

Vulval Monkeypox, Atypical presentation: Co-infection with Herpes Simplex

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Introduction

Monkeypox virus (MPXV) is an endemic *Orthopoxvirus* (OPXV) in West and Central Africa. Until recently, most of the monkeypox cases have been reported in Africa and occasional exported infections have been linked to an animal vector or travel to endemic regions. Since May 2022, the ongoing human-to-human transmission outside of Africa has been responsible for the global outbreak. The MPXV was thought to be transmitted mainly through direct contact with skin lesions and respiratory droplets. Classical descriptions of monkeypox depict patients initially presenting with a fever and systemic symptoms followed by a rash, which was most commonly monomorphic with a centrifugal distribution. During the current outbreak, the potential sexual transmission was suggested by the initial presentation of genital ulcers, mostly in men who have sex with men, where sexual contact occurred before the systemic illness. Until now, >99% of patients infected are men and clinical cases of infected women are still very rare. In the current outbreak, lesions frequently begin and affect the genital, anal and oral areas. Recent research published in The New England Journal of Medicine suggests that the current case definition of monkeypox needs to be broadened to include genital lesions and sores on the mouth or anus as symptoms to prevent misdiagnoses. These symptoms are similar to those of sexually transmitted infections (STIs), leading to potential misdiagnosis.

Case presentation

We report the case of a 43 year old perimenopausal woman, with severe acute vulvar ulceration. She had a 4 day history of lower abdominal pain and itchy vulval lesions. There was a previous history of genital herpes simplex and she has recently been diagnosed with Diabetes Mellitus. 4 weeks prior to the onset of symptoms, she had visited a country with a Monkeypox outbreak. Intravenous antibiotics were started along with acyclovir, for suspected Pelvic Inflammatory Disease and possible Herpes flare up. The initial CRP was 98mg/DL and the White cell count was $6.4 \times 10^9/L$. The transvaginal scan was reported to be normal. Blood cultures were negative at 36 hours and the repeat C-Reactive Protein was 56mg/dL. Vulval biopsy showed a non-specific inflammatory process, with no evidence of lichen sclerosis, HPV associated changes, VIN or malignancy.

Disease progress

On day 4, a throat swab was sent, as well as a monkeypox swab considering the recent outbreak. The patient was isolated and her husband was also advised to isolate.

Over time, the erythematous vulval lesions became more swollen, ulcerated and began to bleed. A few days later, the patient's husband reported similar punctuated lesions on his limbs. On day 5, the patient developed more widespread pustules with surrounding erythema across her body. The pelvic pain got worse and the skin colour became purplish.

On day six of admission genital swab came back positive for Herpes Simplex Virus 1. On day seven of admission the result of the monkeypox swab was reported as positive.



Day 8



Day 8



Day 10

Conclusion

Common reasons for admission to the hospital were pain and bacterial superinfection. However, rare serious complications such as myocarditis and epiglottitis have been reported. Our case highlights that if monkeypox is suspected, especially in patients with a travel history to monkey-pox outbreak areas, an oropharyngeal swab should be performed even in the absence of cutaneous manifestations as the skin may be spared, but the oral, genital or rectal mucosa may be involved. Therefore, complete STI screening is recommended after a diagnosis of monkeypox. There are pieces of evidence suggesting that these individuals may still be contagious for several days after clinical remission. Consequently, healthcare professionals should encourage appropriate precautions, which is essential for the containment of this infection.

Management

Prevention- Timely updates to the general public are given via the media to educate on the symptoms and transmission of monkeypox and remind the public to practise strict personal hygiene. At-risk groups such as MSM are advised by WHO to temporarily reduce the number of sexual partners and to exchange contacts with new partners to facilitate contact tracing. Travellers to affected countries should additionally avoid contact with wild animals, and seek medical attention if new symptoms of fever, lymphadenopathy or rashes develop within 3 weeks of return from travel. General measure- Supportive management is the current standard of care. This includes wound care to prevent secondary skin infections, monitoring for systemic complications, and addressing any psychosocial impact in a sensitive manner.

Discussion

Monkeypox is a global health emergency. Prior to 2022, there were few report monkeypox outside of endemic countries, which were mostly travel-related. Since May 2022, an exponential increase in monkeypox infections in previously non-endemic countries has been reported. Unlike previous outbreaks of monkeypox, which were zoonotically transmitted and presented with generalised vesicular eruptions after prodromal symptoms, cases of the current outbreak feature significant travel and sexual history and atypical localised genital eruptions. Although research into vaccination and antiviral strategies is ongoing, monkeypox is currently conservatively managed. Clinical vigilance and a high index of suspicion are required to facilitate early detection and isolation of cases to contain transmission.

References

1. Newly Identified Clinical Symptoms of Monkeypox Similar to Common STI Symptoms. <https://www.pharmacytimes.com/view/newly-identified-clinical-symptoms-of-monkeypox-similar-to-common-sti-symptoms>
2. Monkeypox presenting with genital ulcers: a challenging clinical problem <https://www.mp.pl/paim/issue/article/16304/>
3. Monkeypox infection presenting as genital rash, Australia, May 2022 <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2022.27.22.2200411>
4. **Monkeypox:** Information for healthcare providers about monkeypox. <http://www.bccdc.ca/health-professionals/clinical-resources/monkeypox>