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

How cytomegalovirus (CMV) infection is spread

The method of spread of the infection varies. Infants usually acquire the infection while in the uterus or during passage through the birth canal, but may also be infected through breastmilk. Young children are frequently infected by contaminated saliva when sucking and sharing toys. People with weakened immune systems may have a return of a previous infection with CMV (reactivation) or may be infected with a new strain of the virus. CMV can also be transmitted during blood transfusions and organ transplants, or through sexual contact.

In developed countries more than half the population carry CMV virus by the time they reach adulthood, though this figure is much higher in developing countries.

Signs and symptoms

Infection in children and adults is usually without symptoms. Occasionally, symptoms similar to glandular fever such as fever, sore throat, swollen glands, abdomen pain and jaundice (yellowing of the skin) can occur. In certain groups, infection can result in severe disease.

These groups are:

> Infants infected before, during, or shortly after birth. Infection of a baby before birth can result in serious congenital abnormalities, with the highest risk during the first half of pregnancy and in women who have not previously been infected. CMV infection occurs in 1% or less of pregnancies, and of these cases, less than 10% are likely to have severe illness.
> People who have had a transplant, either solid organ or bone marrow/stem cell.
> People with severe immune suppression such as advanced human immunodeficiency virus (HIV) infection.

Once someone has been infected with CMV, he or she is thought to remain infected for life, even though he or she usually won’t have any symptoms. People can become infected with a number of different strains of the virus. During periods of illness or stress, the virus can reactivate, and may or may not cause symptoms.

Diagnosis

Diagnosis in infants is made by growing the virus, usually from urine. Diagnosis in adults is more complicated and usually requires growing the virus, blood tests or PCR (polymerase chain reaction) tests in a pathology laboratory.

Incubation period

(time between becoming infected and developing symptoms)

3 to 12 weeks.
Cytomegalovirus (CMV)

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

The virus is often shed 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

Specific antiviral treatment is available for use in severe CMV infections.

Prevention

- Exclusion from childcare, preschool, school or work is not necessary
- Good hand washing after handling articles contaminated with urine or saliva, particularly after changing nappies
- During pregnancy, do not share food, drinks or utensils used by young children and avoid contact with saliva when kissing a child
- There is currently no vaccine available to prevent CMV infection.

Useful links

SA Health website – www.sahealth.sa.gov.au

- Hand hygiene
- Glandular fever

Communicable Disease Control Branch
Telephone: 1300 232 272  Email: HealthCommunicableDiseases@sa.gov.au

The SA Health Disclaimer for this resource is located at www.sahealth.sa.gov.au/youvegotwhat