

Saliva: An Overlooked yet Critical Diagnostic Tool in Detection of Nipah Virus

Dear Editor,

I am writing to emphasize the importance of saliva samples as a critical diagnostic tool in the diagnosis of the Nipah virus. This method has specific advantages that warrant serious consideration.

A Nipah virus outbreak has just been reported in Kerala, India. The Nipah virus is well-known for its severe impact on human health, which frequently results in high mortality rates. It causes flu-like symptoms that can quickly advance to encephalitis, creating a serious public health risk. The Centers for Disease Control and Prevention has issued updated guidelines for sample collection. They propose that urine, cerebrospinal fluid (CSF), blood, and throat swabs are collected first for diagnostic purposes. Unfortunately, saliva samples have been ignored.

Saliva samples offer a noninvasive and convenient method of sample collection when compared to conventional samples such as blood, CSF, urine, or nasal swabs. Such ease in data collection promotes higher compliance among patients.

Moreover, studies have demonstrated the presence of Nipah virus RNA in saliva during the acute phase of infection, signifying its potential as a reliable diagnostic tool.^[1,2] This approach enables earlier detection, allowing for prompt intervention and containment measures. Given Nipah's extreme contagiousness, early detection is essential to halt outbreaks and limit transmission.

Saliva-based testing is not only effective but also cost-efficient. It makes it particularly suitable for massive screening projects, especially in environments with limited resources where conventional methods would not be feasible. Saliva-based testing's accessibility and ease of use can greatly improve surveillance and response capabilities, particularly in areas where the virus poses a serious danger.

In conclusion, the merits of saliva samples as a diagnostic tool for Nipah virus detection are substantial. Their ease of collection, early detection capabilities, cost-effectiveness, and scalability make them a pivotal asset in safeguarding public health. Considering these advantages, I urge the medical community and policymakers to seriously explore and integrate

saliva-based testing as an early detection method of the Nipah virus.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

B. Gayathrie¹, Parvinder Sharma², Aishwarya Pandey³

¹JRF, ²Head of Department, ³Research Associate, Centre for Advanced Maxillofacial Research, Institute of Nuclear Medicine and Allied Sciences, Defence Research and Development Organization, New Delhi, India

Address for correspondence: Dr. B. Gayathrie, Institute of Nuclear Medicine and Allied Sciences, Defence Research and Development Organization, Timarpur, New Delhi - 110 054, India. E-mail: shanthibasur68@gmail.com

REFERENCES

1. Chua KB. Epidemiology, surveillance and control of Nipah virus infections in Malaysia. *Malays J Pathol* 2010;32:69-73.
2. Aditi, Shariff M. Nipah virus infection: A review. *Epidemiol Infect* 2019;147:e95.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online

Quick Response Code:



Website:

<https://journals.lww.com/IJPH>

DOI:

10.4103/ijph.ijph_1185_23

Submitted: 20-Sep-2023

Revised: 18-Oct-2023

Accepted: 03-Nov-2023

Published: 29-Jun-2024

How to cite this article: Gayathrie B, Sharma P, Pandey A. Saliva: An overlooked yet critical diagnostic tool in detection of Nipah virus. *Indian J Public Health* 2024;68:333.

© 2024 Indian Journal of Public Health | Published by Wolters Kluwer - Medknow