

HSV-2, Monkeypox, or Both?

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INTRODUCTION

- More than 26,000 cases of human monkeypox virus (hMPXV) have been reported in the country.
- Evaluation and management of hMPXV remain challenging from a clinical and public health standpoint.
- Differential diagnosis of hMPXV includes several other infections that also present with rash.

CASE OVERVIEW

HPI:

33-year-old transgender woman presented with fever, neck pain, and headache with photophobia for one day. She endorsed unprotected anoreceptive intercourse ten days ago. Since then, she has had "anal fissures" and painful bowel movements.

PMHx:

- Transgender female on gender-affirming hormone therapy
- High risk sexual behavior on PrEP
- Chronic lumbar back pain s/p lumbar discectomy

Physical Exam:

T 38.9 C, BP 139/84, HR 112, RR 18, SpO2 97% on RA

- MSK: Nuchal rigidity
- NEURO: A&Ox4, no focal neurologic deficits
- SKIN: Multiple non-tender pinpoint vesicular papulopustular lesions in various stages of healing over both buttocks, two small tender perianal ulcers

Initial Work-up:

- BMP: Na 139, K 3.9, Cl 103, BUN 16, Cr 1.0, gluc 10
- CBC: **WBC 11**, Hgb 13.2, Plt 199
- CT head non-con: no acute intracranial processes

CLINICAL COURSE

HOSPITAL DAY 1

Empiric vancomycin, CTX, and dexamethasone
Contacted OHA ID, and Infection

Contacted OHA, ID, and Infection Control

HOSPITAL DAY 3

Near resolution of all symptoms Stopped antibiotics and steroids Transitioned to PO TPOXX

HOSPITAL DAY 6

Urinary symptoms improved PO TPOXX stopped Discharged with valacyclovir

HOSPITAL DAY 2

Fluoroscopic-guided lumbar puncture Started acyclovir and IV TPOXX Improvement of symptoms

HOSPITAL DAY 4-5

Acute urinary retention
Transitioned to PO valacyclovir

Additional Testing	Results
HIV AG-AB	Non-reactive
RPR	Non-reactive
G/C (rectal, urine, throat)	Negative
Blood culture	No growth
CSF	gluc 75, protein 107, RBC 260, WBC 640, 77% lymphocytes; no culture growth, (-) gram stain, HSV-2 (+), VDRL (-)
Perianal ulcer swab*	HSV-2 (+)
Buttock lesion swab*	Orthopoxvirus (-), HSV-2 (-)
*Resulted after discha	



hMPXV commonly presents as a new maculopapular rash that develops into vesicles and then pustules. Lesions can be firm and well-circumscribed with central umbilication. However, in this current outbreak, the presentation, pattern, and number of lesions have been highly variable. (*Image Source: CDC*)

DISCUSSION & TAKE-HOME POINTS

- The 2022 hMPXV outbreak is notable for high rates of infection among persons with multiple sexual partners, with distribution of lesions in the anogenital area.
- Skin lesions associated with hMPXV can vary in presentation and be confused with more common etiologies such as secondary syphilis, herpes, and varicella zoster.
- Clinical criteria for suspected hMPXV: characteristic rash **OR** "high clinical suspicion" **PLUS** epidemiologic criteria.
- Diagnosis and management of hMPXV requires a coordinated multidisciplinary approach involving:
 - Oregon Health Authority, Infectious Disease, and infection control
 - Laboratory, pharmacy, nutrition, medical center authorities, and research division
- IV and oral tecovirimat (TPOXX) are available for treatment of severe hMPXV through the CDC Emergency Access Investigational New Drug protocol. It is important to note that optimal absorption of the oral form requires concurrent intake of a high-fat meal.
- Complications of hMPXV including encephalitis are rare in adults.

REFERENCES

- 1. Del Rio, C., & Malani, P. N. (2022). Update on the monkeypox outbreak. *JAMA*, *328*(10), 921-922.
- 2. Gessain, A., Nakoune, E., & Yazdanpanah, Y. (2022). Monkeypox. *New England Journal of Medicine*.
- 3. Guarner, J., Del Rio, C., & Malani, P. N. (2022). Monkeypox in 2022—what clinicians need to know. *Jama*, *328*(2), 139-140.