

ZIKA VIRUS IN PREGNANCY

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Have you heard of the Zika virus?

It's caused by a simple mosquito bite, and has been linked to an alarming number of cases of brain damage in newborn babies

Abstract

Zika virus is an emerging mosquito-borne virus. It is transmitted to people through the bite of an infected mosquito. Zika virus diagnosis can only be confirmed by laboratory testing for the presence of Zika virus RNA. Pregnancy affected with Zika virus can infect the fetus results in birth defect, as well as other neurological disorders. Mosquitoes and their breeding sites pose a significant risk factor for Zika virus infection.¹ Prevention and control relies on reducing mosquitoes through source reduction and contact between mosquitoes and people.

Key words - Genre. Vector. Reservoir.

Introduction

The word 'ZIKA' virus is derived from the Zika forest in Uganda, where the virus was first isolated by a Scientist in 1947 in rhesus monkeys and it was subsequently identified in humans in 1952 in Uganda. Outbreaks of Zika virus disease have been recorded in Africa, America, Asia and the Pacific areas.

Mode of transmission

- **Genre:** Flavivirus
- **Vector:** Aedes mosquitoes (which usually bite during the morning and late afternoon/evening hours)
- **Reservoir:** Unknown



Zika virus is transmitted to people through the bite of an infected mosquito from the Aedes genus. This is the same mosquito that transmits dengue, chikungunya and yellow fever. However, sexual transmission of Zika virus has been described in 2 cases.¹

Incubation Period

The incubation period (the time from exposure to symptoms) of Zika virus disease is not clear, but is likely to be a few days to a week, which last for 2-7 days.

Diagnosis

Infection with Zika virus may be suspected based on symptoms and recent history (e.g. residence or travel to an area where Zika virus is known to be present). Zika virus diagnosis can only be confirmed by laboratory testing for the presence of Zika virus RNA in the blood or other body fluids, such as urine or saliva.²

Symptoms

Common symptoms of infection with the virus include:

- Mild headaches
- Maculopapular rash
- Fever
- Malaise
- Conjunctivitis
- Joint pains

Management

Zika virus disease is usually relatively mild and requires no specific treatment. People sick with Zika virus should get plenty of rest, drink enough fluids, and treat pain and fever with common medicines. If symptoms worsen, they should seek medical care and advice. There is currently no vaccine available.

Prevention

Mosquitoes and their breeding sites pose a significant risk factor for Zika virus infection. Prevention and control relies on reducing mosquitoes through source reduction (removal and modification of breeding sites) and reducing contact between mosquitoes and people.

- This can be done by using insect repellent regularly
- Wearing clothes that cover as much of the body as possible
- Using physical barriers such as window screens, closed doors and windows, and if needed, additional personal protection, such as sleeping under mosquito nets during the day
- It is extremely important to empty, clean or cover containers regularly that can store water, such as buckets, drums, pots etc,

- Other mosquito breeding sites should be cleaned or removed including flower pots, used tyres and roof gutters
- Community must support the efforts of the local government to reduce the density of mosquitoes in their locality
- Special attention and help should be given to those who may not be able to protect themselves adequately, such as young children, the sick or elderly. During outbreaks, health authorities may advise that fogging of insecticides be carried out
- Travellers should take the basic precautions described above to protect themselves from mosquito bites.³

During pregnancy

Zika virus RNA was detected in the amniotic fluid of two pregnant women whose fetuses had microcephaly, indicating that the virus had crossed the placenta and could have caused a mother to-child infection.

Tests & treatments can be provided for a mother exposed to Zika

Pregnant mother who has travelled in affected country are advised to undergo blood test to detect Zika Virus. The results are much faster nowadays.

If the test is positive or inconclusive

Doctor will consider administering an amniocentesis to check the baby for Zika infection. Ultrasounds for every three to four weeks for the rest of the pregnancy is advised to check for signs of microcephaly and unusual calcium deposits in the skull. And also measure the length, weight and width of baby's head to

check for microcephaly, regardless of Mom's Zika test results.

If the test is Negative

- Doctor will administer an ultrasound to look for signs of microcephaly or unusual calcium deposits in the skull.
- If no signs are apparent, there will be only routine prenatal care
- If there are signs of either, your doctor will retest you for Zika and potentially administer an amniocentesis to test your baby for Zika³

Zika and other Birth Outcomes

In addition to microcephaly, other problems have been detected among fetuses and infants infected with Zika virus before birth, such as absent or poorly developed brain structures, defects of the eye, hearing deficits, and impaired growth.

Future Pregnancies

Based on the available evidence, we think that Zika virus infection in a woman who is not pregnant would not pose a risk for birth defects in future pregnancies after the virus has cleared from her blood.³

Zika infection and breastfeed

Zika virus has been detected in breast milk but there is currently no evidence that the virus is transmitted to babies through breastfeeding. WHO recommends exclusive breastfeeding for the first 6 months of life.

Conclusion

The infections, associated with zika virus, often causes no or only mild symptoms; however the illness cannot be prevented by medications or vaccines. Zika fever in pregnant women is associated with microcephaly. Researchers are collecting data to better understand the extent Zika virus' impact on mothers and their children

References

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