

Mumps

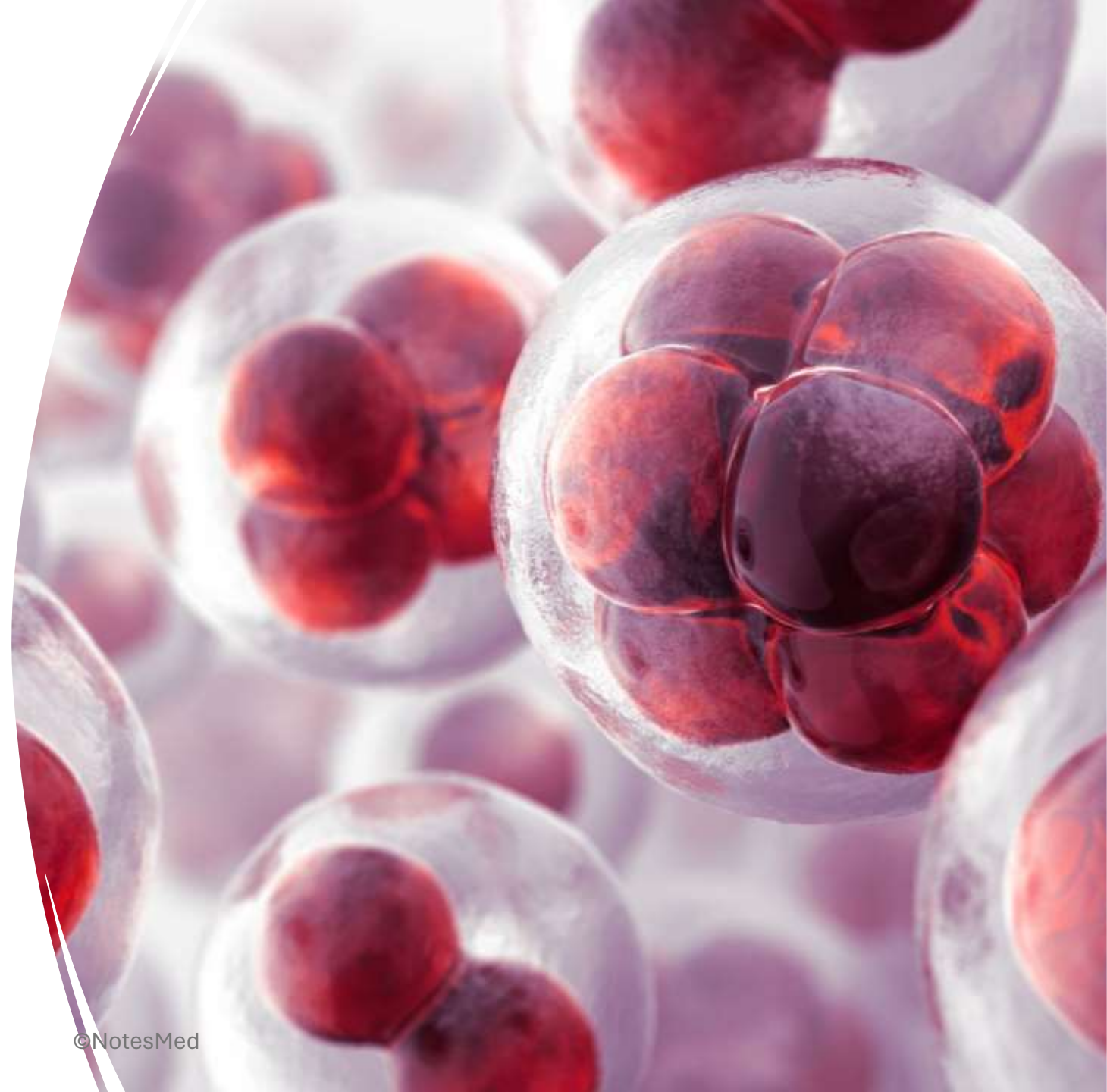
Mumps

- Painful enlargement of the salivary gland, mainly in the parotid gland
- Organism: Mumps virus, an RNA virus (genus Paramyxovirus in the family Paramyxoviridae)
- Transmission: Inhalation of airborne droplets.
- Incubation period: 2-4 weeks



Pathogenesis

- Entry of virus
- Virus replicates in the nasopharynx
- Spread to regional lymph nodes
- Finally the organisms spread through blood (viraemia) to different target tissues such as
 - Salivary gland
 - Testes and ovaries
 - Pancreas
 - Thyroid and meninges
 - Heart, Kidney, Liver and joint



Clinical features

Prodromal stage (1-2 days)

- Anorexia, fever, myalgia, malaise, headache, vomiting, sore throat and earache on chewing and swallowing

At the end of the prodromal stage:

- Painful swelling of the parotid gland
- Opening of Stensen duct may be red and oedematous

Diagnosis



Mainly clinical with

H/O contact with an affected patient, mainly from school

Characteristic of clinical features



Investigations

CBC

PBF: non-specific

Serum amylase: raised in both mumps parotitis and pancreatitis

Serum lipase: raised in pancreatitis but not in parotitis

ELISA for IgM

Culture: saliva, CSF, blood, urine

Complications

Orchitis or epididymo-orchitis

Testicular atrophy, but sterility is rare

Oophoritis in females

Aseptic meningitis/Meningoencephalitis

Myocarditis

Transient myelitis

Polyneuritis

Hearing loss

Others: pancreatitis, carditis, thyroiditis, arthralgia, arthritis, and nephritis

Treatment

Counsel the parents about the disease, its complications

Allow usual diet with intake of plenty of fluid

Paracetamol for fever and pain

Encourage maintenance of oral hygiene e.g. warm saline mouthwash, regular tooth brushing

For orchitis: Steroid helps in reducing pain and oedema, but it does not alter the clinical course of the disease or prevent future complications. Prednisolone (40 mg/day) may be used



Prevention

- MMR vaccination (2 doses):
 - 1st dose at 12-15 months of age
 - 2nd dose by 4-6 years of age

Differential diagnosis

Suppurative parotitis

Submandibular lymphadenitis

Recurrent juvenile parotitis

Stensen duct calculus

Cytomegalovirus, Coxsackie virus
parotidis



References

- Ghai Essential Pediatrics-10th edition
- Nelson Essential of Pediatrics

