

CASE STUDY

Genital Mpox without Extra-Genital Lesions or Constitutional Symptoms in a Nigerian Male: A Case Report

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ABSTRACT

Human mpox is a re-emerging orthopox virus infection. We report a 36-year-old Nigerian male who presented with a one-week history of insidious onset ulcer at the base of the penis with no associated extra-genital rash or constitutional symptoms. He had unprotected heterosexual intercourse 14 days prior to the onset of the genital lesion, with a partner who had itchy vagina discharge. Physical examination revealed a solitary granulating ulcer measuring 3 cm by 2.5 cm with multiple satellite pustular lesions. No extra-genital lesion was observed. Polymerase chain reaction of the swab of lesions was positive for mpox. This was atypical mpox which should be considered by clinicians evaluating persons for sexually transmitted diseases.

Keywords: Genital, Mpox, Rash, Nigeria.

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1. INTRODUCTION

Human mpox (previously known as monkeypox) is a re-emerging orthopox virus infection that was first identified in humans in 1970 [1], [2]. The original name was derived from the fact that it was initially isolated in two outbreaks of pustular lesions in laboratory macaques in Denmark in 1958 [1]. It is a double-stranded DNA virus belonging to the poxviridae family [2]. Before the 2022 mpox outbreak, the disease was considered a zoonosis with transmission patterns of being endemic (in Central and West Africa) and then exported cases from endemic regions to non-endemic regions [2]. The clinical syndrome is predominantly characterised by fever, rash, and lymphadenopathy with frequently encountered complications being pneumonitis,

encephalitis, sight-threatening keratitis, and secondary skin infections [2]. According to the World Health Organization (WHO), the 2022 outbreak of mpox affected a majority of men who have sex with men (MSM) and bisexual populations [3]. This is a case report of mpox presenting as an isolated genital rash without extra-genital lesion or constitutional symptoms in a young male, highlighting the need for a high index of suspicion in unusual presentations to minimise missed diagnosis which may promote infection transmission.

2. CASE REPORT

A 36-year-old Nigerian male presented to the Federal Medical Center (FMC) Asaba, in southern Nigeria, with



a one-week history of genital ulcer. This was insidious in onset, first appearing as multiple solid rashes located at the base of his penis which progressed to fluid-filled rashes that subsequently ruptured and coalesced into a mildly painful ulcer. The rashes were itchy with no history of similar rashes on the face, limbs, palms, or soles of the feet. He also had no fever, headache, or other constitutional symptoms. There was no history of dysuria, frequency, urethral discharge, or symptoms and signs suggestive of complications of mpox. There was no history of contact with anyone with body or genital rashes in the preceding three weeks. He had unprotected sexual intercourse with a regular sexual partner who had symptoms of itchy vaginal discharge. There was no known history of genital or skin rashes in the index patient's partner. He neither had a history of prior contact with a sick or dead animal nor a history of ingestion of poorly cooked bush meat. The patient neither had a history of smallpox vaccination nor an obvious smallpox vaccination scar. He suffered chicken pox as a child and did not have any history of symptoms suggestive of sexually transmitted diseases in the preceding three months. There was no preceding history of trauma to the genitalia. He was not known to have diabetes mellitus. For the above complaint, he presented to the hospital outpatient department where an initial diagnosis of sexually transmitted infection (STI) was made, and he was subsequently started on empirical antibiotics (tab azithromycin 500 mg daily for one week) and a topical cream which he applied twice a day to the lesion (name not provided).

Following the lack of improvement after about a week on the prescribed treatment, he was referred to the Centre for Communicable Diseases Control and Research of FMC, Asaba for further evaluation. Further genital examination revealed a solitary, well-granulated, mildly tender ulcer at the base of the penis measuring 3 × 2.5 cm with multiple satellite pustules and associated tender inguinal lymphadenopathy (Fig. 1A). Other examination findings were normal. A clinical diagnosis of granuloma inguinale to rule out atypical herpetic ulcer was entertained. The possibility of genital mpox was considered in view of an ongoing mpox multi-country outbreak. Monkeypox virus polymerase chain reaction (PCR) testing using swab sample from the lesion was conducted at the National Reference Laboratory, Abuja which turned out positive. HIV 1 and 2 screening, HBsAg and Anti-HCV tests were non-reactive. In the absence of mpox-specific antiviral therapy, he was managed empirically for secondary bacterial skin infection using amoxicillin-clavulanic acid 625 mg 12 hourly, mupirocin ointment as well as tabs vitamin C 500 mg daily for one week. The genital lesions resolved completely by day 14 of presentation (21 days after onset of the symptoms, Fig. 1B). The patient was entirely managed as an outpatient and remained stable during a follow-up clinic visit.

3. DISCUSSION

Literature on the clinical manifestation of mpox has grown over the past two years with increased recognition of relatively uncommon presentations such as isolated genital rash without extra-genital rash/constitutional symptoms.

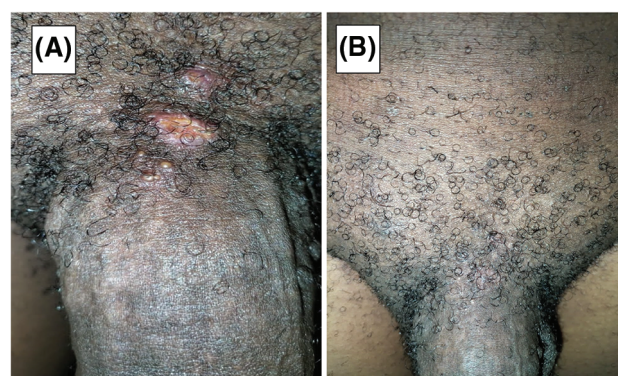


Fig. 1. Genital mpox lesion at the base of the penis in a 36-year-old Nigerian man: A) Lesion on presentation, B) Lesion after two weeks of supportive care.

The 2022 multi-country outbreak has opened up knowledge on the sociodemographic and clinical characteristics of mpox which revealed that it is found more in sexually active individuals especially MSM and bisexual populations [3]. Classically, mpox presents with fever and systemic symptoms followed by an umbilicated rash that is mostly monomorphic with centrifugal distribution (concentrating more on the face and distal extremities) [4].

Isolated genital rash without constitutional symptoms in our patient was a deviation from the conventional presentation of mpox. Similar cases of genital mpox have been reported in sexual and gender minority groups as well as in persons with heterosexual orientation [1], [3], [5]–[8]. Unlike our patient, most of the reported cases had constitutional symptoms including fever, headache, diarrhea, and myalgia [3], [5]–[8]. In agreement with our observation, a case of genital monkeypox without constitutional symptoms at presentation has been reported in Australia, however, the patient subsequently developed fever, and malaise with subsequent spread to other parts of the body [8]. The development of fever was thought to be a result of super-imposed bacterial infection of the genital rash resulting in cellulitis in the genital area which was not the case in our patient who was on primary prophylaxis against secondary bacterial infection using systemic and topical antibiotics [8]. Generally, the absence of preceding constitutional symptoms has been acknowledged by the World Health Organization (WHO) as one of the atypical presentations of monkeypox [9].

As was the case in our patient who had a history of unprotected sexual intercourse two weeks prior to the onset of the rash, all other patients reported with genital monkeypox had a history of sexual contact within one to three weeks of the onset of their genital rash [3], [5]–[8]. In contrast to our patient who was heterosexual, most of the reported cases were MSM, and bisexual populations [3], [6]–[8]. Despite the contrasting sexual orientation, the existing legislation against same-sex relationships in Nigeria could potentially impact the willingness of patients to disclose same-sex or bisexual relationships. That said, our case report further buttresses the potential role of sexual contact in mpox transmission.

4. CONCLUSION

In conclusion, mpox can manifest as an isolated genital rash without constitutional symptoms. Sexual activity was identified as the likely route of transmission. Our report provides additional data on atypical presentations of mpox, and the need for a heightened index of suspicion among clinicians. Finally, mpox should be strongly considered by clinicians in the differential diagnosis of STI.

CONFLICT OF INTEREST

Authors declare that they do not have any conflict of interest.

REFERENCES

- [1] Bunge EM, Hoet B, Chen L, Lienert F, Weidenthaler H, Baer LR, et al. The changing epidemiology of human monkeypox—a potential threat? A systematic review. *PLoS Negl Trop Dis*. 2022;16(2):e0010141. doi: 10.1371/journal.pntd.0010141.
- [2] Betancort-Plata C, Lopez-Delgado L, Jaen-Sanchez N, Tosco-Nunez T, Suarez-Hormiga L, Lavilla-Salgado C, et al. Monkey pox and HIV in the Canary Islands: a different pattern in a mobile population. *Trop Med Infect Dis*. 2022;7(10):318. doi: 10.3390/tropicalmed7100318.
- [3] Davido B, D'anglejan E, Jourdan J, Robinault A, Davido G. Monkeypox 2022 outbreak: cases with exclusive genital lesions. *J Travel Med*. 2022;29(6):taac077. doi: 10.1093/jtm/taac077.
- [4] Adler H, Gould S, Hine P, Snell LB, Wong W, Houlihan CF, et al. Clinical features and management of human monkeypox: a retrospective observational study in the UK. *Lancet Infect Dis*. 2022;22(8):1153–62.
- [5] Portela-Dias J, Sereno S, Falcao-Reis I, Rasteiro C. Monkeypox infection with localized genital lesion in women. *Am J Obstet Gynecol*. 2022;227(6):906. doi: 10.1016/j.ajog.2022.08.046.
- [6] Chakra AM, Duquesne I, Yassine AB, Hanna E, Delongchamps NB, Jida M, et al. Isolated monkeypox genital lesions. *Scand J Urol*. 2023;57(1–6):115–6. doi: 10.1080/21681805.2022.2138534.
- [7] Patrocinio-Jesus R, Peruzzi F. Monkeypox genital lesions. *N Eng J Med*. 2022;387(1):66. doi: 10.1056/NEJMicm2206893.
- [8] Hammerschlag Y, Macleod G, Papadakis G, Sanchez AA, Druce J, Taiaroa G, et al. Monkeypox infection presenting as genital rash, Australia, May 2022. *Euro Surveill*. 2022;27(22):2200411. doi: 10.2807/1560-7917.ES.2022.27.22.2200411.
- [9] World Health Organization. Disease outbreak news; multi-country monkeypox outbreak in non-endemic countries. 27 June, 2022. [cited 2022 June 27]. Available from: <https://www.who.int/emergencies/disease-outbreak-news/item/2022-DON396>.