

VIRAL MENINGITIS

Clinical Description:

Viral meningitis is a relatively common but rarely serious syndrome with multiple viral etiologies. Viral meningitis is also called aseptic meningitis.



Source of Infection and Transmission:

- ◆ Humans and probably certain birds, mammals and reptiles are reservoirs.
- ◆ A wide variety of agents, many of which are associated with other diseases can be causative agents. Many viruses are capable of producing features of meningeal irritation.
- ◆ Half of all cases have no etiology demonstrated.
- ◆ In Canada, enteroviruses cause most cases of known etiology, particularly coxsackievirus and echovirus.
- ◆ In addition, arboviruses, measles, herpes simplex and varicella viruses, adenovirus and others are responsible for sporadic cases.
- ◆ Transmission depends on specific virus, but for enteroviruses, generally directly by fecal-oral or respiratory droplet contact with an infected person, or indirectly by contact with articles freshly soiled with feces or throat discharges from an infected person.

Incubation Period:

- ◆ Depends on the specific virus, but for enteroviruses often 3 to 5 days.

Symptoms:

- ◆ Sudden onset of fever, with headache, and other signs of meningeal involvement and abnormal CSF findings.
- ◆ A rash resembling rubella in some types caused by echoviruses and coxsackieviruses; vesicular and petechial rashes may also occur.
- ◆ Active illness seldom exceeds 10 days. Recovery is usually complete.
- ◆ GI and respiratory symptoms may be associated with infection with enteroviruses.

Major Complications:

- ◆ Residual signs lasting a year or more include weakness, muscle spasm, insomnia and personality changes.

Diagnosis and Treatment:

- ◆ Definitive diagnosis is made by laboratory study usually after infection has resolved.
- ◆ There are no specific medicines or antibiotics indicated for treatment.

Public Health Measures:

- ◆ Hand washing, droplet control.
- ◆ Typically higher incidence in young children. Contact Precaution if enteroviral for infants and young children.
- ◆ In outbreak situations, EHO/MHO will assist with investigation and education of public.

For details on
Contact Precaution,
see
NWT Infection Control
Manual

Public Education: (Key Messages)

- ◆ Educate the public on the need to reduce direct contact and exposure to droplet infection (e.g. thorough handwashing).

Reporting and Follow-Up:

- ◆ Any suspected cases are to be reported to the Office of the Chief Medical Health Officer (OCMHO) with 24 hours.
- ◆ Complete *Meningitis Investigation Form*.

Epidemiology:

Sporadic cases yearly, twice in the last fifteen years increased activity associated with echovirus.

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