Cytomegalovirus (CMV) infection is a viral infection.

This infection is caused by cytomegalovirus (CMV). This virus occurs worldwide and humans are the only source of human CMV.

How CMV is spread

CMV infection can spread in different ways. The virus can be passed from person-to-person, usually through close contact with saliva, breast milk, urine or other body fluid, or through sexual contact with someone with the infection.

A person can have a primary infection (an infection with CMV for the first time), or a return of a previous CMV infection (reactivation), or may have another infection with a different strain (type) of the virus.

CMV can also be transmitted during blood transfusions and organ transplants.

Babies can also become infected during delivery and from breast milk, but these babies have few, if any, symptoms or complications from the infection.

Breastfeeding can therefore be encouraged as it offers many important benefits to mothers and babies.

Congenital CMV

Women who become infected with CMV while pregnant may pass the virus to their unborn child (congenital CMV).

If an unborn baby is infected with CMV, some of these babies may develop serious health problems such as hearing loss, developmental delay or learning problems. Infection with CMV during pregnancy may also lead to stillbirth or infant death.

Congenital CMV is the most common infective cause of congenital hearing loss.

Signs and symptoms

Infection in child and adults is usually without symptoms

Occasionally, symptoms similar to glandular fever can occur, such as:

- fever
- sore throat
- swollen glands
- abdominal pain
- jaundice (yellow skin and eyes).

CMV infection can result in severe disease for:

- babies
- people who receive solid organ transplants or bone marrow/stem cell transplants
- people with severe suppression such as advanced human immunodeficiency virus (HIV) infection.

Diagnosis

Diagnosis in infants is made by growing the virus, usually from urine, in a pathology laboratory.

Diagnosis in adults is more complicated and usually requires growing the virus or other tests in the laboratory.

Incubation period

(time between becoming infected and developing symptoms)

3 to 12 weeks
Cytomegalovirus (CMV) infection

Infectious period
(time during which an infected person can infect others)

The virus is often present for months in urine or saliva following infection in children and adults.

Infants and immune suppressed adults can shed the virus for months to years following infection or reactivation of infection.

Treatment

Antiviral medications may be used to treat those infected, including babies.

Prevention

> There is currently no effective vaccine to prevent CMV infection, including in pregnant women.
> Exclusion from childcare, preschool, school or work is not necessary.
> Pregnant women can reduce their risk of being infected with CMV if they:
  - Do not share food, drinks, or utensils used by children (under the age of 3 years)
  - Do not share a toothbrush with a young child
  - Do not put a child’s dummy/soother in their mouth
  - Avoid contact with saliva when kissing a child (“kiss on the forehead not on the lips”)
  - Thoroughly wash hands with soap and water for 15-20 seconds, especially after changing nappies or feeding a young child or wiping a young child’s nose or saliva
  - Clean toys, countertops and other surfaces that come into contact with children’s urine or saliva with a simple detergent and water.

Useful links

> Prevent CMV during pregnancy
> Hand hygiene
> Glandular fever
> Congenital CMV Association of Australia


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