

Protein content	Elevated	Normal or slightly increased
Glucose content	Decreased	Normal
Gram stain; bacteria culture	Positive	Negative
Color	Turbid or cloudy	Clear or slightly cloudy
Opening pressure	Elevated	Normal

*Results may vary in the neonate.

Treatment is primarily symptomatic, such as acetaminophen for headache and muscle pain, maintenance of hydration, and positioning for comfort. Until a definitive diagnosis is made, antimicrobial agents may be administered and isolation enforced as a precaution against the possibility that the disease might be of bacterial origin. Nursing care is similar to the care of the child with bacterial meningitis. The clinical course of viral meningitis is much shorter and typically without any significant complications.

Encephalitis

Encephalitis can occur as a result of (1) direct invasion of the CNS by a virus or (2) post infectious involvement of the CNS after a viral disease. Often the specific type of encephalitis may not be identified. The cause of more than half of the cases reported in the United States is unknown. The majority of cases of known etiology are associated with the childhood diseases of measles, mumps, varicella, and rubella and, less often, with the enteroviruses, herpesviruses, and West Nile virus.

Herpes simplex encephalitis is an uncommon disease, but 30% of cases involve children. The initial clinical findings are nonspecific (fever, altered mental status), but most cases evolve to demonstrate focal neurologic signs and symptoms. Children may experience focal seizures. The CSF is abnormal in most cases. Because of a rise in the number of children with herpes simplex encephalitis, suspected cases require prompt attention, especially because the diagnosis can be difficult. CSF polymerase chain reaction (PCR) testing can confirm the clinical diagnosis rapidly. The early use of IV acyclovir reduces mortality and morbidity. Empiric therapy with acyclovir is given before precise virologic diagnosis has been established. The multiplicity of causes of viral encephalitis makes diagnosis difficult. Most are those involved with arthropod vectors (togaviruses and bunyaviruses) and those associated with