

## Acute Flaccid Myelitis

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In the last several months an increase in the numbers of cases of acute flaccid myelitis (AFM) has been reported by the Centers for Disease Control and Prevention (CDC). This entity has been reported since 2014, the cases occur mostly in young children, and it has occurred in at least 29 states in 2018 (46 states since 2014). Most of the cases have presented between the months of August and October. This is a rare disease with an incidence of 1-2 cases per million children/year in the United States. This neurologic process usually starts as a mild febrile or respiratory illness followed by the appearance of neurologic symptoms, including sudden onset of upper and lower extremity weakness, loss of muscle tone or reflexes, ocular and facial muscular weakness, dysphagia, facial droop, urinary retention, constipation or fecal incontinence, etc. The deficits are mostly motor, but sensory deficits, such as numbness or tingling in upper or lower extremities may develop. Many etiologic causes have been proposed; AFM has been associated in the past with enteroviruses, such as poliovirus and enterovirus A71, and other viral etiologies like West Nile virus. The viral causality in confirmed cases has been heterogeneous; some authorities propose that the etiology must be multifactorial and that environmental factors need to be considered. None of the cases in the United States have tested positive for poliovirus; coxsackievirus A16, EV-A71, and EV-D68 have been isolated in cerebrospinal fluid (CSF) in 4 of 414 confirmed cases of AFM as of November, 2018.

The diagnosis is clinical with confirmation using magnetic resonance image (within 72 hours) of spinal lesions restricted to gray matter. The CSF may provide supportive evidence with increased white blood cell counts. There is no targeted treatment for AFM other than supportive care. The CDC does not recommend administration of corticosteroids, intravenous immunoglobulin, plasmapheresis, fluoxetine, antiviral medications, etc. The duration of symptoms is variable depending on the severity of presentation. There are no specific vaccines recommended to prevent all cases of AFM, and the CDC recommends standard hygiene measures, such as hand washing, the administration of poliovirus vaccine, and seasonal mosquito control to prevent West Nile virus cases.

**Keywords:** acute flaccid paralysis, children, seasonal illness

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### REFERENCES

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