# Meningitis

August 2024 Education

# What is Meningitis?

- Meningitis is an inflammation of the membranes (meninges) surrounding your brain and spinal cord.
- The swelling from meningitis typically triggers symptoms such as headache, fever and a stiff neck.
- Most cases of meningitis in the United States are caused by viral infection, but bacterial, parasitic and fungal infections are other causes. Some causes of meningitis improve without treatment in a few weeks. Others can be life-threatening and require emergency antibiotic treatment.

# **Symptoms**

- Early meningitis symptoms may mimic the flu. Symptoms may develop over several hours or over a few days.
- The following are symptoms of meningitis:
  - Sudden high fever
  - Stiff neck
  - Severe headache that seems different than normal
  - Headache with nausea or vomiting
  - Confusion or difficulty concentrating
  - Seizures
  - Sleepiness or difficulty walking
  - Sensitivity to light
  - No appetite or thirst

### **Bacterial Meningitis**

- Bacteria that enters the bloodstream and travel to the brain and spinal cord cause acute bacterial meningitis. But it can also occur when bacteria directly invade the meninges. This may be caused by an ear or sinus infection, a skull fracture, or, rarely after some surgeries.
- Several strains of bacteria can cause acute bacterial meningitis, most commonly:
  - Streptococcus pneumoniae- this bacteria is the most common cause of bacterial meningitis in the United States. It more commonly causes pneumonia or ear or sinus infections. A vaccine can help prevent this infection
  - Neisseria meningitidis- These bacteria commonly cause an upper respiratory infection but can cause meningococcal meningitis when they enter the bloodstream. This is a highly contagious infection that affects mainly teenagers and adults.

### **Bacterial Meningitis Cont.**

- Bacterial meningitis
  - Haemophilus influenzae-type b bacterium was once the leading cause of meningitis

in children. But new vaccines have greatly reduced the number of cases with this type of meningitis.

 Listeria monocytogenes-these bacteria can be found in unpasteurized cheeses, hot dogs and lunch meats. Pregnant women, newborns, older adults and people with weakened immune systems are most susceptible. Listeria can cross the placental barrier, and infections in late pregnancy may be fatal to the baby.

# **Viral Meningitis**

• Viral meningitis is usually mild and often clears on its own. Most cases in the United States are caused by a group of viruses known as

enteroviruses, which are most common in late summer and early fall.

- Viruses such as herpes simplex virus, HIV, mumps, West Nile virus and
- others can cause viral meningitis.

## **Chronic Meningitis**

- Slow-growing organisms (such as fungi and Mycobacterium tuberculosis) that invade the membranes and fluid surrounding your brain cause
  - chronic meningitis.Chronic meningitis develops over two weeks or more.
  - The signs and symptoms of chronic meningitis-headaches, fever, vomiting
  - and mental cloudiness- are similar to those of acute meningitis.

## **Fungal Meningitis**

- Fungal meningitis is relatively uncommon and cause chronic meningitis. It may mimic acute bacterial meningitis. Fungal meningitis isn't contagious
  - from person to person. Cryptococcal meningitis is a common fungal form
  - of the disease that affects people with immune deficiencies, such as AIDS.
  - It is life threatening if not treated with antifungal medications.

#### **Risk Factors**

- **Skipping vaccinations.** Risk rises for anyone who hasn't completed the recommended childhood or adult vaccination schedule.
- Living in a community setting. College students living in dormitories, personnel on military bases, and children in boarding schools and child care facilities are at greater risk of meningococcal meningitis.
- **Pregnancy.** Pregnancy increases the risk of listeriosis- and infection caused by listeria bacteria, which may also cause meningitis.
- **Compromised immune system.** AIDS, alcoholism, diabetes, use of immunosuppressant drugs and other factors that affect your immune system also make you more susceptible to meningitis.

## **Complications**

- Meningitis complications can be severe. The longer you or your child has the disease without treatment, the greater the risk of seizures and permanent neurological damage including:
  - $\circ \quad \text{Hearing loss} \\$
  - Memory difficulty
  - Learning disabilities
  - Brain damage
  - Gait problems
  - Seizures
  - Kidney failure
  - Shock
  - Death

#### **Prevention**

- Common bacteria or viruses that can cause meningitis can spread through coughing, sneezing, kissing, or sharing eating utensils, a toothbrush or a cigarette.
- These steps can help prevent meningitis:
  - Wash your hands- handwashing is the #1 way to prevent the spread of infection
  - Practice good hygiene- don't share food, drinks, straws, lipstick or toothbrushes
  - Stay healthy- maintain your immune system by getting enough rest, exercising regularly, and eating a healthy diet with plenty of fresh fruits, vegetables, and whole grains
  - Cover your mouth-when you need to cough or sneeze, be sure to cover your mouth and nose

#### When to SEE a Doctor

- Seek immediate medical care if you or someone in your family has meningitis symptoms such as:
  - Fever
  - Sever, unrelenting headache
  - Confusion
  - Vomiting
  - Stiff neck
- Bacterial meningitis is serious, and can be fatal within days without prompt antibiotic treatment. Delayed treatment increases the risk of permanent brain damage or death.

#### When to Call the Office

- As a home health aide is is vital that you keep in good communication with the office. This ensures that our patients, staff, case managers, and physicians are aware of the patient's condition. You are the eyes and ears in the field.
- Some examples of when you should call the office are:
  - Falls or stumbles
  - Injuries
  - o Illness
  - Anything out of normal range per the patient's care plan
  - Domestic disputes
  - Missing items

#### When to Call the Office Cont.

• Remember any call offs need to be communicated to the office at least 2

hours prior to the start of your shift.

• The agency has a 24-hour on call phone that can be reached by calling any of our offices. If you get the voicemail leave a message and someone will return your call.