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Zika Virus and Pregnancy: An Update

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Zika virus infection has gained worldwide attention over the last year with numerous cases of Zika virus infection reported in Brazil. The mosquito-borne flavivirus was first reported in humans in the early 1950s in Africa. The virus is spread by the Aedes mosquito species (i.e. *Ae. Aegypti and Ae albopictus)*. The most devastating aspect of the pandemic is the spread of the virus from pregnant women to her developing fetus, which has been tied to certain birth defects including microcephaly and intracranial calcifications, resulting in smaller, underdeveloped brains. Cases of Guillain-Barre Syndrome have also been reported in adults.

Up until recently, except for a few sexually acquired cases in the United States (US), the Zika virus had been restricted to those who traveled to affected areas. However, the number of cases in the US is growing. What was thought to be a foreign problem or a traveler's disease, has now come to the mainland. According to the CDC, the Florida Department of Health has identified an area in one neighborhood of Miami where Zika is being transmitted by Aedes mosquitoes. The species is present in 30 states in the southern portion of the US.

Neither an effective treatment nor a vaccine is available for Zika virus; therefore, the public health response primarily focuses on prevention, particularly in pregnant women. One of the biggest challenges is the lack of funding to combat virus spread as a result of the US government's inability to agree on a bill that would fund much needed research and resources to control mosquitoes.

While there are generally very mild or no symptoms, it is important for all clinicians, including dermatologists, to be able to evaluate and counsel patients on proper recognition and prevention of the Zika virus infection. The most common symptoms are nonspecific flu-like symptoms, which include fever, rash, joint pain, conjunctivitis, followed by muscle aches and headache. The skin rash is typically a maculopapular, morbilliform or scarlitiniform starting day 1 on the face then spreading to the rest of the body. The rash is completely resolved within 1 week. The infection is usually self-limiting and resolves with supportive therapy.

Pregnant women with suspected Zika virus infection, or those who have recently travelled to an infected zone, should see their doctor immediately and undergo testing for the Zika virus within 2 weeks of symptom onset. At this time, it is unclear whether there is a certain term in pregnancy where the fetus is most susceptible to the effects of the virus.

The CDC recommends that pregnant women avoid travel to active Zika virus transmission areas. If they live in or must travel to an active area it is recommended that they use an insect repellent such as DEET, wear protective clothing, and use mosquito nets. Sex partners of pregnant women must take the same precautions in addition to use of barrier protection with every sexual encounter or abstain from sex for the duration of the pregnancy.

Women of reproductive age are encouraged to wait at least 8 weeks after symptoms first appear before trying to get pregnant. Men should wait at least 6 months and be counseled to also correctly and consistently use condoms for vaginal, anal, and oral sex or abstain during this time period to avoid transmission.

A better effort is needed to protect our most precious and newest additions to society. As the summer heat wave continues perhaps we can do our part to encourage patients to not only practice sun safety, but to also be cognizant of exposures to mosquitoes and incorporate some of the above transmission prevention practices.

References:

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