

LETTER TO THE EDITOR

Rumor has it; the truth behind Zika virus

Dear Editor,

Zika virus infection has recently become a well mentioned topic in healthcare and media sectors all over the world. Although first identified in rhesus monkeys in 1947, its infection in humans was confirmed in 1952. Since then, outbreaks of Zika virus have been reported in parts of Africa, Asia and South America.

Belonging to the flavivirus family, the same family as that of the dengue virus, Zika virus is transmitted by the Aedes mosquito. These mosquitoes are known to bite either in the early morning or late evening hours. Proper preventive measures must be implemented during these hours especially in areas where disease is known to be prevalent.

Zika virus infection has been found to be symptomatic in only one out of five cases [1]. The most common symptoms reported in confirmed infections are fever, headache, fatigue, malaise, maculopapular rash, conjunctivitis, and arthralgias with investigations revealing leucopenia and thrombocytopenia [2]. The incubation period of the virus is a few days with symptoms resolving within 2-7days [2]. The cornerstone therapy of symptomatic patients is with bed rest, adequate hydration and pain killers. Avoidance of aspirin or any other non steroidal anti-inflammatory drug (NSAID) is important since symptoms resemble dengue hemorrhagic fever and can cause bleeding in the latter, if it has been misdiagnosed [3]. Recently in Brazil, local health authorities have noted an increase in Guillain-Barré syndrome (GBS) which correlated with Zika virus infections in the general population, as well as an increase in babies born with microcephaly in northeast Brazil. Agencies studying the Zika outbreaks closely are discovering an increasing amount of evidence about the link between Zika virus and microcephaly although a causal link has not yet been established [4]. Zika virus infection in



http://www.elsevier.com/locate/jiph

pregnancy can be confirmed by RT-PCR in amniotic fluid which is positive even if the mother's urine and serum samples test negative for the virus [5]. The main concern regarding Zika virus infection is that 80% of the individuals are asymptomatic and those who do show symptoms disregard the illness as the flu [5].

With no vaccine or antiviral therapy available, the main tools against Zika virus remains protection from mosquito bites. Insect repellents should be applied on exposed body surfaces and an effort should be made in wearing clothes that cover the maximum possible surface area of the body. Other barrier methods of protections such as keeping the doors and windows closed and sleeping under mosquito nets should also be used. Pregnant women should avoid travelling to risky areas. However, if pregnant women travelling to areas known to have the zika virus develop symptoms within two weeks of their travel, it should elicit a high index of suspicion. If microcephaly and intracranial calcifications are detected on routine ultrasound in a pregnant woman, amniocentesis should be performed and if positive for zika virus, it should be reported to the local authorities.

Authors' contribution

HFH and MYH developed the original ideas and drafts for the article. SAH added further ideas. SAH revised the article for intellectual content. All the authors have read and approved the final paper.

Funding

No funding sources.

Competing interests

None declared.

http://dx.doi.org/10.1016/j.jiph.2016.04.004

1876-0341/© 2016 King Saud Bin Abdulaziz University for Health Sciences. Published by Elsevier Limited. All rights reserved.

Ethical approval

Not required.

References

- Zika virus Symptoms, diagnosis and treatment, http://www.cdc.gov/zika/symptoms/ [accessed 26.02.16].
- [2] Kutsuna S, Kato Y, Takasaki T, Moi ML, Kotaki A, Uemura H, et al. Two cases of Zika fever imported from French Polynesia to Japan. Euro Surveill 2014;19:2068–73.
- [3] Zika virus: What are the chances I'll get it? (And other Q&As), http://edition.cnn.com/2016/02/09/health/zika-symptomsvaccine-tests-questions/ [accessed 26.02.16].
- [4] Zika virus, http://who.int/mediacentre/factsheets/zika/en/ [accessed 26.02.16].

[5] European Centre for Disease Prevention and Control. Zika virus epidemic in the Americas: potential association with microcephaly and Guillain–Barré syndrome; 2016 http://ecdc.europa.eu/en/publications/Publications/rapidrisk-assessment-zika-virus-first-update-jan-2016.pdf [accessed 26.02.16].

Hareem F. Hussain Muhammad Y. Hafiz Syed A. Hussain* Dow Medical College, Dow University of Health Sciences, Karachi, Pakistan

* Corresponding author. Tel.: +92 2136630517. *E-mail address*: drsahussain121@gmail.com (S.A. Hussain)

26 February 2016

Available online at www.sciencedirect.com

ScienceDirect