



Monkeypox Virus in Human Seminal Fluid Test

Anita Goel*

Department of Pathology, University of Freiburg, Germany

INTRODUCTION

The 1979 eradication of smallpox certified by the World Health Organization (WHO) resulted in the cessation of routine smallpox vaccination in most countries. It is estimated that more than 70% of the world's population is no longer protected against smallpox or by cross-immunity against closely related orthopoxvirus such as Monkeypox. During the COVID-19 pandemic, the fast spread of Monkeypox (MPX) cases in many nations throughout the world has aroused interest and worry about the illness globally. On 23 July 2022, the Director General of the WHO designated the MPX outbreak as a Public Health Emergency of International Concern.

The Monkeypox virus (MPXV) is a zoonotic virus that causes MPX. A double-stranded DNA virus known as MPXV belongs to the family Poxviridae genus Orthopoxvirus and is only found in a small number of endemic countries in Central and West Africa. In 1958, this virus was discovered in captive monkeys, and in 1970, it was discovered in a child in the Democratic Republic of the Congo. In addition, the virus has two variants: The Congo Basin clade and the West African clade.

DESCRIPTION

MPX has an initial prodromal phase with variable symptoms such as fever, lymphadenopathy, fatigue, and malaise. Most patients present with focal, more abundant, or more severe lesions in the genital, anorectal, and oropharyngeal regions, possibly reflecting high levels of virus exposure during sexual intercourse.

Most of the MPX cases detected during the 2022 outbreak were men who have sex with men (MSM) who engaged in high-risk sexual behavior. The MPXV transmission methods are developing quickly. Close sexual contact with one or more MPX lesions on the skin or mucosal surfaces (such as the oropharynx or anorectum) of a person with MPX has been shown to be the predominant mechanism of transmission in the present outbreak.

The temporal correlation between symptoms and sexual contact, as well as the co-occurrence of main lesion sites with those of sexual contact, are evidence that MPXV is transmitted through semen during sexual activity. According to a recent study, the vi-

ral DNA quantities in semen were lower than those found in skin lesions.

Diagnostic methods are crucial for infectious disease surveillance and management. There are currently accessible MPXV serological, sequencing, and nucleic acid amplification assays. Polymerase chain reaction (PCR) and sequencing are frequent MPXV diagnostic techniques. Skin lesion swabs, oropharyngeal swabs, anal swabs, urethral swabs, conjunctival swabs, and semen have all revealed the presence of MPXV.

Currently, the spread of MPXV continues to evolve, and as new scientific evidence becomes available, a better approach to this disease will be guided. Studies report that most cases of MPX are transmitted through sexual contact, so there is concern about the possible transmission of the virus between seminal fluids. The present study aims to identify MPXV in seminal fluid samples from MPX cases. More research is required on the identification of MPXV in seminal fluid, which will provide sufficient proof that this disease is spread through sex, as information on the transmission of MPXV is continually changing. The current investigation provides proof that MPXV was found in the seminal fluid of patients with verified MPX.

CONCLUSION

Although the present study's methodology included case report and case series investigations, which could lead to information heterogeneity, it meticulously adhered to the PRISMA standards. In addition, each included study was evaluated by two or more authors independently. The evidence reported serves as a basis for future research as more evidence on the identification of MPXV in seminal fluid is reported.

ACKNOWLEDGEMENT

None.

CONFLICT OF INTEREST

The author declares there is no conflict of interest in publishing this article.

Received:	29-March-2023	Manuscript No:	IPJIDT-23-16530
Editor assigned:	31-March-2023	PreQC No:	IPJIDT-23-16530 (PQ)
Reviewed:	14-April-2023	QC No:	IPJIDT-23-16530
Revised:	19-April-2023	Manuscript No:	IPJIDT-23-16530 (R)
Published:	26-April-2023	DOI:	10.36648/2472-1093-9.4.39

Corresponding author Anita Goel, Department of Pathology, University of Freiburg, Germany, E-mail: AnitaGoel555@yahoo.com

Citation Goel A (2023) Monkeypox Virus in Human Seminal Fluid Test. *J Infect Dis Treat.* 9:39.

Copyright © 2023 Goel A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

REFERENCES

1. Ogoina D, Iroezindu M, James HI, Oladokun R, Ogunleye YA, et al. (2020) Clinical course and outcome of human Monkeypox in Nigeria. *Clin Infect Dis* 71: e210-e214.
2. Huhn GD, Bauer AM, Yorita K, Graham MB, Sejvar J, et al. (2005) Clinical characteristics of human Monkeypox, and risk factors for severe disease. *Clin Infect Dis* 41: 1742-1751.
3. Sejvar JJ, Chowdary Y, Schomogyi M, Stevens J, Patel J, et al. (2004) Human Monkeypox infection: A family cluster in the midwestern United States. *J Infect Dis* 190: 1833-1840.
4. Adler H, Gould S, Hine P, Snell LB, Wong W, et al. (2022) Clinical features and management of human Monkeypox: A retrospective observational study in the UK. *Lancet Infect Dis* 22: 1153-1162.