Monkeypox: A Challenging Case and Overview

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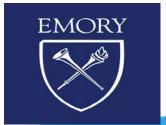




Patient information

- 33 y/o M with PMH HIV (last CD4 >200), anal condyloma and multiple STIs who presented to ED with rectal pain x 3 days, worse with BM, associated with b/l groin pain.
- Denied associated fevers/chills, rash, penile discharge, hematochezia

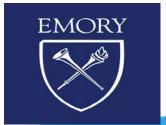




Social History

 Sexually active with men without consistent condom usage, including receptive anal intercourse

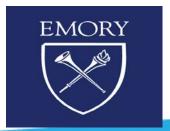




Medications

Biktarvy 1 tab PO daily





Physical Exam

Vitals: T 37.6, BP 138/92, HR 78, RR 19, SpO2 99%

General: alert, not ill appearing

HEENT: oral mucosa moist

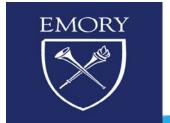
GU: No discharge or lesions

Rectal: + anal tenderness; prior condylomas that were removed noted w/scarring

Skin: warm, dry, no rash

Lymph: tender b/l inguinal lymphadenopathy

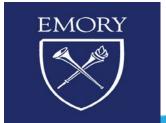




Initial Work-Up/Management

- CBC, CMP at baseline
- CT a/p: mild wall thickening of the rectum consistent with proctitis;
 enlarged inguinal lymph nodes
- RPR, gonorrhea/chlamydia rectal PCRs sent
- Empirically treated for GC/chlamydia (IM CTX, PO doxycycline)
- Discharged home





Subsequent Course

- Chlamydia PCR positive
- RPR positive 1:256 → called to return to ED for treatment 1 day later
- Seen in colorectal clinic 2 days later for persistent symptoms
 - No rash noted
 - Ulcers seen around the anus → concern for HSV





Two days later...

- Presented to different ED with persistent rectal pain + new pustular rash x1 day
 - Pustules/vesicles on face, back, extremities including feet, anorectal region
- Isolated/tested for MPX → DETECTED

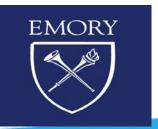




Monkeypox Background

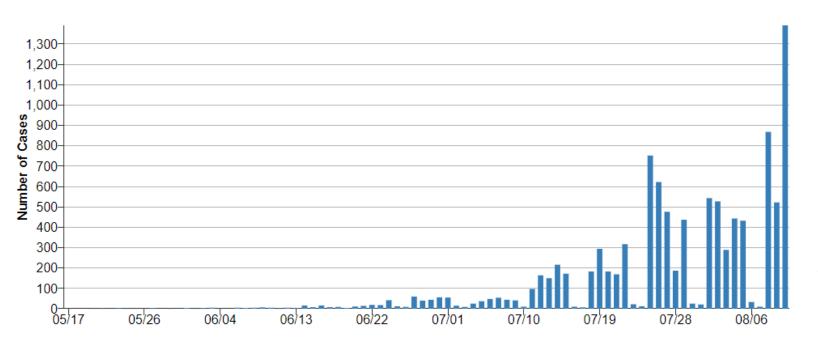
- Discovered in monkeys in 1958
- First diagnosed in humans in 1970 in Central Africa
- Sporadic outbreaks since 2003 outside of Africa, all with links to travel or imported animals
- Transmission:
 - Animal-to-human
 - Human-to-human: contact (direct > indirect) > droplets > ?aerosol
- Incubation period: 5-21 days





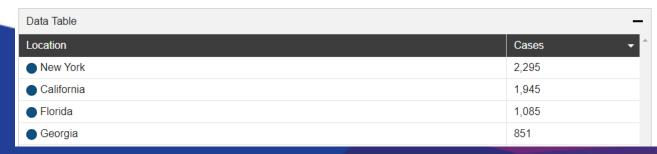
Monkeypox: Current Outbreak

U.S. Monkeypox Case Trends Reported to CDC

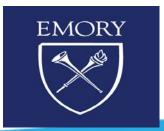


https://www.cdc.gov/poxvirus/monkeypox/response/2022/mpx-trends.html

Cases Reported in 2022

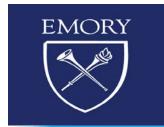






Monkeypox: Current Outbreak

- Varying clinical presentations
 - Prodrome common but not universal
 - Presenting symptom may be proctitis or pharyngitis
 - Rash: GU/rectal vs disseminated, sometimes multiple stages, not always following previously-described progression, often not "deep-seated"
- Local transmission
- Majority presenting to care MSM
- Majority do not need hospitalization, but symptoms can be debilitating















ORIGINAL ARTICLE

Monkeypox Virus Infection in Humans across 16 Countries — April–June 2022

J.P. Thornhill, S. Barkati, S. Walmsley, J. Rockstroh, A. Antinori, L.B. Harrison, R. Palich, A. Nori, I. Reeves, M.S. Habibi, V. Apea, C. Boesecke,
L. Vandekerckhove, M. Yakubovsky, E. Sendagorta, J.L. Blanco, E. Florence,
D. Moschese, F.M. Maltez, A. Goorhuis, V. Pourcher, P. Migaud, S. Noe,
C. Pintado, F. Maggi, A.-B.E. Hansen, C. Hoffmann, J.I. Lezama, C. Mussini,
A.M. Cattelan, K. Makofane, D. Tan, S. Nozza, J. Nemeth, M.B. Klein,
and C.M. Orkin, for the SHARE-net Clinical Group*

ABSTRACT

Table 3. Diagnosis and Clinical Characteristics of Monkeypox in the Case Series.*

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Reported clinical features — no. (%)	
Rash or skin lesions	500 (95)
Fever	330 (62)
Lymphadenopathy	295 (56)
Pharyngitis	113 (21)
Headache	145 (27)
Lethargy or exhaustion	216 (41)
Myalgia	165 (31)
Low mood	54 (10)
Proctitis or anorectal pain	75 (14)
Since Called Later and an application	
Site of skin lesions — no. (%)‡	
Anogenital area	383 (73)
Face	134 (25)
Trunk or limbs	292 (55)
Palms or soles	51 (10)
No. of skin lesions — no. (%)	
<5	207 (39)
5–10	131 (25)
11–20	112 (21)
>20	56 (11)
No lesions or missing data	22 (4)







Monkeypox: Epi Considerations

Standard precautions:

IV.B.2.	Gloves	
IV.B.2.a.	Wear gloves when it can be reasonably anticipated that contact with blood or other potentially infectious materials, mucous membranes, nonintact skin, or potentially contaminated intact skin (e.g., of a patient incontinent of stool or urine) could occur	IB/IC

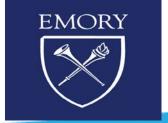
Monkeypox PUI:

Personal Protective Equipment (PPE)

PPE used by healthcare personnel who enter the patient's room should include:

- Gown
- Gloves
- Eye protection (i.e., goggles or a face shield that covers the front and sides of the face)
- NIOSH-approved particulate respirator equipped with N95 filters or higher





References

Adler H, Gould S, Hine P et al. Clinical features and management of human monkeypox: a retrospective observational study in the UK. *Lancet Infect Dis* 2022; 22:1153-62.

Huhn GD, Bauer AM, Yorita K, et al. Clinical Characteristics of Human Monkeypox, and Risk Factors for Severe Disease. *Clin Infec Dis* 2005;41:1742-51.

Thornhill JP, Barkati S, Walmsley S, et al. Monkeypox Virus Infection in Humans across 16 Counteries – April-June 2022.



