

Meningitis

Definition

An infection which causes inflammation of the membranes covering the brain and spinal cord. viral meningitis; bacterial meningitis

Causes, Incidence, and Risk Factors

- The most common causes of meningitis are bacterial infections that start in other parts of the body and spread to the brain or spinal cord via the bloodstream.
- Meningitis is also caused by viruses, chemical irritation, or tumours.

- Types include:
 - meningitis, cryptococcal
 - syphilitic aseptic meningitis
 - meningitis, H. influenza
 - meningitis; meningococcal
 - meningitis, pneumococcal
 - meningitis, staphylococcal
 - meningitis, tuberculous
 - aseptic meningitis
 - meningitis gram negative

- Acute bacterial meningitis is very serious and should be treated immediately to prevent permanent damage.
- Bacterial strains that cause meningitis include Streptococcus, Haemophilus influenzae, Staphylococcus, and Meningococcus.
- Common viral meningitis is milder and occurs more often than bacterial meningitis.

- It usually develops in the winter and affects people under 30.
- Incidence is highest during 1st month and remains high for the first yrs. of life.
- Seventy percent of the infections occur in children under the age of 5.
- Other types of viral meningitis are rare, but more serious

Prevention

- Haemophilus vaccine (HiB vaccine) in children will help prevent one type of meningitis.
- It is highly recommended that parents and close contacts of individuals with meningitis caused by certain bacterial strains take preventative measures to avoid infection themselves.

Symptoms

- fever
- headache, severe
- nausea and vomiting
- stiff neck
- photophobia
- mental status changes
- Rash

Additional symptoms that may be associated with this disease:

- speech impairment
- neck pain
- muscle pain
- hallucinations
- facial paralysis
- eye lid drooping
- drowsiness
- consciousness, decreased
- chills
- Tachypnea
- agitation
- positive Babinski's reflex
- fontanelles - bulging
- opisthotonos (o-pis-thot-o-nos)
- poor feeding
- irritability

Signs and Tests

- lumbar puncture
- CSF smear
- culture of CSF (cerebral spinal fluid)
- skull X-ray, sinuses X-ray, and chest X-ray
- head CT scan looking for abscess or deep swelling

Treatment

- Antibiotics will be prescribed for bacterial meningitis; the type will vary depending on the infecting organism.
- Antibiotics are ineffective in viral meningitis.
- Treatment of secondary symptoms including brain swelling, shock, and convulsions will require other medications and intravenous fluids.
- Hospitalization depending on the severity and the needed treatment.

Prognosis

- Early diagnosis and treatment of bacterial meningitis is essential to prevent permanent neurological damage.
- Viral meningitis is usually not serious, and symptoms should disappear within 2 weeks with no residual complications.

Complications

- hearing loss
- brain damage
- loss of vision
- deafness



