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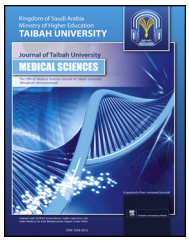

Letter to the Editor

First documented human case of mpox: Implications for global surveillance, public health and policy

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Dear Editor,

The first documented human infection with the mpox virus clade Ib in China represents a pivotal event for global zoonotic disease surveillance, emphasizing the need to reinforce public health strategies that monitor and curb the spread of high-risk viral pathogens.[1] Mpox, formerly known as monkeypox, has long been endemic to the African continent; however, the appearance of clade Ib in China signals an alarming geographic expansion of a variant linked to greater clinical severity and transmissibility. This emergence calls for immediate international collaboration to enhance epidemiological monitoring, diagnostic capacity, and cross-border policy preparedness.[1,2] The index case involved a 28-year-old South African woman residing in Zhejiang Province who had sexual contact with an asymptomatic male traveler from the Democratic Republic of Congo. Genomic sequencing performed on January 2, 2025, identified the strain as MPXV ZJ-JX-2025, a clade Ib virus showing high homology with sequences from the DRC. Although the patient recovered with supportive care, viral shedding from skin lesions, urine, and scabs persisted for up to 20 days, underscoring the challenges of containment.[3] Unlike typical clade IIb cases, which often present with genital lesions and predominantly affect men who have sex with men, this case lacked oral and genital lesions, indicating a broader transmission profile and highlighting the threat of silent transmission chains.[1,3] Virological investigations revealed high viral loads in skin lesions and scabs, while urine specimens remained persistently positive, contradicting assumptions that urine poses minimal risk. These findings support multisite sampling to improve diagnostic sensitivity and refine infection control measures in both healthcare and community settings[3] The detection of MPXV DNA in environmental samples linked to an asymptomatic carrier further exposes gaps in surveillance systems that focus only on symptomatic individuals and demonstrates the need for environmental and serological

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screening.[1,4] Chinese authorities responded promptly by isolating the patient, performing comprehensive contact tracing, and decontaminating affected environments, thereby modeling the best practices for outbreak containment.[3] Nevertheless, the presence of clade Ib in at least 12 countries outside Africa, including the United States, the United Kingdom, Sweden, and India, confirms its pandemic potential. The World Health Organization's designation of mpox as a Public Health Emergency of International Concern in August 2024 was appropriate; however, the global community must act more proactively.[5]

Renewed emphasis on genomic surveillance, especially at international ports of entry, is essential for the rapid identification of emerging variants. Public health agencies should update diagnostic protocols to reflect the evolving clinical and virological characteristics of clade Ib, and clinicians must maintain a high index of suspicion, even in atypical presentations. Vaccination strategies warrant reassessment to extend protection to groups at elevated risk owing to occupational exposure or sexual behavior.[6] Stronger international data-sharing platforms are also critical; timely access to epidemiological and genomic data through mechanisms such as the WHO, GISAID, and regional surveillance networks will underpin effective responses. In parallel, sustained investment in public health infrastructure and community engagement in low- and middle-income countries, where mpox is endemic, will help diminish the viral reservoir from which new variants arise.[7,8] The identification of the MPXV clade Ib in China is a sentinel event that illustrates how rapidly zoonotic threats can transcend borders. It should galvanize national and global health agencies to reinforce surveillance, broaden the diagnostic criteria, strengthen infection control, and prepare for the next phase of the mpox pandemic. Clade Ib's emergence is not a local anomaly; it is a global public-health challenge that demands coordinated, science-driven action.[9]

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