



MUMPS

Cause/Epidemiology

Mumps is caused by the mumps virus, a member of the family Paramyxoviridae. Infections can be sub-clinical e.g. the characteristic signs and symptoms of the illness are not apparent. Most infections in children younger than 2 years of age are subclinical, however if contracted in adulthood, the disease is likely to produce a more severe disease. Deaths attributed to mumps are rare.

Persons with asymptomatic or non-classical infection can transmit the virus. No carrier state is known to exist.

Mumps is a vaccine-preventable disease.

Clinical Presentation

Mumps is an acute viral infection characterized by low-grade fever, myalgia, anorexia, malaise, and headache. As well, there is painful swelling of one or more of the salivary glands, usually the parotid and sometimes the sublingual or submandibular glands.

Prodromal symptoms are usually non-specific and may include low-grade fever, anorexia, malaise and headache. Generalized non-specific symptoms or primarily respiratory symptoms occur in about half of infected persons. Symptoms usually resolve three to ten days after onset of illness. Subclinical infection is common.

Sometimes mumps can be serious and cause swelling of the brain or its protective surface (encephalitis or meningitis) and temporary or permanent deafness.

Central nervous system (CNS) involvement (i.e., aseptic meningitis) is the most common extra-salivary gland manifestation of mumps. It can also cause swelling of the testes or ovaries, which may result in infertility on rare occasions.

Complications of acute Mumps include

- Orchitis in males is a common complication (15-25%) after puberty
- Sterility from orchitis is rare
- Oophoritis in females is about 5%

Rare complications of acute Mumps include

- Arthritis
- Pancreatitis
- Thyroiditis
- Nephritis
- Arthralgia
- Mastitis
- Glomerulonephritis



- Myocarditis
- Thrombocytopenia
- Deafness
- Increased risk of spontaneous abortion if infected during the 1st trimester of pregnancy

Incubation

The incubation period is usually 16 – 18 days (range 14 – 25 days).

Transmission

Mumps is spread by Droplet transmission, and by direct contact with saliva of an infected person (e.g., from coughing, sneezing, sharing drinks/utensils, kissing). All persons who have not had the disease or who have not been successfully immunized are susceptible. Immunity acquired after contracting the disease is usually permanent.

Virus can be isolated in saliva 7 days prior to the onset of parotid swelling to 5 days after. Viral excretion is highest 2 days before to 5 days after onset of parotitis.

Infection Prevention and Control Practices

Implement Droplet Precautions immediately for a resident with mumps. Refer to the Management of Communicable Diseases in Personal Care Homes Table for specific disease/microorganism information. Refer to Droplet Precautions in the Additional Precautions section 5.

Occupational Health

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

Definition of Occupational Exposure

A susceptible healthcare worker (one who has not had the disease or who has not been successfully immunized) who has had direct or droplet contact of the oral or nasal mucous membrane of an infectious person's saliva during the period of communicability

References

1. Additional Information for Physicians regarding Mumps. (January 25, 2012). Dr. Richard Rusk. Retrieved February 5, 2013.
2. Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (April 2012). Manitoba Health. Retrieved February 5, 2013.