nausea,vomiting, increased saliva, tears, and bronchial secretions; generalized muscle weakness is less effective.	health insurance
Drugs and Plasmapheresis 	☼ Drug + Plasmapheresis ∗Short-term plasmapheresis： Similar to hemodialysis, a catheter is inserted into the blood vessel to drain the blood out, remove harmful substances affecting the muscles, and then return the blood back into the body.	Hypotension, hypocalcemia, hypoalbumin, hematoma, oozing,catheter infection.	partial burden of albumin
Drugs and injections of immunoglobulin 	☼ Drugs and injections of immunoglobulin ∗Injection of immunoglobulin： Neutralize active antibodies and regulate immune function by dripping.	Side effects are few but serious, renal failure, cerebral infarction.	Immunoglobulin at own expense

Ⅳ. Precaution

Drug Precautions	Dietary precautions
1.Proactively inform the medical staff that it is a patient with myasthenia gravis.  Image source: https://www.irasutoya.com/p/seasons.html 1.Take the medicine on time and do not increase or decrease the dose arbitrarily. 2.Take it after meals or with milk to reduce stomach irritation. Avoid taking it with fruit juice and coffee.	1.Eat foods with a softer texture, and choose foods that are easy to chew and swallow. 2.Process food into smaller pieces.  3.Eat small meals 

V. Conclusion:

The symptoms of myasthenia gravis patients often fluctuate. The weakness symptoms are usually more obvious after a period of continuous exercise. The symptoms will be aggravated in the evening or night, and the symptoms will be relieved after a period of rest. The course of the disease also varies from person to person. Some people's condition changes greatly within a few days or a few weeks, but as long as they cooperate with the doctor's prescribed treatment, the condition will remain stable.

VI. References

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Let's take a test to confirm that you have a thorough understanding.

1. Myasthenia gravis is an autoimmune neuromuscular disease that may cause weakness in muscles that control the eyes, face, chewing, swallowing, limbs, or breathing.

   ○Yes ○No ○Have no idea

2. Ocular myasthenia gravis causes weakness of the eye muscles, such as diplopia and eyelid drooping. More than half of the patients have initial symptoms of eyelid drooping, paralysis of eye movement, or blurred vision.

   ○Yes ○No ○Have no idea

3. eneralized myasthenia gravis does not affect the respiratory muscles.

   ○Yes ○No ○Have no idea

4. Current treatments for myasthenia gravis include oral medications, plasmapheresis therapy, and injection of immunoglobulin.

   ○Yes ○No ○Have no idea

5. Symptoms of myasthenia gravis will occur repeatedly, so medication must be taken on time and the dose of medication must not be increased or decreased arbitrarily.

   ○Yes ○No ○Have no idea