Enteroviral encephalitis is much less common than enteroviral aseptic meningitis. Occasional highly inflammatory cases of enteroviral meningitis may be complicated by a mild form of encephalitis that is recognized on the basis of progressive lethargy, disorientation, and sometimes seizures. Less commonly, severe primary encephalitis may develop. An estimated 10–35% of cases of viral encephalitis are due to enteroviruses. Immunocompetent patients generally have a good prognosis.

Patients with hypogammaglobulinemia, agammaglobulinemia, or severe combined immunodeficiency may develop chronic meningitis or encephalitis; about half of these patients have a dermatomyositis-like syndrome, with peripheral edema, rash, and myositis. They may also have chronic hepatitis. Patients may develop neurologic disease while receiving immunoglobulin replacement therapy. Echoviruses (especially echovirus 11) are the most common pathogens in this situation.

Paralytic disease due to enteroviruses other than poliovirus occurs sporadically and is usually less severe than poliomyelitis. Most cases are due to enterovirus 70 or 71 or to coxsackievirus A7 or A9. Guillain-Barré syndrome is also associated with enterovirus infection. While earlier studies suggested a link between enteroviruses and chronic fatigue syndrome, most recent studies have not demonstrated such an association.

ACUTE FLACCID MYELITIS Patients with acute flaccid myelitis present with fever or respiratory symptoms and progress within hours to a few days to flaccid paralysis in one or more limbs. The disease is much more frequent in children. Less commonly, the disease can affect cranial nerves and respiratory or bulbar muscles. Like polio and some other enteroviruses, the disease affects the anterior horn cells in the spinal cord; gray matter changes can be seen on MRI of the spinal cord. The CSF shows a lymphocytic pleocytosis and often a mildly elevated protein. Cases of acute flaccid myelitis have occurred in late summer or early fall since 2012. Several studies have shown antibodies to enteroviruses in the CSF; antibodies to enterovirus D68 are most frequently detected. While enterovirus D68 has been detected in respiratory, stool, and nasopharyngeal samples