

About Acute Flaccid Myelitis

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Acute flaccid myelitis (AFM) is a condition that affects the nervous system, specifically the spinal cord, which can result from a variety of causes including viral infections.

Symptoms

Most patients will have sudden onset of limb weakness and loss of muscle tone and reflexes. Some patients, in addition to the limb weakness, will experience:

- facial droop/weakness,
- difficulty moving the eyes,
- drooping eyelids, or
- difficulty with swallowing or slurred speech.

Numbness or tingling is rare in patients with AFM, though some patients have pain in their arms or legs. Some patients with AFM may be unable to pass urine. The most severe symptom of AFM is respiratory failure that can happen when the muscles involved with breathing become weak. This can require urgent ventilator support (breathing machines).

Diagnosis

A doctor can tell the difference between AFM and other diseases with a careful examination of the nervous system, looking at the location of the weakness, muscle tone, and reflexes, to help differentiate such patients from patients with other forms of acute flaccid paralysis (AFP). Magnetic resonance imaging (MRI) can be very helpful in diagnosing cases of AFM.

Testing nerve response can also be helpful in supporting a diagnosis of AFM; it is important that the tests are performed at the appropriate time (e.g., 7-10 days after onset of weakness) to be helpful. Finally, by testing the cerebrospinal fluid (CSF, the fluid bathing the brain and spinal cord), clinicians can look for findings suggestive of AFM. All of these findings put together help a clinician make a diagnosis of AFM.

Germs Associated with AFM

Acute flaccid myelitis can be caused by a variety of germs, including several viruses:

- enteroviruses (polio and non-polio),
- <u>West Nile virus</u> (WNV) and viruses in the same family as WNV, specifically Japanese encephalitis virus and Saint Louis encephalitis virus,
- herpesviruses, such as cytomegalovirus and Epstein-Barr virus, and
- adenoviruses.

AFM is one of a number of conditions that can result in neurologic illness with limb weakness. Such illnesses can result from a variety of causes, including viral infections, environmental toxins, genetic disorders, and Guillain-Barre syndrome, a neurologic disorder caused by an abnormal immune response that attacks the body's nerves. Oftentimes, however, despite extensive laboratory testing, a cause for AFM is unable to be identified.

Treatment

There is no specific treatment for acute flaccid myelitis, but a doctor who specializes in treating brain and spinal cord illnesses (neurologist) may recommend certain interventions on a case-by-case basis.

If you or your child is having problems walking or standing, or develop sudden weakness in an arm or leg, you should contact a doctor right away.

Prevention

Being up to date on all recommended vaccinations, including <u>poliovirus</u>, is one way to protect yourself and your family from a disease that can cause acute flaccid myelitis. Check with your doctor to make sure your family is up to date on all recommended vaccines.

You can protect yourself from mosquito-borne viruses such as <u>West Nile virus</u>—another known cause of acute flaccid myelitis— by using mosquito repellent and staying indoors at dusk and dawn, which is the prime period that mosquitoes bite. Removal of standing or stagnant water from nearby property to minimize the number of mosquitoes is also recommended.

You can help protect yourselves from other known causes of acute flaccid myelitis by -

- washing your hands often with soap and water,
- avoiding close contact with sick people, and
- cleaning surfaces with a disinfectant, especially those that a sick person has touched.

<u>Washing your hands</u> the right way is one of the best things you and your children can do to protect against getting sick. Wash your hands

- before you touch food;
- after going to the bathroom, blowing your nose, changing a baby's diaper, or touching an animal, an animal's food, urine or feces; and
- before and after taking care of a sick person or a cut or wound.

Page last reviewed: January 22, 2016

Page last updated: January 22, 2016

Content source: National Center for Immunization and Respiratory Diseases (http://www.cdc.gov/ncird/), Division of Viral Diseases (http://www.cdc.gov/ncird/DVD.html)