What is Miller Fisher Syndrome (MFS)?

Miller Fisher Syndrome (MFS), also called Fisher's syndrome, usually begins with the rapid development, over days, of 3 problems:

- weak eye muscles, with double or blurred vision, and often drooping eyelids with facial weakness;
- **2.** poor balance and coordination with sloppy or clumsy walking; and
- **3.** on physical examination, loss of deep tendon reflexes, such as the knee and ankle jerk.

MFS is named after Dr. C. Miller Fisher who described it in 1956 as a limited variant of ascending paralysis, Guillain-Barré Syndrome (GBS).

MISSION STATEMENT

We improve the quality of life for individuals and families affected by GBS, CIDP and related conditions. Our unwavering commitment to the patients we serve is built on four pillars: support, education, research, advocacy.

- We support patients by nurturing a global network of volunteers, healthcare professionals, researchers and industry partners to provide them with critical, timely, and accurate information.
- We **educate** doctors, clinicians, patients and caregivers to increase awareness and understanding;
- We fund **research** through grants, establishing fellowships and other appropriate avenues to identify the causes of and discover treatments;
- We **advocate** at the federal, state, and grassroots levels to educate policymakers and help them make informed decisions that benefit our patient community.

MORE INFORMATION

GBS|CIDP Foundation International

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Non-profit 501(c)(3)



MFS Miller Fisher Syndrome

SUPPORT EDUCATION RESEARCH ADVOCACY SUPPORT EDUCATION RESEARCH ADV

Working for a future where every person affected by GBS, CIDP, MMN or a related variant, will have access to early and accurate diagnosis, appropriate treatment and knowledgeable support services.

HOW IS MILLER FISHER SYNDROME DIAGNOSED?

Patients typically seek medical attention because of a rapid decrease in vision over days and/or difficulty walking. These changes are frequently preceded by a viral or diarrheal illness 1 to 4 weeks earlier. Slurred speech, difficulty swallowing and abnormal facial expression with inability to smile or whistle may also occur. Examination shows poor balance and coordination of the hands as well as loss of deep tendon reflexes and eye muscle weakness. Facial weakness, enlarged or dilated pupils and a decreased gag reflex on stimulation of the throat can be present in some patients. Tests of nerve conduction may show diminished activity of nerves that carry sensory information to the spinal cord and brain.

Magnetic resonance (MRI) or other imaging of the brain and/or spinal cord are usually normal. Spinal fluid protein is often elevated.

Pure Miller Fisher syndrome is uncommon, with many patients going on to develop the prominent widespread weakness of GBS.

HOW IS MILLER FISHER SYNDROME TREATED?

Fortunately, this disorder is often short lived, progressing for only a few weeks and then improving. MFS symptoms can signal the beginning of GBS, with breathing difficulties, so patients are often hospitalized for observation. In pure MFS, a near full recovery typically occurs within 2-3 months. In rare cases when symptoms substantially impair function, various treatments that limit or neutralize immune system activity may be considered. These include high dose immune globulins or plasma exchange.

WHAT CAUSES MILLER FISHER SYNDROME?

The cause(s) of Miller Fisher Syndrome is not completely understood. The waddling, duck-like gait is likely due to the loss of a fat rich insulating material called myelin around nerves, designated as 1A, that innervate the major sensory organ

of muscle called the muscle spindle. These fibers send information to the spinal cord about the speed and extent of muscle stretch without which skeletal muscles can not properly function. As the clinical course progresses, other sensory fibers can be involved as well as motor and autonomic fibers that respectively innervate muscles that move the eyes and face and control function of the eye, pupil and the bladder.

Multiple lines of evidence support an auto-immune mechanism in which the preceding/triggering infection stimulates production of an antibody that reacts to a sugar found on both the surface of infectious organism and the peripheral nerve causing demyelination and loss of function of the nerve.

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Working for a future when no one afflicted with Guillain-Barré syndrome (GBS), chronic inflammatory demyelinating polyneuropathy (CIDP) or variants suffers alone and every patient has a full recovery.

NEED HELP?

If you have GBS, CIDP or a variant such as MFS, or know someone who does and would like assistance or information, contact the Foundation. If you would like to form a local support group chapter or learn of local physicians who are familiar with GBS, CIDP and MFS, contact us. If you are a health care professional and would like our literature or emotional support for your patients, feel free to contact us. We are here to serve you.

SERVICES AVAILABLE

- Centers of Excellence
- Visits to patients by recovered persons
- Comprehensive information booklets for all stages of GBS/CIDP and variants such as MFS
- Patient assistance by local and worldwide chapters
- Social Media channels to connect
- Physicians referrals experienced in GBS
- Quarterly newsletters
- Research funding
- Patient advocacy & ways to get involved
- International educational symposia for the medical community and general public
- Online Resources. Visit our web site: www.gbs-cidp.org

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