



Acute Flaccid Myelitis (AFM)

Disease Fact Sheet

What is Acute Flaccid Myelitis (AFM)?

Acute Flaccid Myelitis, also known as “acute flaccid paralysis with anterior myelitis” or “polio-like syndrome” is a rare condition that affects the nervous system, specifically the spinal cord. It is known for causing a rapid onset of limb (arm or leg) weakness and loss of muscle tone and reflexes. It may also cause facial droop or weakness, trouble moving the eyes, droopy eyelids, trouble swallowing or slurred speech. In rare cases, respiratory failure can occur if muscles involved in breathing are involved.

What causes Acute Flaccid Myelitis (AFM)?

AFM is most commonly caused by viruses such as enteroviruses (polio and non-polio) and flaviviruses such as West Nile virus (WNV), Japanese encephalitis virus or St. Louis encephalitis virus. Other viruses such as herpesviruses (e.g. cytomegalovirus, Epstein-Barr virus) and adenoviruses may also cause AFM.

In 2014, an unusually large number of AFM cases were reported in children nationwide. A total of 120 cases of AFM were identified in 34 states between August and December. Most of the children were hospitalized. Despite extensive testing and investigation, no single organism was found in a majority of patients. The specific cause of AFM in the cluster is still under investigation.

How does a person get Acute Flaccid Myelitis (AFM)?

The most common viruses that cause AFM are carried by mosquitos or are present in the environment, especially in the summer and fall. While AFM is one type of condition that can cause illness with limb weakness, genetic disorders, environmental toxins and Guillain-Barré syndrome can also cause similar illness. Often, the cause of a person’s AFM is never identified, despite extensive testing.

How is Acute Flaccid Myelitis (AFM) diagnosed?

Diagnosing AFM is complex. Clinicians use many clues to differentiate between AFM and other paralyzing diseases. Careful examinations of the nervous system and the location of weakness, reflexes and muscle tone are performed. Magnetic resonance imaging (MRI) can find distinct abnormalities in the gray matter of the spinal cord. Testing of the cerebrospinal fluid (CSF, fluid around the brain and spinal cord) for viruses or other infectious agents and nerve conduction tests such as Electromyography (EMG) can also be performed.

How is Acute Flaccid Myelitis (AFM) treated?

There is no specific treatment for AFM. Neurologists (doctors that specialize in treating brain and spinal cord illnesses) may use different interventions, such as physical rehabilitation, depending on each individual patient. The severity, duration and outcome of AFM are different for each patient depending on the cause of the AFM.

Can Acute Flaccid Myelitis (AFM) be prevented?

Preventing AFM requires preventing the different infections that may cause AFM. Vaccines can help prevent certain infections that can cause AFM infections, such as poliovirus. Protecting yourself from mosquitos can also help prevent AFM causing infections such as West Nile Virus, Japanese and St. Louis encephalitis.

Enteroviruses are best prevented by frequent hand washing, avoiding people who are sick and cleaning surfaces that a sick person has touched.