Mumps

BY

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Mumps is is an acute disease of children and young adults, caused by a paramyxovirus in the same group as parainfluenza The virus has a single-stranded RNA genome.

Rapidly inactivated by chemical agents, heat, and ultraviolet light

Epidemiology

Parotitis and orchitis were described by Hippocrates in the 5th century BCE.

Viral etiology described by Johnson and Goodpasture in 1934

Before vaccine, one of the most common causes of aseptic meningitis and hearing loss among children and hospitalization among military

Occurrence

Mumps occurs worldwide, with 500,000 cases reported on average annually.

Reservoir

Human

Transmission

Mumps is spread through infectious respiratory droplet secretions and saliva.

Temporal pattern

Temporal pattern Peak in late winter and spring

Communicability

2 days before through 5 days after onset of parotitis

During adulthood, infection is likely to produce more sever disease including orchitis.

Death attributable to mumps is rare, the estimated case fatality rate is 3.8 per 10000. more than fatalities occur in people older than 19 years of age.

Mumps infection during the first trimester of pregnancy is associated with an increased risk of spontaneous abortion.

There is no evidence exists that mumps infection during pregnancy causes congenital malformations.

Clinical Features

Incubation period 14 - 18 days

The prodromal symptoms are nonspecific and include low-grade fever, headache, malaise, myalgias.

Typically presents as **parotitis** may be unilateral or bilateral, and swelling of any combination of single or multiple salivary glands may be present.

Up to 20% of infections asymptomatic

Mumps Complications

- Orchitis, oophoritis, mastitis, pancreatitis, hearing loss, meningitis, and encephalitis

- More common among adults than children

- Less likely in vaccinated persons compared to unvaccinated persons

- Meningitis, encephalitis, pancreatitis, and hearing loss 1% or less among infected persons in the postvaccine era

Treatment

Supportive care to relieve symptoms may include applying intermittent ice or heat to the affected neck area, and pain relievers. Warm salt water gargles, soft foods, and extra fluids may also help. Avoid fruit juice or acidic foods, since these stimulate the salivary glands, which can be painful

prevention

- Immunisation is the only effective method of prevention. Mumps vaccine is given in the form of the combined trivalent measles-mumps-rubella (MMR) vaccine.

- Mumps Vaccine composition Live virus and the efficacy 95% (Range, 90% - 97%). Duration of Immunity Lifelong.

- MMR is usually given on or after a child's first birthday. A second vaccination is recommended, again in combination with measles and rubella vaccine, at 4-6 years of age. Persons of any age who are unsure of their mumps disease history and/or mumps vaccination history should be vaccinated, especially if they are likely to be exposed.

- 9 out of 10 exposures that may have resulted in infection in 2 dose vaccinees prevented

- Children with mumps should not attend school, and adults should not work, until five days after swelling began or until they are well, whichever is longer. Measures such as covering coughs and sneezes, washing hands frequently, and not sharing food or eating utensils can also help. A person who may have had contact with a mumps case should be evaluated by their physician.

Adverse Reactions:

febrile seizures, nerve defness, meningitis, encephalitis, rash ,pruritis .orchitis and parotitis have been reported rarely.

Febrile illness: fever is not contraindication to immunization .

Contraindication

- Severe allergic reaction to vaccine component or following a prior dose

- Severe immunocompromise

- Systemic high-dose corticosteroid therapy for 14 days or more

- HIV infection, regardless of immunocompetence status

- Pregnancy: live – virus mumps vaccine can infect the placenta but the virus has not - been isolated from fetal tissue, However conception should be avoided for 28 days after mumps immunization.


THANK
YOU