TESS RESEARCH NETWORK
Yours Network Is Your Networth. It Starts With Us

TESS Research in Medical and Clinical

Open Access
Research Article
Volume 1:1

Nipah Virus Infection: A Brief Summary

Joob B[1,*] and Wiwanitkit V[2]

[1]*Sanitation Medical Academic Center, Bangkok Thailand*

[2]*Adjunct professor, Joseph Ayobabalola University, Ikeji-Arakeji, Nigeria; Honorary professor, Dr DY Patil University, Pune, India; visiting professor, Hainan Medical University, Haikou, China*

***Corresponding author:** Joob B, Sanitation Medical Academic Center, Bangkok Thailand; E-mail: beuyjoob@hotmail.com

Received date: 1 September 2022; **Accepted date:** 7 September 2022; **Published date:** 14 September 2022

Abstract

Nipah virus infection is a contagious disease carried by animals such as fruit bats, pigs, horses, cats, goats, or sheep. Encephalitis is at a high risk of death. People can become infected with the Nipah virus through close contact with infected pigs. Or they may be infected by eating fruit contaminated with the saliva and urine of fruit-eating bats. There are also reports that the Nipah virus can be transmitted from person to person. After having close contact with an infected person.

Keywords: Nipah virus; Infection.

Introduction

Nipah virus infection is a contagious disease carried by animals such as fruit bats, pigs, horses, cats, goats, or sheep. Encephalitis is at high risk of death [1,2]. Nipah encephalitis was first reported in 1999, during which time there were outbreaks of the Nipah virus in Malaysia, India, Bangladesh, and Singapore [3]. The Nipah virus is caused by a pathogen known as the Nipah virus. This virus is classified in the family paramyxoviridae, genus Henipavirus. Similar to the Hendra virus, fruit-eating bats are the source of the virus. And other animals such as pigs, dogs, cats, goats, and sheep are infected with the Nipah virus by touching or eating objects contaminated with the urine, feces, or saliva of bat carriers. However, other animals can also become infected with the Nipah virus by touching objects or eating food and water contaminated with the Nipah virus. The Nipah virus can also be transmitted by touching or breathing in the virus. This type of contact can be found in pigs.

Natural history and management of Nipah virus infection

People can become infected with the Nipah virus through close contact with infected pigs. Or they may be infected by eating fruit contaminated with the saliva and urine of fruit-eating bats. There are also reports that the Nipah virus can be transmitted from person to person. After having close contact with an infected person [1,2]. The early symptoms of nipah virus infection are rarely asymptomatic. The incubation period takes approximately 1-2 weeks on average. Symptoms in the early stages are similar to those of the common cold. With the following characteristics: high fever, headache, muscle pain, dizziness, pneumonia, staggered walk, lethargic, confused, and convulsions. However, the symptoms will gradually intensify and progress to a coma. And eventually died. Patients with Nipah virus infection have a mortality rate of about 40 percent. The confirmation of diagnosis must be based on the laboratory testing (Table 1).

The Nipah virus is considered a dangerous contagious disease because there is currently no drug available. There is also no vaccine used to effectively treat the nipah virus. It can only be treated according to the symptoms of the patient together with the antiviral drug ribavirin, which may reduce the severity of the disease to some extent.

Table 1: *Laboratory testing for Nipah virus infection.*

tests	details
1. Serology method with ELISA technique : can be performed in laboratory level 2 * ELISA IgM: Test for IgM antibodies to indicate infection. * ELISA IgG : IgG antibody test for signs of previous infection	- Take 3-5 ml of blood from the patient and leave the blood to coagulate at room temperature. sucking isolated lymph Out of the blood clot not less than 100 microliters or spin the hematopoietic sediment to collect the lymph for testing immediately or store at 28 degrees for not more than 3 days, if longer than that, keep frozen at -20 degrees. - Instillation of cerebrospinal fluid with a volume of not less than 100 microliters.
2. Molecular approach with RT-PCR and Real Time PCR techniques: can be performed in Level 2 and Level 3 laboratories.	- Collect biopsy samples such as brain, lung, kidney, spleen, soaked in normal saline - Collect at least 2 ml of saliva sample. - Collect at least 20 ml of urine sample. - Collect a Throat swab or Nasal swab sample in 2 ml of VTM. - Collect samples of cerebrospinal fluid with a volume of not less than 300 microliters.

Disease Prevention

Disease control and prevention Use general sanitation prevention measures. Emphasis is placed on washing your hands every time with soap. When in contact with animals, meat, animal tea and do not eat raw meat, undercooked, wash utensils. With disinfectants such as chlorine, iodine, etc. If an animal is found sick with encephalitis syndrome, destroy the sick animal or herd and then destroy the remains by burning or burying do not move animals or carcasses from the disease point within a radius of 2 kilometres.

Conclusion

While the world is battling the epidemic of "Covid-19", incidences are equally or perhaps even more frightening, such as the Nipah virus, which recently it was found in India, causing the death of a 12-year-old boy in the southern Indian state of Kerala. It is a highly contagious disease that causes 70% of people to die. And medication for treatment. It is necessary to recognize this little mentioned disease and prepare for contain it if emergence occurs.

Conflict of interest

None

References

1. Shariff MA. Nipah virus infection: A review. Epidemiol Infect. 2019; 147: 95.
2. Ang BSP, Lim TCC, Wang L. Nipah Virus Infection. J Clin Microbiol. 2018; 56: 1875-1917.
3. Singh RK, Dhama K, Chakraborty S, Tiwari R, Natesan S, Khandia R, et al. Nipah virus: epidemiology, pathology, immune biology and advances in diagnosis, vaccine designing and control strategies - a comprehensive review Vet Q. 2019; 39: 26-55.