

# Monkeypox and Psychotic Manifestations: Possible But Little Recognized Clinical Manifestations



Pathum Sookaromdee<sup>1,\*</sup>, Viroj Wiwanitkit<sup>2,3</sup>

<sup>1</sup>Consultant Unit, Private Academic Consultant, Bangkok 103300, Thailand

<sup>2</sup>Department of Biological Science, Joseph Ayobabalola University, Ikeji-Arakeji 5006, Nigeria

<sup>3</sup>Department of Community Medicine, Dr DY Patil University, Pune 411018, India

**Abstract:** The pox virus is an important pathogen that can cause disease in humans. Monkeypox is a unique type of pox infection. The WHO has acknowledged the seriousness of a massive monkeypox outbreak in 2022. The disease usually presents as an acute febrile illness with skin lesions. The patient usually has many painful vesicular lesions, and this is a common cause of complaint for patients visiting the physician. The patient usually has a history of contact with an infected case and gets the disease. However, sometimes fever or skin damage cannot be detected. Without the special appearance, doctors may miss the problem and make the wrong diagnosis. Basically, clinical diagnosis is the simplest procedure and must be used by practitioners. Laboratory methods can help confirm the diagnosis. The gold standard for diagnosis is molecular-based diagnosis. However, it is important to recognize the atypical clinical problems of monkeypox. In this article, the authors discuss the psychiatric manifestations of monkeypox, a clinical issue that is somewhat addressed. In brief, mental problems are possible in monkeypox. The mental disorder might be the first clinical presentation. In rare cases, patients might have confusion and it is difficult to diagnose. Awareness of the problem is needed. Additionally, the stigma is an important problem for patients with monkeypox. Some patients might have suicidal attempts. Therefore, it is necessary to have good mental health monitoring and support for patients with monkeypox. Last, similar to the previous COVID-19 situation, the influx of new data on monkeypox has occurred and it might be the cause of panic for general people. It is necessary to prepare for control of fake news and provide mental health support to the general public during the outbreak of monkeypox.

**Keywords:** Monkeypox; Infection; Psychiatry

**DOI:** [10.57237/j.wjcm.2022.01.003](https://doi.org/10.57237/j.wjcm.2022.01.003)

## 1 Introduction

Monkeypox is a unique type of pox infection. Despite being around for a long time, the disease has not had a massive outbreak. WHO has acknowledged the seriousness of a large monkeypox outbreak in 2022 [1, 2]. There is a lot more to be said about monkeypox. Today, monkeypox is generally considered a serious threat to public health worldwide. Severe febrile illness and skin

lesions often coexist. The likelihood of the virus spreading from one person to another is increasing. Recent research on the human environment, especially sexual encounters, sheds light on some of today's most pressing questions. Understanding this issue is critical because effective disease treatment depends on early detection and treatment.

\*Corresponding author: Pathum Sookaromdee, [pathumsook@gmail.com](mailto:pathumsook@gmail.com)

However, sometimes fever or skin damage cannot be detected. Without the special appearance, doctors may miss the problem and make the wrong diagnosis. This may be the underlying reason why the current epidemic has gone undetected. If a patient has a serious clinical condition and can receive appropriate treatment, they may need to stay in the hospital. Clinical single agents isolated from crusts or vesicles are often thoroughly studied. This may indicate that clinical problems associated with skin lesions are common. It is important to remember that some people only exhibit certain symptoms, such as those with neurological or intestinal problems [1, 2].

Basically, clinical diagnosis is the simplest procedure and must be used by practitioners. The first step is history. Clinical history taking is very important to diagnose any medical problem. In addition to taking a clinical history, a good physical examination is required to gather information. A presumptive diagnosis of a medical disorder may be based on data from clinical history and physical examination findings. Laboratory tests are complementary to confirming the presumptive clinical diagnosis. Difficulties exist in the setting of atypical clinical presentations, as previously mentioned. Monkeypox has many possible atypical presentations that can make diagnosis difficult. In this article, the authors will summarize the psychiatric manifestations of monkeypox.

## 2 Mental Manifestations of Monkeypox

Human pox is an important infectious disease. In addition to the well-known pox infection, new zoonotic pox diseases have become a hot topic in infectious medicine [1]. Monkeypox has spread in countries such as Europe and is now a serious public health threat [1, 2]. Monkeypox is a rare pox infection that has re-emerged, most likely due to a zoonotic disease [1]. Monkeypox is a rare form of pox that has recurred, likely the result of a zoonotic disease, and has the potential for human-to-human transmission [1]. The growing number of reported cases in several countries has alarmed the medical community. COVID-19 has taught us that in the event of an outbreak, we must respond quickly and thoroughly investigate current issues. We must react quickly and examine the situation thoroughly. We must act quickly, examine the situation thoroughly, and take appropriate action [2].

Monkeypox is characterized by a febrile illness with a rash. However, atypical manifestations are possible. Some people may have other symptoms in addition to fever or rash [1]. Psychiatric performance is reasonable but underestimated. The well-known manifestations of insanity, typical of mental illness, are one of several possible difficulties. Chaos can manifest in many ways, and the prospect of serious illness is rarely considered. Confusion is a rarely mentioned clinical symptom, although it may be present in any new infectious disease condition [3]. To our knowledge, the puzzling symptoms of monkeypox patients have not been studied before. According to the study, confusion was a symptom in a small number of cases (2/34) [3]. Not all of these people had a fever, and some also developed a rash [4]. Atypical presentation, afebrile appearance, and absence of skin lesions are potential but underreported clinical features of monkeypox [1]. The first sign that may appear is confusion. Therefore, in modern clinical practice, it is crucial to prepare for suspected monkeypox because of the potential for a large outbreak. People with monkeypox are more likely to feel anxious and sad. In fact, any illness can cause anxiety or sadness. Depressive symptoms have been reported in one quarter of monkeypox patients [5]. Therefore, it is critical to diagnose and treat monkeypox patients with mental health problems.

## 3 Other Neurological Problems of Monkeypox

Headache is a common clinical symptom with a variety of medical causes, including neurological disorders. Despite the fact that none of these individuals reported headaches, a survey of cases during the outbreak in the United States found that headaches were one of the main symptoms in approximately one third of patients [4]. Concurrent clinical problems with skin lesions and lymphadenopathy are common [4]. In traditional African stories, with American examples [4, 6, 7]. To our knowledge, headache signs and symptoms in monkeypox patients have not been studied before. Although these patients did not have only one headache, a review of cases during the 2003 outbreak in the United States found that headache was one of the symptoms of 9 out of 34 [4]. Clinicians are therefore alerted by various signs and indicators to In these cases, the headache may be secondary. Skin lesions, febrile illness, and other clinical

symptoms may occur more frequently than previously thought. One of the earliest possible clinical indications is headache.

Although altered consciousness can manifest in many ways, the prospect of serious illness is rarely studied. Although it may occur in any new infectious disease situation, confusion is a clinical symptom that is rarely emphasized. To our knowledge, the puzzling symptoms seen in monkeypox patients have not been studied before.

Monkeypox may also have a stiff neck as its initial clinical symptom. In a previous report, stiff neck was the main symptom of 3 of the 34 patients studied. Not all of these people developed a fever, and some also developed a rash [4]. As outbreaks in new regions are conceivable, preparation for suspected monkeypox is critical in contemporary clinical practice.

## 4 Suicide

Disasters and traumatic life events typically have an impact on a person's psychological makeup. For instance, the development of epidemics or endemics may lead to an increase in psychological conditions such as sadness, anxiety, post-traumatic stress disorder, and emotions of sorrow [9]. Due to the added burden on the sick person's mentality, it may even result in suicide in some circumstances [9]. The problem of suicide due to infectious diseases has attracted attention. There is growing evidence that infectious diseases are associated with suicide, self-harm, and thoughts of suicide or self-harm. Suicide rates increased among older Hong Kong adults during SARS, but did not change among younger Japanese during COVID-19, but it is unclear to what extent these findings can be generalized. Anxiety, despair, and other mental diseases like poor mood reactions can result from monkeypox infection [9]. Therefore, in the event that the monkeypox endemic spreads, appropriate measures should be taken, including lowering mental stress, disseminating accurate information on social media, preventing misrepresentation and inciting fear among citizens, conducting ongoing research on the effects of the epidemic, and finding effective treatments for psychological issues. Regarding monkeypox, a recent report from Nigeria suggested that suicide may be associated with the disease [7, 8]. Developing the latest self-harm and suicide statistics to monitor the impact of the current pandemic is a priority. In monkeypox, suicide can occur during hospital-managed isolation. Therefore, it

is necessary to develop a suicide prevention program in any ward caring for monkeypox patients. The difficulties encountered in managing the suicide case can serve as a lesson for epidemic response teams and isolation facilities during outbreaks.

Another important topic to be mentioned is the management of the successful suicidal case. After the patient committed suicide, the management team encountered two significant obstacles [8]. The first difficulty involved moving the body to the mortuary and making sure it was preserved and safely buried [8]. No one was initially eager to release the corpse from the pole, not even the family members, due to local beliefs that suicide is an abomination associated with curses. The majority of those in attendance were concerned that taking part in the rescue of a suicide victim's body would subject them to curses. Mortuary staff were hesitant to transport the body to the mortuary, even after they had untied it, out of concern that they may become infected [8]. Reassurance that infection was unlikely following emergency training on the use of personal protective equipment [8]. The second difficulty is responding to family members' worries on his passing [8]. Due to the lack of a confirmation diagnosis at the time of his suicide, his family first disagreed with the diagnosis of monkeypox and questioned the need for isolation [8]. Concerns regarding the suicide's potential to stigmatize family members in the eyes of society at large and the requirement for a respectable funeral were voiced [8]. A number of family meetings were held, psychiatric counseling and assistance were provided, and misunderstandings concerning the patient's passing were cleared up [8]. Additionally, they should dispel cultural taboos and misconceptions about suicide and address systemic issues like unwelcoming and uncomfortable settings in isolation institutions that foster hopelessness and loneliness and act as precursors to suicidal ideation and behavior [10].

## 5 Monkeypox Scare

When an emerging disease emerges, there can be rapid sharing of unverified information and can lead to a panic situation [11]. Disasters and traumatic life events typically have an impact on a person's psychological makeup. For instance, the spread of epidemics or endemics may lead to an increase in psychological conditions such as sadness, anxiety, post-traumatic stress disorder, and sensations of

sorrow [11]. Due to the added burden on the sick person's mentality, it may even result in suicide in some circumstances [11]. Mental diseases such as anxiety, depression, and low mood reactions can result from monkeypox infection [11]. Therefore, in the event that the monkeypox endemic spreads, appropriate measures should be taken, including lowering mental stress, disseminating accurate information on social media, preventing misrepresentation and inciting fear among citizens, conducting ongoing research on the effects of the epidemic, and finding effective treatments for psychological issues [11]. It is possible that the monkeypox outbreak might be continue and cause worldwide problem [12]. Therefore, it is necessary to develop a good data control strategy. It is necessary to stop any fake data and publicly promote the correct data. In the event of the spread of the monkeypox endemic, appropriate measures should be taken, such as reducing mental stress, disseminating accurate information on social media, preventing misrepresentation and spreading fear among citizens, and conducting ongoing research on the effects of the epidemic and ways to treat psychological problems [13]. Fake news has already begun to spread on social media, escalating the tense atmosphere and stifling the voices of medical professionals [14]. Even when there is widespread awareness of the epidemic and a variety of government sources are widely spreading advice on how to stay healthy, some people in situations where there is a disease outbreak take very little precaution to avoid getting sick [15]. It has been particularly well established that false information may lead people to take fewer precautions to effectively stop the spread of disease [15]. As a result, some solutions are put forth, such as raising awareness among the public and lowering stigma through sharing engagement with civil society organizations as well as better coordination between policymakers, the medical community, and social media platforms in terms of distributing accurate official news about the illness [14]. In addition to the general health education team, consideration should be given to urgently setting up a psychiatric advisory team to support the local population. State and federal public health officials should form interdisciplinary mental health teams to offer adequate mental health care to monkeypox patients. These teams should include clinical psychologists, psychiatrists, psychiatric nurses, and other mental health experts [11, 16].

## 6 Substance Addiction and Monkeypox

Addiction to substances is a widespread psychological issue in the world. Addicts who have a tendency toward poor hygiene tend to behave badly. Whether there is a connection between drug abuse behavior and monkey pox is an intriguing subject. In a recent study from Saudi Arabia, the level of knowledge about monkeypox was substantially correlated with income and smoking status [17].

## 7 Conclusion

Human pox is an important infectious disease. In addition to the well-known pox infection, new zoonotic pox diseases have become a hot topic in infectious medicine [1]. Monkeypox has spread in countries such as Europe and now poses a serious public health threat. Monkeypox is a rare pox infection that has re-emerged, most likely due to a zoonotic disease [1]. Monkeypox is a rare form of pox that has recurred, most likely the result of a zoonotic disease, and the possibility of human-to-human transmission. The growing number of reported cases in several countries has alarmed the medical community. COVID-19 has taught us that in the event of an outbreak, we must respond quickly and thoroughly investigate current issues. We must react quickly and examine the situation thoroughly. We must act quickly, examine the situation thoroughly, and take appropriate action. Monkeypox is characterized by a febrile illness with a rash. However, atypical manifestations are possible. Some people may have other symptoms in addition to a fever or rash. Psychiatric performance is reasonable but underestimated. Available data supports a variety of neuropsychiatric presentations, including those with severe neurological consequences, such as encephalitis and seizures, and general neurological characteristics. Less information is available on the psychiatric manifestations or consequences of the infection.

## References

- [1] Wiwanitkit S, Wiwanitkit V. Atypical zoonotic pox: Acute merging illness that can be easily forgotten. *J Acute Dis*2018; 7: 88-89.

- [2] Mungmunpantipantip V, Wiwanitkit V. Re-emerging monkeypox: an old disease to be monitored. *BMJ Rapid Response*. Accessible online at <https://www.bmj.com/content/377/bmj.o1239/rr-1> Accessed on 21 May 2022
- [3] Tasci I, Balgetir F, Mungen B, Demir CF, Gonen M, Delen LA, et al. Evaluation of neurological disorders that develop concurrently with COVID-19 pneumonia: a retrospective analysis. *Arq Neuropsiquiatr*. 2022 Apr 20: S0004-282X2022005008202.
- [4] Huhn GD, Bauer AM, Yorita K, Graham MB, Sejvar J, Likos A, Damon IK, Reynolds MG, Kuehnert MJ. Clinical characteristics of human monkeypox, and risk factors for severe disease. *Clin Infect Dis*. 2005; 41: 1742-51.
- [5] 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 May 24; S1473-3099 (22) 00228-6. doi: 10.1016/S1473-3099 (22)00228-6. Online ahead of print.
- [6] Yinka-Ogunleye A, Aruna O, Dalhat M, Ogoina D, McCollum A, Disu Y, Mamadu I, Akinpelu A, Ahmad A, Burga J, Ndoreraho A, Nkunuzimana E, Manneh L, Mohammed A, Adeoye O, Tom-Aba D, Silenou B, Ipadeola O, Saleh M, Adeyemo A, Nwadiutor I, Aworabhi N, Uke P, John D, Wakama P, Reynolds M, Mauldin MR, Doty J, Wilkins K, Musa J, Khalakdina A, Adedeji A, Mba N, Ojo O, Krause G, Ihekweazu C; CDC Monkeypox Outbreak Team. Outbreak of human monkeypox in Nigeria in 2017-18: a clinical and epidemiological report. *Lancet Infect Dis*. 2019 Aug; 19 (8): 872-879.
- [7] Rogers JP, Chesney E, Oliver D, Begum N, Saini A, Wang S, McGuire P, Fusar-Poli P, Lewis G, David AS. Suicide, self-harm and thoughts of suicide or self-harm in infectious disease epidemics: a systematic review and meta-analysis. *Epidemiol Psychiatr Sci*. 2021 Apr 27; 30: e32.
- [8] Ogoina D, Mohammed A, Yinka-Ogunleye A, Ihekweazu C. A case of suicide during the 2017 monkeypox outbreak in Nigeria. *IJID Reg*. 2022 Apr 25; 3: 226-227.
- [9] Ahmed SK, M-Amin HI, Abdulqadir SO, Hussein SH, Ahmed ZK, Essa RA, Khdir AA, Abdulla AQ, Omar RM. Timely mental health care for the 2022 novel monkeypox outbreak is urgently needed. *Ann Med Surg (Lond)*. 2022 Oct; 82: 104579.
- [10] Leane E, Samuel M, Oh H, Poulet E, Brunelin J. Suicidal behaviors and ideation during emerging viral disease outbreaks before the COVID-19 pandemic: a systematic rapid review. *Prev Med*. 2020; 141.
- [11] Islam MR, Asaduzzaman M, Shahriar M, Bhuiyan MA. The spreading of monkeypox in nonendemic countries has created panic across the world: Could it be another threat? *J Med Virol*. 2022 Jun 7. doi: 10.1002/jmv.27919. Online ahead of print.
- [12] Guessoum SB, Lachal J, Radjack R, Carretier E, Minassian S, Benoit L, Moro MR. Adolescent psychiatric disorders during the COVID-19 pandemic and lockdown. *Psychiatry Res*. 2020 Sep; 291: 113264.
- [13] Farahat RA, Head MG, Tharwat S, Alabdallat Y, Essar MY, Abdelazeem B, Setti MO. Infodemic and the fear of monkeypox: call for action. *Trop Med Health*. 2022 Sep 5; 50 (1): 63.
- [14] Brainard J, Hunter PR. Misinformation making a disease outbreak worse: outcomes compared for influenza, monkeypox, and norovirus. *Simulation*. 2020 Apr; 96 (4): 365-374.
- [15] Dugerdil A, Flahault A. Infodemics in an Era of Pandemics. Emery N, *Int J Public Health*. 2022 Aug 17; 67: 1605209.
- [16] Delaney KP, Sanchez T, Hannah M, Edwards OW, Carpino T, Agnew-Brune C, Renfro K, Kachur R, Carnes N, DiNenno EA, Lansky A, Ethier K, Sullivan P, Baral S, Oster AM. *MMWR Morb Mortal Wkly Rep*. 2022 Sep 2; 71 (35). doi: 10.15585/mmwr.mm7135e1. Rabiul Islam M, Hasan M, Rahman MS, Rahman MA. Strategies Adopted by Gay, Bisexual, and Other Men Who Have Sex with Men to Prevent Monkeypox virus Transmission - United States, August 2022. Monkeypox outbreak - No panic and stigma; Only awareness and preventive measures can halt the pandemic turn of this epidemic infection. *Int J Health Plann Manage*. 2022 Jul 6. doi: 10.1002/hpm.3539. Online ahead of print.
- [17] Alshahrani NZ, Alzahrani F, Alarifi AM, Algethami MR, Alhumam MN, Ayied NAM, Awan AZ, Almutairi AT, Bamakhrama SA, Almushari BS, Sah R. Assessment of Knowledge of Monkeypox Viral Infection among the General Population in Saudi Arabia. *Pathogens*. 2022 Aug 11; 11 (8): 904.