

A review on NiV (Nipah Virus): Precaution and treatments

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ABSTRACT:

Nipah virus is a zoonosis viral disease. Nipah virus, scientific name **Nipah henipavirus**. Nipah virus (NiV) was first discovered in 1999 following an outbreak of disease in pigs and people in Malaysia and Singapore. Twenty years ago, the world had only just discovered Nipah virus, a new zoonotic paramyxovirus closely related to Hendra virus. A concurrent disease outbreak in pigs and humans in Malaysia led to the discovery of this virus in 1999. Through the intermediate host involved in this outbreak—domestic pigs—the outbreak spread to Singapore, resulting in a total of 276 reported cases with 106 deaths; the outbreak ended with the culling of more than 1 000 000 pigs. Nipah virus (NiV) is a zoonotic virus, meaning that it can spread between animals and people. Nipah virus is also known to cause illness in pigs and people. Infection with NiV is associated with encephalitis (swelling of the brain) and can cause mild to severe illness and even death. Outbreaks occur almost annually in parts of Asia, primarily Bangladesh and India. Nipah virus infection can be prevented by avoiding exposure to sick pigs and bats in areas where the virus is present, and not drinking raw date palm sap which can be contaminated by an infected bat. During an outbreak, standard infection control practices can help prevent person-to-person spread in hospital settings. Currently there are no licensed treatments available for Nipah virus (NiV) infection. Treatment is limited to supportive care, including rest, hydration, and treatment of symptoms as they occur. The drug ribavirin was used to treat a small number of patients in the initial Malaysian NiV outbreak, but its efficacy in people is unclear. There is no right treatment for Nipah virus.

Key words: Nipah virus, zoonosis, pig.

I. INTRODUCTION:

Nipah virus (NiV) was first discovered in 1999 following an outbreak of disease in pigs and people in Malaysia and Singapore. Nipah virus is a zoonosis viral disease. Nipah virus, scientific name **Nipah henipavirus**. The Nipah virus outbreak in Malaysia (September 1998 to May 1999) resulted in 265 cases of acute encephalitis with 105 deaths, and near collapse of the billion-dollar pig-farming industry [1]. Nipah virus, is a bat-borne virus that causes Nipah virus infection in humans and other animals, a disease with a high mortality rate. Nipah virus belongs to the genus Henipavirus along with the Hendra virus, which has also caused disease outbreaks [2]. Nipah is a virus which commonly affects animals like bats, pigs, dogs, horses, etc. The virus can spread from animals to humans and can sometimes cause serious illness among humans [3]. Twenty years ago, the world had only just discovered Nipah virus, a new zoonotic paramyxovirus closely related to Hendra virus. A concurrent disease outbreak in pigs and humans in Malaysia led to the discovery of this virus in 1999 [4]. Through the intermediate host involved in this outbreak—domestic pigs—the outbreak spread to Singapore, resulting in a total of 276 reported cases with 106 deaths; the outbreak ended with the culling of more than 1 000 000 pigs [4,5]. Scientists and public health officials quickly learned that Nipah virus had the ability to spread from person to person [6]. NiV is belonging to the family of Paramyxoviridae, genus Henipavirus. Nipah virus is zoonosis viral disease, meaning of I.e. spread between the humans and animals. Infected food, water and fruits can spread the disease in humans [7,8]. On 4 September 2021, the Kerala State Health department reported an isolated case of Nipah virus disease in Kozhikode district, Kerala state, India. This is the fifth outbreak of the disease in India.

Affected various countries and human by Nipah virus. Nipah virus firstly out breaks in Malesia 1999 by outbreak pig farmers. Nipah virus transmitted human to animal. Nipah virus is a transmitted. Nipah virus is a human virus that is spread through infected animals and pigs.

How does its spread?

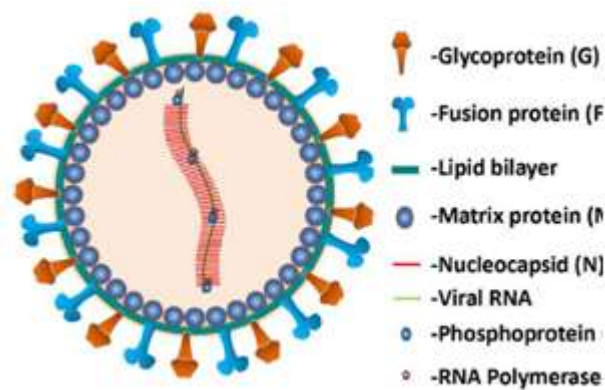
1. Nipah virus is spread in the humans contact to infected persons.

2. This virus is spread to the contaminated food and water.

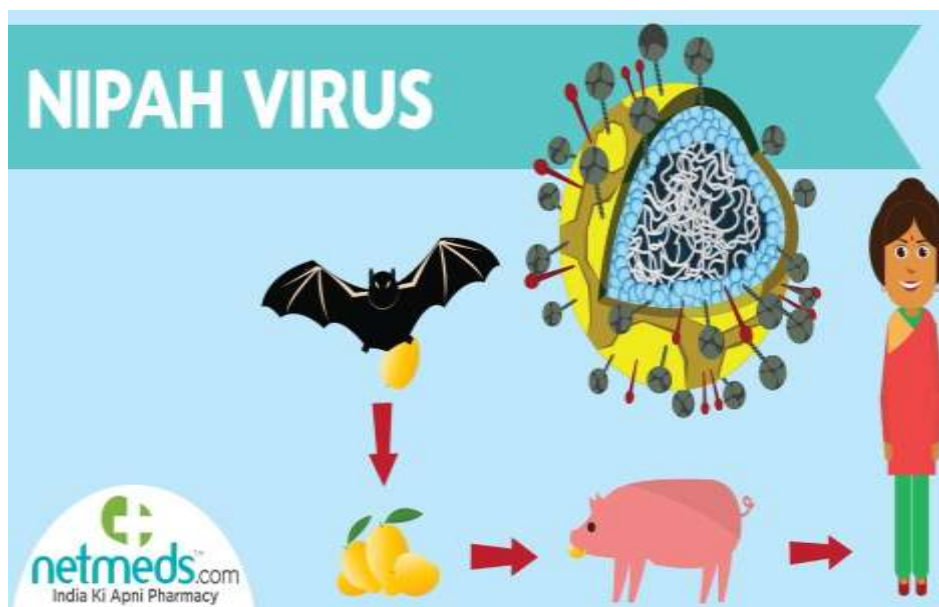
3. Nipah virus is spread the infected animals and pigs and bats.

4. Sometimes Nipah virus is spread handle the dead bodies and suspected death Nipah virus.

5. Common reason of spread Nipahvirus, some person direct contact to the sick pigs and contaminated tissues [9].



NiV virus is a zoonotic virus disease. A virus that animals can transmit to humans also known as zoonosis. Infected animals spread the NiV.



Nipah virus (NIPV) was first isolated in 1999 in Malaysia from cerebrospinal fluid (CSF) samples that were collected from encephalitic [14]. A major outbreak occurred in 2001 in Siliguri, West Bengal, India with 66 probable cases and 45 deaths, and in 2007 another smaller outbreak (five cases, 100% fatal) occurred in Nadia district, West Bengal.

SYMPTOMS: Nipah virus is mild severe disease including swelling of the brain (encephalitis) and potentially death.

- Symptoms is appearing in 3-14 days, include the various symptoms like:
- Fever
- Headache
- Cough
- Sore throat
- Vomiting and
- Breathing problem [10]

TREATMENTS: There is no authorized treatment available of Nipah virus. only care of patient, hydration and proper when occur symptoms [11]

PREVENTION:

Wear protective gear like gloves, mask when handling sick animals. Avoid contact with pigs and bats. Do not go to places where bats are known to settle.

1. Proper hand wash before eat the food.
2. Regular hand washes with soap and water.
3. Avoid consumption of raw date palm sap.
4. Avoid the infected persons blood and body fluid [12,13].

II. RESULT AND DISCUSSION:

Studying the Nipah virus revealed that it is a junctional disease that spreads through infected food and fruits. There is no proper treatment available for Nipah virus. To prevent Nipah virus, proper care, rest and relaxation is needed. To avoid Nipah virus, it is necessary to protect against infected animals.

III. CONCLUSION:

Exactly 20 years ago NiV was found as a new virus, causing serious consequences for mortality in both humans and animals and destroying the pig-rearing industry in Malaysia, and it continues to cause outbreaks in Bangladesh and India. High mortality rate in Bangladesh due to NiV and typically spread in winter. Proper care is required to avoid Nipah virus. To avoid this virus, one has to stay away from infected animals. Avoiding animals is the only way to avoid Nipah virus.

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