

UC Davis

Dermatology Online Journal

Title

A Quick Review of the Cutaneous Findings of the Zika Virus

Permalink

<https://escholarship.org/uc/item/4rx5g4zz>

Journal

Dermatology Online Journal, 22(7)

Authors

Singh, Rasnik K
Atanelov, Zaza
Aabodi, Natalie
et al.

Publication Date

2016

DOI

10.5070/D3227031655

Copyright Information

Copyright 2016 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives License, available at <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Peer reviewed

Letter

A Quick Review of the Cutaneous Findings of the Zika Virus

Rasnik K. Singh BS¹, Zaza Atanelov BS², Natalie Aabodi BA³, John Koo MD⁴

Dermatology Online Journal 22 (7): 19

¹ **University of California, Los Angeles, David Geffen School of Medicine**

² **New York Medical College**

³ **University of California, Los Angeles**

⁴ **University of California, San Francisco, Department of Dermatology**

Correspondence:

Rasnik K. Singh
University of California, San Francisco, Department of Dermatology, San Francisco, California
515 Spruce St. San Francisco, CA 94118
Email: RKSingh@mednet.ucla.edu

Abstract

The current outbreak of Zika virus is a growing public health concern, especially for pregnant women. Zika virus infection may manifest as a maculopapular skin eruption that progresses rostrocaudally, with or without hemorrhagic manifestations such as petechiae and gingival bleeding. Recognizing the cutaneous findings associated with Zika virus may aid in early diagnosis, particularly in individuals at increased risk for the disease.

Keywords: Zika Virus, cutaneous viral manifestations

Significance

The Zika virus is an arbovirus within the *Flaviviridae* family that has been a subject of broad and current interest because of recent disease outbreaks in Africa, Asia, and the Americas. Originally isolated in Rhesus monkeys in 1947, human infection was first reported in 2007 in the Federated States of Micronesia [1]. During the current epidemic that began in May 2015, Zika infections have been confirmed in at least 33 countries and territories [2]. As of February 10th, 2016, 52 travel-associated cases of Zika virus disease have been reported in the United States [2]. Thus, it is important to review the cutaneous findings of Zika infection that can aid in early identification and prevention of further spread of disease.

Features of Zika Virus

The virus is primarily transmitted between humans through a mosquito vector. The spread of infection has also been reported through blood transfusions, sexual contact, and vertical transmission from mother to fetus [2]. In utero transmission of Zika virus is of particular concern given the theorized risk for microcephaly among affected fetuses. Following inoculation, the virus has an incubation period of 3 to 12 days, followed by a mild illness that may last up to one week [3]. The most prevalent findings in affected adults include transient fever, rash, myalgia, arthralgia, headache, and conjunctivitis [3].

Cutaneous Manifestations

The maculopapular skin eruption of Zika virus can mimic the presentation of measles or scarlet fever, with diffuse lesions that begin on the face and subsequently extend to the trunk and extremities, with palmoplantar sparing [4]. Additional cutaneous findings that may develop simultaneously include petechiae and gingival bleeding. Lesions may be pruritic and heal with desquamation. The eruption generally subsides within 3 days, with complete resolution expected to occur within one week [2].

Implications

At the time of writing, there are no approved vaccines available for the Zika virus. Fortunately, the disease course is typically mild in adults and no specific therapy is necessary other than supportive care. Suspected patients should be counseled to rest, remain well-hydrated, and use acetaminophen for pain and fever relief [2]. Primary prevention through avoidance of mosquito bites should be emphasized, particularly to those who travel to endemic areas [2, 3].

Although the cutaneous findings of Zika are neither particularly life threatening nor specific, it is important for clinicians to keep this syndrome among their differential diagnoses when contemplating a viral etiology. For the most up-to-date recommendations from the Centers for Disease Control (CDC) and World Health Organization (WHO), please visit <http://www.cdc.gov/zika/>.

References

1. Samarasekera U, Triunfol M. Concern over Zika virus grips the world. *Lancet* (London, England). 2016.
2. World Health Organization. Zika Virus. 2016. Accessed February 29th, 2016.
3. CDC Division of Vector-Borne Diseases. Revised diagnostic testing for Zika, chikungunya, and dengue viruses in US Public Health Laboratories. Centers for Disease Control and Prevention;2016.
4. Hayes EB. Zika virus outside Africa. *Emerg Infect Dis*. 2009;15(9):1347-50. [PMID: 19788800]