Viral Meningitis

Epidemiology

Source: Human

Anatomical source:
Resp. excretions, stools

Transmission:
- Fecal-oral
- Direct or indirect contact with respiratory secretions
- Indirect: fomites

Incubation
3-6 days

Contagious
until symptoms cease

Clinical case definition
- Fever
- Headache
- Stiff neck
- Photophobia
- Fatigue
- Nausea
- Vomiting
- Lack of appetite
- CSF pleocytosis

Infants:
- Fever
- Irritability
- Poor eating
- Lethargy

Complications: Rare

Death: Rarely fatal

-Enteroviruses (85-95%),
-Also
Herpesvirus, varicella, measles, influenza, arbovirus

Most common in the summer & fall

400-700 hospitalizations /year

Exclusion recommended until symptoms are gone

Diagnosis

Enteroviruses: RNA viruses, 15 serotypes, including echovirus and coxsackievirus

Lab Diagnosis

- **Test spinal fluid to differentiate between viral meningitis and bacterial meningitis**
- Viral agents may be isolated in early stages from throat washings, stool, CSF, and blood by tissue culture techniques or animal inoculation. (time & resource consuming, limited clinical use)
- PCR & typing based on genomic sequences can detect enterovirus

Confirmed: Clinically compatible case with no laboratory evidence of bacterial or fungal meningitis; or a viral isolate from CSF or blood

Treatment

- No specific treatment is available.
- Bed rest, fluids, and medication to relieve fever & headache are recommended.

Contact precautions

Control

Contact precautions for 7 days after onset of illness

Preventive Measures
- Frequent and thorough handwashing (especially after changing diapers or using the bathroom)
- Disinfection of contaminated surfaces with diluted bleach solution
- Avoidance of shared utensils and drinking containers
- Cover cough with tissue or upper arm to avoid respiratory droplet spread

Immunization
- Available for measles, mumps, and chicken pox, which are rare but possible causes of viral meningitis

Report all cases