THE PATHCARE NEWS

Mumps Virus Alert: South Africa 2023

Background

Mumps virus (MV), a single-stranded RNA virus of the Paramyxoviridae family, is highly contagious and is most commonly associated with parotitis. There has been a significant increase in the amount of mumps cases nationally in 2023. For patients presenting with swelling of the salivary glands, or presenting with one of the common complications of MV infection (with or without parotitis), clinicians are advised to consider MV infection, with appropriate laboratory testing where clinically indicated.

Epidemiology

- Worldwide occurrence with outbreak potential
- Possibility of outbreaks every 2-5 years
- Highly infectious; spread – droplet, direct contact, fomites
- Incubation period – 12-25 days
- Infectiousness period – ~7 days before to 8 days after parotitis onset. Most transmission occurs in the period just before and 5 days after parotitis onset
- Most often affects children 5-9 years old, although younger children, adolescents and adults can be infected
- Limited data in South Africa

Clinical Manifestations and Complications

- Prodrome of fever, headache, myalgia, fatigue, and anorexia
- Parotitis usually follows prodrome within 48 hours
- Parotitis may be unilateral or bilateral, lasting up to 10 days
  - Usually self-limited; most individuals recover completely within a few weeks
- Complications include (can occur in the absence of parotitis) meningitis, encephalitis, orchitis, oophoritis, pancreatitis, arthritis, myocarditis, interstitial nephritis, thyroiditis, hearing loss

Diagnosis

- Serology
  - IgM
    - Positive test usually indicates acute or recent infection/vaccination
    - False reactivity is possible; interpret all positive results in conjunction with clinical features
    - False negative results are possible (can be negative up to 5 days after symptom onset); interpret negative results in conjunction with clinical features and repeat test 5-10 days after symptom onset if clinically indicated
  - IgG
    - Positive test could be due to current or past infection/vaccination
    - Interpret in conjunction with IgM test
- Molecular
  - PCR of buccal swab
  - Test as soon as possible after parotitis onset (ideally within 3 days and not after 8 days)
  - For meningitis/encephalitis → cerebrospinal fluid PCR

Differential diagnosis

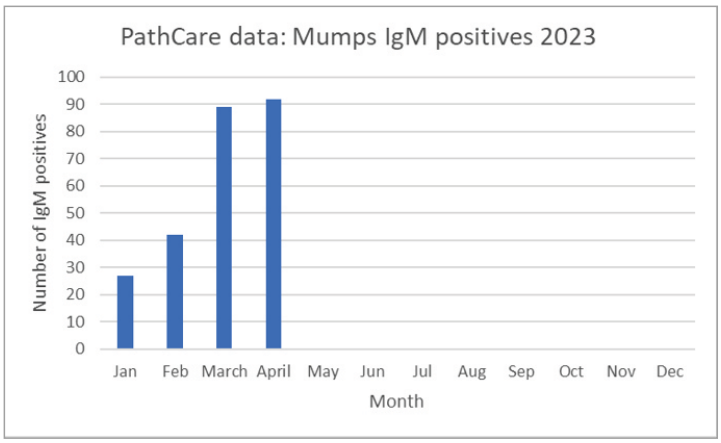
- Viral
  - Influenza A virus, parainfluenza, adenovirus, coxsackievirus, EBV, CMV, HSV, HIV
- Bacterial
  - Several with Staph aureus most common
- Non-infectious
  - Salivary gland stone
  - Salivary gland tumour
  - Sjögren's syndrome
  - Sarcoidosis

Treatment and Prevention

- Treatment supportive; no specific antiviral
- Vaccine (MMR)
- Health care setting droplet precautions
- No post-exposure prophylaxis

Mumps Alert 2023

- Increase in case numbers since November 2022
- PathCare data → more than 90 laboratory confirmed cases in April 2023 alone



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