

Review Article

## Homoeopathy in NIPAH Virus

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**Abstract:** Nipah virus disease outbreak occurred in Kerala in the month of May 2018. It happened in Kerala again in September 2023. As on 13<sup>th</sup> September 2023, two unnatural deaths from Kozhikode district were suspected to be due to Nipah virus infection. Again in Sept 14, 2023, TOI reports that Kerala reported its 5<sup>th</sup> case. In the absence of a definitive cure for this viral disease, the article peeps through the homoeopathic lens & explores what it can offer to deal with this viral episode. The success of homoeopathy in COVID 19 again reiterates the fact that as homoeopathy was & is effective against viral infections; it is effective against Nipah virus disease also [2]. Nipah virus is an enveloped RNA virus that has been a major cause of encephalitis outbreaks with high mortality primarily in the Indo-Bangladesh regions. The first breakout was in Malaysia-Singapore that was related to contact with pigs & the outbreak in Phillipines associated with horse slaughter. Most other outbreaks has affected the Indo- Bangladesh regions. Here, the outbreaks were associated with consumption of raw date palm sap contaminated by fruit bats & had a very high secondary attack rate [3].

**Keywords:** NiV, RNA, Homoeopathy.

## INTRODUCTION

Nipah Virus (NiV) was initially isolated & identified in 1999 during an outbreak of encephalitis & respiratory illness among pig farmers & people with close contact with pigs in Malaysia & Singapore. Its name originated from Sungai

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Nipah, a village in the Malaysian peninsula where pig farmers became ill with encephalitis. Given the relatedness of NiV to Hendra virus, bat species were quickly singled out for investigation & flying foxes of the genus *Pteropus* were subsequently identified as the reservoir of NiV [4, 5].

Nipah virus infection in humans causes a range of clinical presentations, from asymptomatic infection (subclinical) to acute respiratory infection and fatal encephalitis. The case fatality rate is estimated at 40% to 75%. This rate can vary by outbreak depending on local capabilities for epidemiological surveillance and clinical management. Nipah virus can be transmitted to humans from animals (such as bats or pigs), or contaminated foods and can also be transmitted directly from human-to-human. Fruit bats of the Pteropodidae family are the natural host of Nipah virus. There is no treatment or vaccine available for either people or animals. The primary treatment for humans is supportive care. The 2018 annual review of the WHO R&D Blueprint list of priority diseases indicates that there is an urgent need for accelerated research and development for the Nipah virus [1].

Viruses will continue to evolve themselves & it is here that the role of the immune system comes into play. As already seen in the case of ineffectiveness of Flu vaccines, challenges will evolve in similar ways in future. The nine Flu vaccines that are available currently are only 40-60% effective. The vaccine will continue to face uncertainty as the virus will continue to evolve itself. It is not feasible to develop vaccines for each variant of all the viruses [7].

### **Clinical Symptoms**

The patient usually presents with fever, encephalitis & or respiratory involvement with or without thrombocytopenia, leucopenia & trans-aminitis. Nipah virus disease should be differentiated with some of the diseases. These are Japanese Encephalitis, Measles, Rabies, Dengue Encephalitis, Cerebral Malaria, Scrub Typhus, Leptospirosis, Herpes Encephalitis & Bacterial Meningitis [3].

### **Laboratory & Radiological Diagnosis of Nipah Virus Disease**

The first is the Peripheral Blood Picture which shows thrombocytopenia, leucopenia, raised liver enzymes & hyponatremia.

The second is the Cerebro Spinal Fluid analysis which shows lymphocytosis, pleocytosis, raised proteins and normal glucose levels.

The third is imaging. In this, 2-7 mm multifocal discrete lesions in sub cortical & deep white matter is seen.

The National Institute of Virology tests involved in diagnosis are ELISA which detects antibodies. The other is PCR that helps in virus isolation [3- 6].

### **Prognosis**

Case fatality ranges from 40% to 100%. Poor prognostic factors from the Malaysian out break include old age, more severe brain stem involvement presenting as a reduced level of consciousness, vomiting, abnormal doll's eye reflex, abnormal pupils, hypertension & tachycardia during the course of the illness [6].

### **Homoeopathic Approach**

In this section, we have to take note that this disease has a high mortality. The patient's breathing, fluid & temperature has to be in sync for the patient to survive. It has to be treated like an emergency. Homoeopathy should be used while ensuring the fluid. The fever & the breathlessness can be taken care by homoeopathy [17].

All the drugs can be given at one time depending upon the symptoms and laboratory findings of the patient.

For fever, drugs like 'Pyrogen', 'Acetanilidum' & 'Brucella Melitensis' should be given.

For Encephalitis, drugs like 'Helleborus' & 'Tuberculinum' are to be prescribed.

For respiratory involvement, 'Grindelia R' in Mother Tincture should be prescribed as the drug takes care of both the lungs & heart.

For Thrombocytopenia, drugs like 'Crotalus Horridus' & 'Bothrops L' are to be prescribed.

For Leucopenia, drugs like 'Baptisia' and 'Chloramphenicol' are to be prescribed.

For raised liver enzymes, drugs like 'Ferrum Ars' & 'Ferrum Iod' are to be prescribed in triturations.

For high Lymphocytosis in CSF, drugs like ‘Bacillinum’ & ‘Tuberculinum’ are to be prescribed.

For Pleocytosis in CSF, ‘Zincum Met’ needs to be prescribed.

For high proteins in CSF, ‘Solidago’ & ‘Zinziber’ in mother tinctures are to be prescribed.

Along with these medicines, the medicines for meningitis are to be prescribed.

For Lesions in the brain, drugs like ‘Flouric Acid’, ‘Ruta G’ & ‘Phytolacca Berry’ are to be prescribed as it is a process of fat involvement as brain has fat cells [9- 15].

## CONCLUSION

As all drugs in homoeopathy have a group of mental symptoms, Homoeopathy is and will be effective against viral disorders in general as it will take the fear out of the patient. The current article adds another feather in the Homoeopathic cap as it can deal with the probable upcoming of large number of cases of Nipah virus in view of the continued high stress levels due to the consequences of the ongoing COVID 19 crisis that is still prevalent in the form of long COVID. However, it should be also seen that along with constitutional/deep acting/polychrest Homoeopathic medicines, specific medicines are also required to deal with the cases as mentioned above. Simultaneously, nutrition, counselling and all psychic health modalities like life style modification, diet and stress reduction are adhered in each case so that these cases do not recur [9- 16].

The Homoeopathic fraternity should be ready to cover the masses as there is no other therapeutic system that can cover the masses effectively while being economical, no side effects and to add to it, it is cost effective. Hence, it meets all the criteria of essential medicines as per the National List of Essential Medicines (NLEM). Simultaneously, it has a wide range of medicines for viral disorders as seen in the contents of the sections mentioned above [8].

### Declaration of the Lead Author

Prof. Shankar Das, a co-author of the current article was the Ph.D. guide of the lead author at Tata Institute of Social Sciences, Mumbai. Professor D.P. Singh, another co-author of the article was the teacher of the lead author at Tata Institute of Social Sciences, Mumbai during 1995-1997. The lead author also certifies that he has expressed his personal opinion based upon his public health and clinical experiences. The treatment approach or the medicines suggested are only suggestive in nature.

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