MATHEWS

Editorial

Mathews Journal of Emergency Medicine

MonkeyPox and Recommendations for Cancer Patients

Farbod Amiri[1], Shehroze Tabassum[2], Melika Boroomand-Saboor[1], Laya Ohadi[1]*

[1]*School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran*

[2]*King Edward Medical University, Lahore, Pakistan*

During the world is still challenged by the COVID-19 pandemic, the resurgence of the monkeypox virus has elevated solicitude even if it would create a new threat.

The outbreak of the monkeypox virus in humans which can cause an uncommon zoonotic illness similar to a smallpox-like disease commenced in 1970 [1]. At present, whilst this is being written there are no specific medications for patients with a Monkeypox infection.

Most patients have mild disease and heal without therapeutic intervention, but antivirals or vaccinia immune globulin may be used for treating critically ill or immunocompromised individuals.

Prevention strategies can be attempted by following some precautionary measures which can easily be inculcated in one's daily routine. It includes avoiding any contact with primates and rodents as well as avoiding any undercooked food meat and limiting any direct exposure to blood [2]. Additionally, safe sexual practices like the use of protective barriers (eg: condoms) can be helpful in prevention as many cases have been reported in those having unprotected sexual practices and in men having sex with men [3]. Using personal protective equipment (PPE), wearing masks, and other precautionary measures as were taken during the COVID-19 pandemic can be of benefit in preventing the spread through person-to-person contact [4]. Vaccinations are another route of prevention, although smallpox vaccination protects almost 85% of individuals against monkeypox disease, routine immunization is not indicated due to smallpox eradication in 1980 [3]. Furthermore, people who become infected and present with lesions or rashes can prevent their contamination into the environment by covering the affected areas with bandages or gauzes as the transmission is seen by contact with fluid from sores and such lesions [5].

Currently, several regions reported the re-emergence of this disease outside of Africa. This issue aware us of the risk of forming a novel pandemic and the opportunity for rapid transmission, especially among high-risk populations [1]. Besides, due to prolonged viral shedding, controlling the rate of infection spread is challenging even in well-resourced healthcare systems [6]. Furthermore, there is no specific anti-viral against monkeypox [7]. Therefore, accurate attention is

Vol No: 08, Issue: 01

Received Date: January 23, 2023

Published Date: Jaunary 27, 2023

***Corresponding Author**

Ohadi Laya

School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran

E-mail: L75ohadi@gmail.com

Citation: Amiri F, et al. (2023). MonkeyPox and Recommendations for Cancer Patients. Mathews J Emergency Med. 8(1):49.

required according to the prevention methods, especially in immunocompromised patients [7].

One of the most pivotal preventive routes is pre-exposure smallpox vaccination or vaccinia immune globulin in cases with severe contraindications such as some oncology patients [7,8]. Presently, there are three smallpox vaccines in the US Strategic National Stockpile (SNS): JYNNEOS (also known as IMVAMUNE, IMVANEX, MVA-BN) and ACAM2000 are licensed for smallpox; the Aventis Pasteur Smallpox Vaccine (APSV) could be used for smallpox under an investigational new drug (IND) protocol. No increasing complications were detected following JYNNEOS. Due to the presence of complications such as eczema vaccinatum and progressive vaccinia in the use of the ACAM2000 vaccine in immunocompromised individuals, the Availability of JYNNEOS provides opportunities for vaccinating these patients. Because vaccination with the vaccinia virus vaccine is contraindicated in patients with severe immunodeficiency in T-cell function, Vaccinia Immune Globulin (VIG) may be given in these patients with an exposure history [9].

Additionally, isolation, contact tracing, protective sexual contacts, and post-exposure vaccinations collaborate to reduce the risk of making a severe disease [8,10].

There is no data available about monkeypox prevention strategies in cancer patients and due to the weakened immune system of cancer patients receiving chemotherapy, they should be prioritized for pre-exposure vaccination and we suggest a rapid smallpox vaccination with JYNNEOS vaccine in this vulnerable group to prevent further mortality and morbidity and improve clinical manifestations of infection. Additionally, Vaccinia Immune Globulin (VIG) should be used instead of the vaccine in cancer patients with severe immunodeficiency in T-cell function. It can also be mentioned, the use of antiviral drugs such as Tecovirimat, Brincidofovir, and Cidofovir as another measure in controlling infection in cancer patients [9].

Practicing good hygiene, eluding handling clothes, sheets, blankets, or other materials that have been in contact with an infected animal or person, avoiding close contact with people who have a rash that looks like monkeypox, large crowds, and contact with other immunocompromised cancer patients are also highly recommended in cancer patients to avoid monkeypox virus infection.

ABBREVIATIONS

Personal protective equipment: PPE

ACKNOWLEDGMENTS

None to declare.

FUNDING

No additional funding for the execution of the present study was received.

COMPETING INTERESTS

The authors declare that they have no competing or conflict of interests.

CONSENT STATEMENT

Not applicable

REFERENCE

1. Bunge EM, Hoet B, Chen L, Lienert F, Weidenthaler H, Baer LR, et al. (2022). The changing epidemiology of human monkeypox-A potential threat? A systematic review. PLoS Negl Trop Dis. 16(2):e0010141.
2. Guharoy R, Panzik R, Noviasky JA, Krenzelok EP, Blair DC. (2004). Smallpox: clinical features, prevention, and management. Ann Pharmacother. 38(3):440-7.
3. Antinori A, Mazzotta V, Vita S, Carletti F, Tacconi D, Lapini LE, et al. (2022). Epidemiological, clinical and virological characteristics of four cases of monkeypox support transmission through sexual contact, Italy, May 2022. Euro Surveill. 27(22):2200421.
4. Rao AK, Schulte J, Chen T-H, Hughes CM, Davidson W, Neff JM, et al. (2022). Monkeypox in a traveler returning from Nigeria-Dallas, Texas, July 2021. MMWR Morb Mortal Wkly Rep. 71(14):509.
5. Organization WH. (2022). Vaccines and immunization for monkeypox: interim guidance, 14 June 2022. World Health Organization.
6. Adler H, Gould S, Hine P, Snell LB, Wong W, Houlihan CF, et al. (2022). Clinical features and management of human monkeypox: a retrospective observational study in the UK. Lancet Infect Dis. 22(8):1153-1162.
7. Costello V, Sowash M, Gaur A, Cardis M, Pasieka H, Wortmann G, et al. (2022). Imported Monkeypox from International Traveler, Maryland, USA, 2021. Emerg Infect Dis. 28(5):1002.

8. Adalja A, Inglesby T. (2022). A Novel International Monkeypox Outbreak. American College of Physicians.

9. Rizk JG, Lippi G, Henry BM, Forthal DN, Rizk Y. (2022). Prevention and treatment of monkeypox. Drugs. 82(9):957-963.

10. Mahase E. (2022). Monkeypox: What do we know about the outbreaks in Europe and North America? : Br Med J. 377:o1274.