

Zika Virus: A New Version of Threat

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Abstract

Zika Virus is the new threat to the human beings which gets transmitted from the infected mosquitoes. It can cause mild fever, skin rashes, conjunctivitis, muscle pain, joint pain and headaches. Diagnosis is done with the help of lab tests to find out the presence of Zika virus in blood or the body fluids. Till date no vaccine is available to cure the disease but one should focus on the preventive measures to protect himself/herself from Zika virus infection.

Keywords

Zika, Virus, Infection



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INTRODUCTION

Zika means 'overgrown' as per the Luganda language (Language of Uganda). Zika virus was first found in 1952 when the scientists were doing some research on yellow fever placed a monkey in the cage in the Zika forest, Uganda. Later that monkey developed fever and Zika virus was isolated from its serum. In 1954 the Zika virus was isolated from the human beings in Nigeria. The major outbreaks of Zika virus infection occurred in Asia, Africa and Pacific¹.

Definition

Zika virus infection is the vector borne (Aedes mosquitoes) disease is the caused by the flavivirus. This mosquito bites in the morning hours, late afternoon or the evening hours. The source of infection is not known².

Signs and symptoms

The signs and symptoms of Zika virus infection are similar to other arbovirus infections such as:-

- Mild fever
- Conjunctivitis
- Skin rashes
- Malaise or headache
- Muscle and joint pain

These symptoms of Zika virus infection normally remain for 2-7 days².

Complications

- Guillain-Barré syndrome
- Microcephaly

As per the WHO latest Zika situation report (2016) seven countries have reported an increase in the incidence of cases of microcephaly and/or Guillain-Barré syndrome concurrently with a Zika virus outbreak³.

Transmission of Zika virus infection

This infection is transmitted to the human beings by the bite of an infected mosquito of Aedes genus. Aedes Aegypti is mosquito which transmits the infection in the tropical regions².

The sexual transmission is also possible and can also lead to the adverse fetal outcomes in case of pregnant females. The males may harbor the virus in the semen after the infection when the virus cannot be detected in the blood⁴.

DIAGNOSIS

The diagnosis of the Zika virus infection depends on the history taking e.g. residing or travels to the areas where Zika virus is present. Another important measure to detect is to perform the lab test to confirm the presence of Zika virus in the blood, bloody fluids such as saliva or the urine⁵.

PREVENTION

WHO prevention and control strategies are based on the surveillance, response activities and research.³ As the mosquitoes are the vectors of this infection so it's of utmost importance to eliminate the breeding sites of mosquitoes. It can be done through the removal of the breeding sites and reducing the contact between the people and the mosquitoes. One must use the skin barriers such as mosquito nets, screens and sleeping with doors and windows closed. Wearing full sleeved & light coloured clothes and using insect repellents must be emphasized².

The containers filled with water should be either emptied or cleaned/covered as it serves as the suitable places for mosquitoes to breed. Elderly and the young children must be given special attention as they may not be able to take care of them².

Insecticides spray must also be carried out during the outbreaks of the disease. The travellers must also careful and protect themselves from the mosquito bites.²

The pregnant females are recommended to postpone their travel to the areas where Zika virus is spreading and follow the above said precautions⁶.

TREATMENT

The disease caused by the Zika virus is usually mild and does not require any specific treatment. The infected individual must drink adequate fluids & rest adequately. The pain and fever are treated with common medicines. In case if the symptoms worsen, one should seek medical care and advice. No vaccine is currently available².

INDIAN SCENARIO

India has no reported case of Zika virus infection and already tested two vaccines against the virus⁷.

CONCLUSION

Zika virus infection is caused by the flavivirus and transmitted by the infected aedes mosquitoes. The infection is mild in nature and person may be asymptomatic. But it can cause complications like Guillain Barré syndrome and microcephaly in the newborns. Currently the vaccines against this virus are under trial. One must follow the preventive measures in order to protect themselves from the mosquito bites especially in the areas where Zika virus is prevalent.

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