
Mumps

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The word "mumps" probably derives from the British verb to "mump" which means "to grimace or grin". Thus the name of the disease likely refers to the marked parotid swelling which is the most common physical manifestation of infection with this virus. An outbreak of what was probably mumps or epidemic parotitis was described by Hippocrates in 5th century B.C. as an illness accompanied swelling near the ear and painful enlargement of the testes, either unilaterally or bilaterally. In fact modern virologic and serologic methods showed that mumps virus could cause illness without parotitis. During childhood, mumps is generally a self-limited febrile disease with manifestation that are frequently multisystemic. The disease is caused by a single strain of paramyxovirus mumps which is RNA virus and usually spherical and may also be pleomorphic, filamentous form. During recent years a number of studies have been reported on the protein composition of mumps virus. Like other paramyxoviruses mumps virus has been shown to contain two glycoprotein structures: the larger one and smaller one. There are many different strains of mumps virus and each strain has unique antigenic site. The virus produces hemolysis, hemagglutinin, complement fixing antigen and an antigen that elicits delayed hypersensitivity. Mumps infection are most common in childhood age group. Almost half of all children entering school had been infected with mumps. Infection is uncommon during the early months of life. This may be due in part to infrequent opportunities for exposure and to placental transfer of maternal antibody to the fetus. Infection is most common during the late winter and early spring months. Mumps virus infection is spread by respiratory route. Male and females are affected with equal frequency. Parotid swelling is usually bilateral, although one gland may begin swelling a day or two earlier than the other gland; therefore the progress of parotitis may be asynchronous. Mumps virus produces a generalised infection. Although emphasis has focused on parotid involvement, it is clear that mumps may occur in the absence of parotid swelling. Meningitis and renal involvement may be considered a part of the disease. It is unusual that mumps virus should be responsible for neonatal respiratory distress. For knowledge only one case has been described. One attack of mumps usually confers lifelong immunity. As regard to the immunity against mumps both, the humoral and cell mediated immunity are encountered. A patient with mumps rarely has severe systemic manifestation. Temperatures are only moderately elevated. The classic illness begins with fever, headache, and malaise, followed within 24 hours by pain localized near the lobe of the ear and aggravated by chewing movements, direct palpation. Anorexia is a common complaint. Central nervous system involvement is a common

manifestation, occurring in about 10 percent of cases. Sometimes patients will complain of photophobia. Signs of meningeal irritation also may be present. Evidence of encephalitis, such as convulsions or disturbances of mentation are less common. Among adults the second most common manifestation of mumps is orchitis which occurs in 20 to 35 percent of cases. It is rarely in children before the age of puberty. In females, an oophoritis infrequently occurs with signs and symptoms that may be indistinguishable from those of acute appendicitis. Some patients may complain of abdominal pain, this may represent involvement of the pancreas. Pancreatitis may occur in 1% of cases; either alone or associated with parotitis, the onset may be sudden with severe epigastric pain, fevers, chills, nausea and vomiting. Nephritis may also occur during the first 14 days after the onset of parotitis. Other rare manifestations include: Thyroiditis, mastitis, dacryoadenitis and Bartholin'sitis. Since mumps is a self-limited infectious disease and is unaffected by the use of antibiotics, treatment is symptomatic and supportive and usually includes analgesics such as aspirin, propoxyphene or codeine and parenteral fluids if anorexia and persistent vomiting occur. Mumps is a preventable disease by passive and active immunization. Passive immunization (mumps immune globulin) is a 16.5% solution of gamma-globulin fraction of blood from healthy adults who have had mumps. Active immunization is a mumps virus vaccine or, measles, mumps and rubella vaccine.