

Zika virus - vaccines and management

Volume 2 Issue 1 - 2016

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Received: January 29, 2016 | **Published:** February 03, 2016

Editorial

The Zika virus is spread to people through *Aedes* species mosquito bites. This virus was first noticed in a monkey at the Zika Forest of Uganda; hence, it was named the Zika virus. The symptoms include fever, headache, nausea, fatigue, joint pain, rash, and conjunctivitis. Affected pregnant women may give birth to babies with birth defects (small brain and other problems associated with the nervous system). Recent reports suggest that in Brazil, there is an increase in the number of infants born with microcephaly in Zika virus-affected areas. Moreover, Zika virus RNA was identified in the amniotic fluid of two women, and also, the ultrasound reports showed microcephaly in the affected fetuses.¹

The Zika virus is widely distributed in Africa and Asia. Now, it has been spreading across South America, Central America, and the Caribbean and is potentially threatening the United States and the surrounding territories. Human migration and also tourism result in the transmission of this virus to different regions and populations across the globe. Research reports reveal that a patient with fever and rash (symptoms of the Zika) has been identified who traveled from Maldives to Finland. Another patient has been identified with fever, headache, rash, and conjunctivitis and flew back to Japan from Thailand.^{2,3} Thus, there should be control over tourism to areas affected by the Zika virus; otherwise, there will be an active threat from this virus.

Though there is no specific antiviral treatment for the Zika virus, supportive care is always recommended. Many agencies in the US are working on the development of vaccines, but it will be a time-consuming process. Even the recent report from the concerned authority of the National Institute of Allergy and Infectious Diseases (NIAID, US) concludes that it will take a few years to develop the Zika vaccine. While developing drugs, it will always be reliable to work on human samples rather than doing animal experiments.⁴

“A stitch in time saves nine.” Supportive care is recommended, especially for microbial infections whether it is a developed or developing country. It plays a significant role in controlling the diseases of poverty (dengue, etc.). If the disease is spread by mosquitoes, certain preventive measures should be adopted that will be none other than the simple method to control mosquitoes to a larger extent. Mosquito repellents, adequate clothing, etc., can minimize mosquito biting. Household fixtures such as air-conditioning, windows, and door screens can reduce mosquito biting. Full bed rest and taking a sufficient quantity of boiled water or any liquid will be advisable. Raw food should be avoided. Food items rich in vitamins are always helpful to fight against infectious diseases and toxicity.⁵⁻⁸ DNA-based vaccines that have been developed for other viruses will also be useful to treat the Zika virus.

Acknowledgments

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.

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