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Review Article

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ZIKA VIRUS-LIFE THREATNING VIRUS

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ABSTRACT

Zika virus is an emerging mosquito-borne arbovirus that was first isolated from a rhesus monkey in Uganda in 1947, and caused sporadic human infections in some African and Asian countries, with usually mild symptoms of ever, rash, and arthralgia. A causal link between Zika virus in the mother and microcephaly in the newborn baby has yet to be firmly established, but is a worrying possibility.

KEYWORDS: Zika virus, Chikungunyna.

INTRODUCTION

Zika is a viral infection that is spread by the bite of an infected mosquito. Outbreaks typically occur in tropical Africa and south east Asia. In May 2015, Brazil reported the first outbreak of Zika in the Americas. Zika is now present in tropical areas.

BACKGROUND

ZIKAV, an arthropod-borne virus (arbovirus) belonging to the family *Flaviviridae* and genus *Flavivirus* , was first isolated in 1947 from a monkey in the Zika forest, Uganda.[1] Sporadic human Zika fever cases have been reported since the 1960s. The first documented outbreak outside Africa and Asia occurred in 2007 in the Yap State, Micronesia, in the North Pacific, where Zika fever was characterised by rash, conjunctivitis and arthralgia.[2]

ZIKA virus has been isolated from several *Aedes* mosquito species, notably including *Ae. aegypti* and *Ae. albopictus*. *Ae. aegypti* is widespread in the tropical and subtropical regions of the world and *Ae. albopictus* is now established in many parts of Europe, especially Mediterranean countries. Recent reports of imported cases of ZIKAV infection from south-east Asia or the Pacific to Europe or Japan highlight the risk of ZIKAV emergence in parts of the world where the vector is present.[3]

TRANSMISSION

✓Zika is transmitted to people through the bite of an infected Aedes mosquito. This is the same mosquito that transmits dengue and chikungunya.

✓Zika virus has been found in semen and person-to-person sexual transmission has been documented, although this is uncommon.

✓If a person has Zika, avoid mosquito bites for the first week of her illness. During the first week of infection, Zika virus can be found in the blood and passed from an infected person to another mosquito through mosquito bites.

✓An infected mosquito can then spread the virus to other people.

SYMPTOMS

✓Symptoms usually begin 3-12 days after being bitten by an infected mosquito and last several days to a week.

✓The most common symptoms are fever, rash, joint pain or red eyes.

✓Other symptoms include muscle pain and headache.

✓Hospitalization and deaths from Zika are rare.

The difference between zika, dengue, and viruses chikungunya

✓Most Zika patients have skin rashes

✓Most dengue patients have a higher fever and more severe muscle pain

✓Most chikungunya patients have a higher fever and more intense joint pain in the hands, feet, knees, and back.

TREATMENT

There is no specific treatment for Zika. Symptoms are treated by getting rest, drinking fluids to prevent dehydration and taking medicines such as acetaminophen (paracetamol) to relieve fever and pain. Aspirin and other non-steroidal anti-inflammatory drugs (NSAIDs) like ibuprofen and naproxen should be avoided until dengue can be ruled out to reduce the risk of increased bleeding.[4]

Prevention: No vaccine or preventive drug is available at this time. The best way to prevent Zika is to avoid mosquito bites when traveling to an area where Zika is present.[5]

- Use insect repellent. Repellents containing DEET, picaridin IR3535 and oil of lemon eucalyptus PMD provide long lasting protection against mosquitoes that may transmit virus such as Zika, dengue and chikungunya.

- When indoors, use air conditioning, window screens or insecticide-treated mosquito netting to keep mosquitoes out of the home.

- Reduce the number of mosquitoes outside the home or hotel room by emptying or routinely changing standing water from containers such as flowerpots, pet dishes and bird baths.

- Weather permitting, wear long sleeves and pants when outdoors.[6]

Risk of Zika in pregnancy: Zika can be spread from a pregnant woman to her unborn baby. There have been reports of a serious birth defect of the brain called microcephaly and other poor pregnancy outcomes in babies of mothers who were infected with Zika.

CONCLUSION

Human Zika virus infection appears to have changed in character while expanding its geographical range. The future transmission of Zika infection is likely to coincide mainly with the distribution of *Aedes* mosquito vectors, although there may be rare instances of person-to-person transmission (other than mother to child, e.g. through semen). Beyond the range of mosquitos, infection has been, and will continue to be, carried widely by international travel.

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