

Meningitis (spinal fever)

Overview:

- Inflammation of the membranes that surround the brain and spinal cord, and can infect anyone.
- Most Meningitis types transmitted by respiratory secretions.
- Early symptoms are flu-like, and intensify within a short period.
- There is no specific treatment for viruses, and treatment aims at strengthening the body with fluids.
- Taking the vaccine is one of the most important ways to prevent the disease.

Definition:

Spinal fever is an inflammation of the protective membranes surrounding the brain and spinal cord (meninges), where swelling caused by inflammation leads to symptoms such as headache, fever and stiff neck. It can affect anyone, but it is most common among young people from birth to adulthood, as well as the elderly .

Types of Meningitis :

- **Bacterial Meningitis** : The types of bacteria that affect people vary in every age group, and are infectious, dangerous and life-threatening.
- **Viral Meningitis** : More common than bacteria, and are most commonly spread in late summer and early autumn. They are infectious and usually mild and quick to heal.
- **Chronic Meningitis** : Spreads among people if its bacterial
- Other types Fungal Meningitis, parasitic Meningitis , chemical Meningitis

Other Names:

Spinal fever, Meningitis

Causes:

Transmission of bacteria (meningococcal bacteria, pneumococcus, Haemophilus influenzae B), viruses (enterovirus, mumps virus, or herpes simplex virus) to the body.

Modes of Transmission:

Most Meningitis types transmitted by respiratory secretions in the following ways:

- Sneezing.
- Cough.
- Kissing.
- Sharing cups, toothbrushes, cigarettes and other items.

Bacterial Meningitis : It is often transmitted from people carrying bacteria in the throat or nose, and is rarely transmitted from infected people.

Fungal Meningitis : Infection is acquired from the environment (e.g: Inhaling the pathogen from a place contaminated with remnants of birds, bats, etc.) and is not transmitted among people.

Parasitic Meningitis : Infection is acquired from the environment (e.g: Rodents such as mice and raccoons).

Risk factors:

- Not taking the vaccine.
- Age: Most cases of viral infection affect children under the age of 5 years, while bacterial infection is common at the age of 20 years and less.
- Pregnancy.
- Weak body immunity due to AIDS or diabetes, splenectomy and others.
- Living in a large group of people (such as: Collective housing or military bases) because the prevalence of infection increases in crowds.
- Traveling to epidemic areas such as the African meningitis belt countries.
- Contact with people with infectious types of this disease.

- Going for Hajj and Umrah and contact with pilgrims who may be infected or carriers of the disease.

Symptoms:

Initially, flu-like symptoms appear, worsening within several hours or days.

Symptoms in people over 2 years of age:

- Sudden fever
- Neck stiffness
- Severe headache with nausea and vomiting
- skin rashes.
- Convulsions.
- Difficulty concentrating.
- Fatigue and difficulty waking up.
- Sensitivity to light

Symptoms in babies less than two years of age:

- Fever
- Laziness and non responsiveness
- Swelling of the fontanel area.
- Stiffening of the child's body and neck.
- Rejecting feeding.
- Tantrums, rejecting being carried by others.
- Unusual tone when crying
- Convulsions.
- Skin rash in some types of spinal fever

Bacterial meningitis is an emergency that requires immediate medical attention.

When to see a doctor?

See your doctor immediately if you notice symptoms of spinal fever on the same person, family member or even coworkers. You may need to take a vaccine to prevent infection.

Complications:

If meningitis is not treated promptly, it can cause serious toxemia, resulting in permanent damage to the brain and nerves.

- Death.
- Hearing loss.
- Difficulty remembering and concentrating.
- Learning difficulties.
- Problems in walking and balance
- Epilepsy seizures
- Kidney problems

Diagnosis:

- Medical history.
- Clinical examination.
- Laboratory tests: Blood culture, examination of cerebrospinal fluid (lumbar puncture).
- CT scans.

Treatment:

It is important to know the type of cause of meningitis because the treatment varies depending on the cause:

- Treatment of viral meningitis: It can not be treated with antibiotics, but in most cases it goes away without medical interventions by resting, drinking fluids and using painkillers. Your doctor may prescribe NSAIDs to relieve

swelling of brain membranes, as well as prescribe antiepileptic drugs to control convulsions.

- Treatment of bacterial meningitis: Intravenous antibiotics and steroidal anti-inflammatory drugs. Medications vary depending on the bacteria causing the disease.

Your doctor may aspire fluids, and other treatments may include:

- IV fluids to avoid dehydration.
- Antivirals may be used (but their treatment depends on body resistance) and antifungals depending on the cause.

Prevention:

- Taking the vaccine for bacterial spinal fever.
- Washing hands thoroughly.
- Maintaining hygiene and not sharing cups, toothbrushes and others.
- Improving the body's immunity by practicing healthy behaviors such as healthy food and exercising.
- Covering the mouth and nose when sneezing
- Dispensing prophylactic treatment to those coming from infected areas or in contact with the infected.

Frequently Asked Questions:

- **Does meningitis vaccine hurt in the first weeks of pregnancy?**
The Ministry of Health recommends that the vaccine be given to pregnant women when going to endemic areas, Hajj or Umrah.
- **Is there a relationship between smoking and meningitis?**
There is no direct relationship between them, but smoking affects the lungs and Pneumonia can develop into spinal fever.

- **Is spinal fever transmitted by shaking hands with the infected person?**
Infection can be transmitted if the hand is contaminated with the patient's spray

Misconceptions:

- **Viral spinal fever is a simple type of disease.**
Fact: Although not life-threatening, they can cause permanent damage such as headaches and memory loss.
- **Spinal fever cannot be cured.**
Fact: There is no specific treatment for viruses, and treatment aims at strengthening the body with fluids.
- **Spinal fever affects newborns only .**
Fact: No, it could infect anyone.
- **Children who had spinal fever are not advised to take the vaccine.**
Fact: wrong, for many reasons:
 1. There are many types and causes of meningitis, there are multiple vaccines as well (including three types in the vaccination schedule in the Kingdom). Having one type does not prevent infection of the other type.
 2. The same type of infection can occur again as there is no natural immunity (i.e, the natural immunity produced after the disease does not last a lifetime, as it disappears within a few years).

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