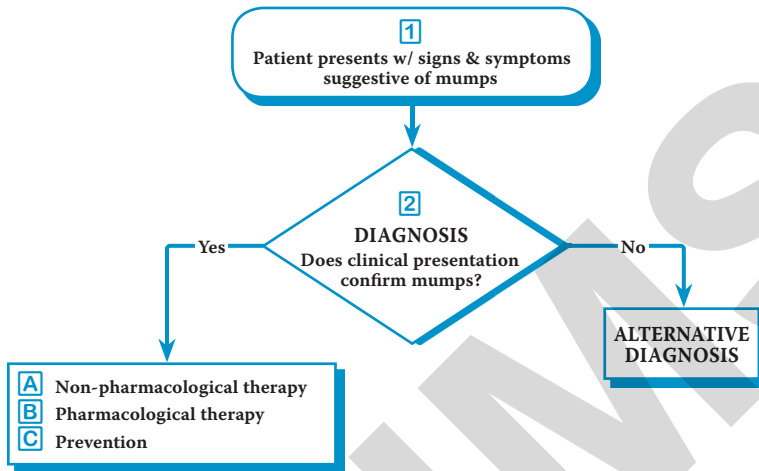


Mumps (1 of 3)



1 MUMPS

- A self-limited, viral disease that normally involves the parotid glands
- Commonly affects children aged 2-12 yrs, very uncommon in <1 yr of age

Etiology

- Pathogen belongs to the genus Rubulavirus, a single-stranded RNA virus classified under Paramyxoviridae family
- Transmission is through airborne droplets from resp secretion of infected persons
- Incubation period is typically 14-25 days
- Generally self-limited; symptoms usually resolve after 10 days

Signs & Symptoms

- Parotitis
 - May be unilateral, bilateral, combination of single or multiple salivary glands
 - Usually appears w/in 2 days after being infected, accompanied by earache & pain upon palpation of the jawline
 - May present initially as earache, pain on palpation of the jaw angle
- Constitutional symptoms include fever (often moderate to high grade), headache, myalgia, tiredness, loss of appetite

Complications

- Orchitis
- Deafness
- Meningitis
- Oophoritis
- Myocarditis
- Nephritis

1 DIAGNOSIS

- Diagnosis is based on clinical findings

History

- Mumps should be considered in patients presenting w/ parotitis of at least 2 days duration that cannot be attributed to other causes

Lab Exam

- Serologic test is the simplest method of confirming mumps infection
 - Enzyme immunoassay is the commonly used test
 - Presence of IgM antibody is diagnostic; usually detected during the 1st few days of illness & peaked a wk after the onset of illness
 - A fourfold rise in IgG antibody titer in acute- & convalescent-phase serum specimens is also diagnostic
 - IgG testing during the convalescent phase should be done 2 wk after collection of IgM levels
- Viral isolation is also confirmatory of mumps infection

A NON-PHARMACOLOGICAL THERAPY

- Bed rest: Hospitalization is needed for sever orchitis
- Warm or cold packs over inflamed parotid to relieve discomfort
- IV fluid administration for patients w/ persistent vomiting
- "Bridge" support & ice packs, in addition to analgesics, may help relieve orchitis if present
- Lumbar puncture may help relieve headache associated w/ meningitis, if present

B PHARMACOLOGICAL THERAPY

Analgesics & Antipyretics

- Eg Paracetamol, Ibuprofen
- May be given to relieve fever & discomfort

C PREVENTION

Parental Education

- Advise parents to isolate the patient from large-population facilities (eg daycare center) until 9 days after the swelling begins or until the swelling subsides
- Advise on good handwashing practices

Mumps Vaccine

- Available as a single-antigen preparation or combined w/ other vaccines [eg mumps & rubella (MMR), or also w/ varicella (MMRV)]
 - Single-antigen is not routinely recommended
 - Based on several studies, a single dose of MMR is 75-91% effective while vaccine effectiveness of 88% is seen w/ 2 doses
 - MMRV is approved for use in healthy children 1-12 yrs of age
- Single-antigen (MMR) is indicated for children ≥ 1 yr of age w/ low risk for mumps exposure
- Second-dose MMR is indicated for children 4-6 yr of age at high risk for mumps exposure
- Second dose should be given >1 mth after the 1st dose

*Not all products are available or approved for above use in all countries.
Specific prescribing information may be found in the latest MIMS.*

Dosage Guidelines

ANALGESICS (NON-OPIOID) & ANTIPYRETICS

Drug	Dosage	Remarks
Paracetamol (Acetaminophen)	10-15 mg/kg/dose PO 6 hrly Max dose: 60 mg/kg/day	Adverse Reactions <ul style="list-style-type: none"> Rare & usually mild; rarely hypersensitivity reactions Hematologic effects have been reported (thrombocytopenia, leucopenia, pancytopenia, agranulocytosis) Special Instructions <ul style="list-style-type: none"> Use w/ caution in patients w/ renal or hepatic dysfunction & in patients w/ alcohol dependence

NONSTEROIDAL ANTI-INFLAMMATORY DRUGS (NSAIDs)

Drug	Dosage	Remarks
Ibuprofen	6 mth-12 yr: 20-40 mg/kg/day PO divided 6-8 hrly Max dose: <30 kg: 500 mg/day	Adverse Reactions <ul style="list-style-type: none"> GI effects (GI discomfort, nausea, diarrhea, GI bleeding, GI ulcers); Hematological effects; Other effects (Reye's syndrome) Special Instructions <ul style="list-style-type: none"> To be administered w/ or after food, milk or anti-ulcer drugs to prevent GI effects Avoid in patients w/ peptic ulceration, hypersensitivity to Aspirin or any other NSAID including those in whom attacks of asthma, angioedema, urticaria or rhinitis have been precipitated by Aspirin or any other NSAID Use w/ caution in patients w/ hypertension, renal, hepatic or cardiac dysfunction

VACCINE

Drug	Dosage	Remarks
Live measles,- mumps & rubella virus vaccine ¹ [Measles, mumps, rubella (MMR), live vaccine]	0.5 mL/dose IM/SC 1st dose: 12 mth of age 2nd dose: 4-6 yr of age 2nd dose may be administered at least 4 wk since the 1st dose If the 2nd dose is not given, the schedule should be completed by 11-12 yr old visit	Adverse Reactions <ul style="list-style-type: none"> CNS effects (fever, seizures, headache, rarely Guillain-barré syndrome); Dermatologic effects (rash, urticaria); GI effects (diarrhea, N/V); Other effects (inj site reactions, joint symptoms, lymphadenopathy) May cause temporary suppression of tuberculin skin test sensitivity Special Instructions <ul style="list-style-type: none"> Administered into the anterolateral aspect of thigh or arm Contraindicated in patients w/ allergic reaction to neomycin, gelatin or any component of the formulation, in patients w/ known anaphylactoid reaction to eggs, w/ blood dyscrasias or malignant neoplasms affecting the bone marrow or lymphatic systems & those w/ primary & acquired immunodeficiency states Use w/ caution in patients w/ history of postvaccination thrombocytopenia, cerebral injury, seizures

¹Combination w/ Varicella vaccine is available. Please refer to the latest MIMS for specific prescribing information.

All dosage recommendations are for children w/ normal renal & hepatic function unless otherwise stated.

Not all products are available or approved for above use in all countries.

Products listed above may not be mentioned in the disease management chart but have been placed here based on indications listed in regional manufacturers' product information.

Specific prescribing information may be found in the latest MIMS.

Please see the end of this section for the reference list.