Myasthenia Gravis
Association of Western Pennsylvania
at Allegheny General Hospital
A Treatment & Advocacy Center

Emergency Management of Myasthenia Gravis

Myasthenia gravis (MG) is an autoimmune neuromuscular disorder. It is characterized by fluctuating weakness of voluntary muscle groups. Muscle groups most commonly affected include the eye muscles, facial, clewing and swallowing muscles, and shoulder and hip muscles. Muscles that assist breathing may be affected also.

MG signs and symptoms may include drooping eyelids, double vision, slurred speech, nasal quality to speech, inability to speak, drooling, nasal regurgitation, weak cough, problems chewing and/or swallowing, choking, trouble sitting up or holding head erect, trouble walking, feeling short of breath.

Medical emergencies ('crises") occur, but may happen when the muscles that support respiration are so weak that breathing becomes very difficult. Respiration may be shallow and ineffective. The airway may become obstructed due to weakened throat muscles and accumulated secretions.

FAILURE TO TREAT SYMPTOMS PROMPTLY CAN RESULT IN POOR AIR EXCHANGE AND RESPIRATORY INSUFFICIIENCY AND DEATH

Seek Medical Care Early to Prevent Emergencies.
Maintain an Open Airway.
Support Air Exchange.
Transport to Hospital Immediately.

Severe Respiratory Difficulty
Subjective findings may include shortness of breath at rest, air hunger, inability to lay flat, anxiety, restlessness, fatigue.

Evaluate

- Airway patency
- Strength of cough
- Respiratory rate & effort
- Cardiac status
- Skin and nailbed color and temperature
- Mental Status

Physical examination may reveal skin and nailbed color changes (pale to cyanotic), cool and moist skin, weak cough, rapid heart rate, increased blood pressure, rapid or shallow respirations, confusion, lethargy.

First Responder Management

- Keep airway open.
- Suction pooled oral secretions as needed.
- Elevate head and shoulders.
- Keep a calm and peaceful atmosphere.
- Support respirations if needed

Severe Swallowing Difficulty

Subjective findings may include gagging, choking, inability to swallow medications or food, anxiety, restlessness.

Evaluate

- Airway patency
- Pooled oral secretions or retained food
- Strength of cough
- Respiratory rate and effort
- Cardiac status
- Speech effort and quality

Physical examination may reveal drooling, weak cough, pooled secretions, retained food in the mouth, rattling sounds in the throat or chest, slurred or absent speech.

First Responder Management

- If actively choking, open mouth and remove any visible food particles.
- Perform Heimlich maneuver only if foreign body (food or other object) obstruction in airway is suspected.
- Keep airway open.
- Suction pooled oral secretions as needed.
- Keep a calm and peaceful atmosphere.

Clinical Manifestations of MG

- MG weakness occurs in specific muscles or muscle groups.
- MG weakness may fluctuate over time and during the course of the day.
- Individuals with MG are usually stronger in the morning.
- MG weakness increases after prolonged use of the affected muscles.
- MG symptoms may worsen with emotional upset, systemic illness, fever, surgery, menses, pregnancy, thyroid dysfunction and drugs affecting neurotransmission.

Crisis

Crisis occurs when the individual with MG is unable to breathe or swallow adequately. Myasthenic crisis may result from factors that exacerbate the weakness of the disorder. Cholinergic crisis may result from anticholinesterase overdosage. A commonly prescribed anticholinesterase drug is pryridostigmine (Mestinon).

General Treatment Guidelines

- Avoid lengthy questioning, as it may unduly fatigue the individual with MG.
- Administration of narcotics may worsen symptoms of MG and further compromise breathing.

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