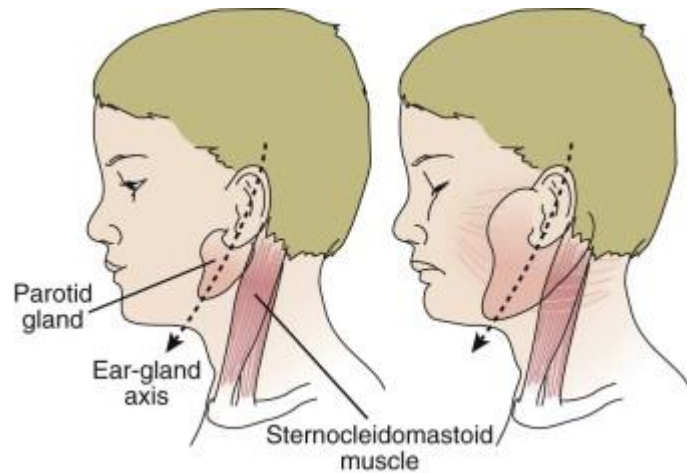


Mumps

Learning Objectives:

1. Define the Concept,
2. Identify the etiology
3. Describe the clinical presentation of mumps
4. Mention the differential diagnosis of mumps
5. Identify the complications of mumps
6. Clarify the prevention
7. Outline treatment

MUMPS



Schematic drawing of a parotid gland infected with mumps (*right*) compared with a normal gland (*left*). An imaginary line bisecting the long axis of the ear divides the parotid gland into 2 equal parts. These anatomic relationships are not altered in the enlarged gland. An enlarged cervical lymph node is usually posterior to the imaginary line
Nelson textbook 20th ed.



A child with mumps showing parotid swelling
Nelson textbook 20th ed.

Mumps virus is in the family Paramyxoviridae and the genus *Rubulavirus*. It is a single-stranded pleomorphic RNA virus encapsulated in a lipoprotein envelope & possessing 7 structural proteins

Mumps is an acute self-limited infection. It is characterized by fever, bilateral or unilateral parotid swelling & tenderness, & the frequent occurrence of meningoencephalitis and orchitis

Mumps virus targets the salivary glands, (CNS), pancreas, testes, & to a lesser extent, thyroid, ovaries, heart, kidneys, liver, & joint synovia

Clinical Features

IP 15-18 days

~30% asymptomatic

Or as simple URI

>50% have CSF pleocytosis, <10% have symptoms of meningitis

Orchitis in postpubertal, Sterility rare

Other rare complications (arthritis, thyroiditis, GN, pancreatitis, myocarditis, cerebellar ataxia, ECF, THROMBOCYTOPENIA, PERMANENT HEARING LOSS

Diagnosis

Hx&PE

Confirmation of the presence of parotitis could be made with demonstration of an ↑ serum amylase value.

isolation of the virus in cell culture,

detection of viral antigen by direct immunofluorescence, or identification of nucleic acid by RT-PCR .

Virus can be isolated from upper respiratory tract secretions, CSF, or urine during the acute illness.

Serologic testing is usually a more convenient and available mode of diagnosis

Treatment

No specific antiviral therapy is available for mumps.

Mx should be aimed at ↓ the pain associated with meningitis or orchitis & maintaining adequate hydration.

Antipyretics may be given for fever

Prevention

Immunization with the live mumps vaccine is the primary mode of prevention . It is given as part of the MMR 2-dose vaccine schedule, at 12-15 mo of age for the 1st dose & 4-6 yr of age for the 2nd dose. If not given at 4-6 yr, the 2nd dose should be given before children enter puberty. Antibody develops in 95% of vaccinees after 1 dose
Protection ~88% after 2 doses