MSHC
MELBOURNE SEXUAL HEALTH CENTRE

Monkeypox

Also known as MPX

Monkeypox (MPX) virus is an Orthopox virus closely related to the variola (smallpox) virus. Since May 2022 there has been a global outbreak of MPX mainly among men who have sex with men.-

Causes

Monkeypox (MPX) virus is an Orthopox virus closely related to the variola (smallpox) virus. MPX cases previously had been largely confined to endemic areas of Central and West Africa.
Since May 2022 there has been a global outbreak of MPX across non-endemic regions, mainly among men who have sex with men (MSM). MPX requires isolation of cases and notification of close contacts to prevent onward transmission. The World Health Organization has declared the MPX outbreak a global health emergency. Studies have shown that among MSM oral and anal shedding is common, as is detection in semen.

Clinical presentation

The incubation period is 5–21 days, median 7 days. MPX illness may begin with a prodrome of swollen lymph nodes, fever, headache, muscle aches, joint pain and back pain, followed by a rash within 1–3 days after fever onset. Among MSM the rash is disseminated and can concentrate on the following areas: genital, perianal/rectal and oral/perioral. The illness may also present without prodromal symptoms.-

The evolution of skin lesions progress through four stages: macular, papular, vesicular, and pustular, before scabbing over, taking up to four weeks to resolve, from prodrome onset, but averages 10 days (interquartile range: 7 - 13 days).-

MPX is usually self-limiting, and most people recover within a few weeks; however, complications can occur.

Complications

Complications are common (10 -13%) and if severe may require hospitalisation:

- Painful ulceration from coalescing lesions: may involve genital, anal and oral areas
- Cellulitis from bacterial superinfection
- Proctitis with rectal ulcers. There may or may not be perianal lesions
- Pneumonia
- Encephalitis
- Abscesses
- Prostatitis
- Sepsis
- Penile oedema with paraphimosis or phimosis

The risk of severe disease and complications such as secondary infection, sepsis, pneumonia and encephalitis is increased in people who are immunocompromised, young children and pregnant women.

Indication for hospitalisation

Indications for hospital admission include:

- Systemic complications
- Severe pain (oral, genital or anorectal) not controlled with oral analgesia
- Extensive lesions-
- Proctitis with severe pain preventing defaecation or bleeding.
- Bacterial superinfection with cellulitis needing intravenous antibiotics.
- Abscess formation

Diagnosis

A swab should be taken from skin or mucosal lesions. If there is a vesicle or pustule this should be carefully deroofed and the swab taken from the base of the ulcer.-

Lesions may be present at the following locations:

Skin: including face and head, torso, limbs
Oral: oral mucosa including tonsils and tongue, lips, perioral skin
Anorectal: perianal, rectal mucosa
Genitals: penis, pubic area, scrotum

Lesions may join up to form ulcers which can be painful. They may be present at one or multiple anatomical locations.
Systemic symptoms may be present and increase suspicion for MPX. However, systemic symptoms may also be absent.
Men who have sex with men who have rectal pain (with or without discharge) should have an anal swab for MPX (in addition to anal swabs for gonorrhoea, chlamydia, herpes and syphilis PCR) even if there are no perianal lesions.

Management

Treatment

Perianal or genital ulcer pain:-
Mild cases: paracetamol, non-steroidal anti-inflammatoryies-
More severe: panadeine forte-
Lidocaine 2% gel – suitable for use on mucous membranes
Lidocaine 4% cream
Lidocaine 5% ointment

Proctitis with rectal pain:-
Proctosedyl suppositories: can be used up to three times a day for up to 7 days.
Lactulose or other stool softener

Bacterial superinfection-
Oral flucloxacillin or cephalexin, or if genital or perianal Augmentin Duo Forte.-
Have a low threshold for prescribing oral antibiotics

Consider antihistamine for itching

Treatment with antiviral medication such as tecovirimat may be available for severe infection through hospitals.

Isolation and abstinence from sex

If MPX is suspected, advise the patient to isolate and avoid sexual and other contact until it is confirmed as not being MPX. Prevention of

further transmission is a high priority.-

In Victoria, Local Public Health Unit officers advise cases of MPX of isolation requirements.-

A person with MPX may be infectious from the onset of any symptoms until all scabs in exposed sites have fallen off, leaving intact skin underneath. In Victoria, they may leave isolation when the following criteria are all met:-

1. All symptoms (such as fevers, malaise, swollen lymph nodes) have resolved, and
2. There have been no new lesions for at least 48 hours, there are no mucous membrane lesions and all lesions in exposed areas have crusted, the scabs have fallen off, and an intact fresh layer of skin has formed underneath.

   Lesions on unexposed skin must also have crusted over, but if not fully healed (e.g., where a scab is still present) must continue to be covered at all times when in contact with other people.-

Individuals with MPX should be advised avoid sex for 8 weeks after recovery because of persistence in semen. -

MPX sexual contacts

In Victoria, Local Public Health Units will conduct contact tracing for monkeypox cases. Sexual contacts of MPX should be advised to monitor for symptoms for 21 days and seek medical review if they develop symptoms.-
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Prevention

Vaccination-

Two vaccines are available in Australia for prevention of MPX:-

- **JYNNEOS** (MVA-BN): Other brand names: -Imvamune and Imvanex.
- **ACAM2000**

JYNNEOS is a 3rd generation highly-attenuated vaccine that is replication-deficient and is preferred. JYNNEOS is administered in a 2-dose schedule by subcutaneous injection with a minimum dose interval between doses of 28 days. JYNNEOS is associated with fewer potential adverse events and is safe to use in people with immunocompromise or atopic dermatitis. JYNNEOS may also be used in children or during pregnancy, after risk-benefit assessment. Jynneos may be used pre-exposure, allowing 2 weeks until effective, or post-exposure to monkeypox up to 4 days after exposure.

ACAM2000 is a second generation, live-attenuated vaccine that is replication-competent. It is less preferred. Specialised training is required to administer ACAM2000 by scarification using a bifurcated needle, as a single dose. Post-vaccination wound care is required to protect vulnerable contacts and prevent self-inoculation from the vaccination site. ACAM2000 cannot be used in severely immunocompromised people, people with active atopic dermatitis, in pregnancy, in infants under 12 months of age. ACAM2000 is associated with rare but serious adverse events, including myocarditis and pericarditis.-
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Disclaimer

We recognise that gender identity is fluid. In our treatment guidelines, the words and language we use to describe genitals and gender are based on the sex assigned at birth.

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