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What is Chikungunya Fever?

Chikungunya Fever is a disease caused by the Chikungunya virus (CHIKV). CHIKV belongs to the alphavirus genus (togoyiridae family). This virus is transmitted by mosquito Aedes' bite, particularly Aedes aegypti and *Aedes albopicuts*.

Global Chikungunya fever situation

The first occurrence of the disease was described in Tanzania in 1952. Starting in 2004, intense outbreaks have been constantly reported in Africa, islands of the Indian Ocean, and the Pacific region, including Australia and Southeast Asia (India, Indonesia, Myanmar, Maldives, Sri Lanka, and Thailand). In 2007, the virus extended to Italy, where it produced an outbreak transmitted by *Ae albopictus* in the Emilia-Romagna region. Recent Chikungunya fever outbreaks have shown important impacts on Public Health, mainly in health services.

In the Americas, and as of today, autochthonous transmissions have not been detected. However, the high infestation of mosquito *Aedes aegypti* and the presence of *Aedes albopictus* in the Region, along with the great mobility of people as a result of international travel, constitute a potential risk for the introduction of the virus to our Region. As of today, only imported cases have been reported in the United States of America, Canada, French Guyana, Martinique, Guadalupe, and recently in Brazil¹.

The World Health Organization along with CDC Division of Vector-Borne and Infectious Diseases are finalizing a "Preparedness and Response Guide for the possible introduction of Chikungunya virus in the Americas." This guide has been the product of the conclusions drawn from an experts' meeting, which took place in Lima, Peru, from 21 to 23 July, 2010.

Clinical Picture

The clinical picture emerges after an incubation period of 2-4 days. Symptoms appear abruptly and include high fever, headache, myalgia, and atralgia (predominantly in the limbs and large joints). Also, the appearance of a maculopapular rash is frequent. Severe forms of the disease are not very frequent.

Symptoms usually recede in 7 to 10 days, although atralgia and joint stiffness might persist intermittently for various months.

¹ On 3 September, 2010, Brazil's IHR NFP reported an imported case of Chikungunya fever in a 41-year-old male with recent travel history to Indonesia.

Diagnostic

The main diagnostic methodology is serology for IgM (detectable through ELISA from day 2 to several weeks after), as well as for IgG (detectable in convalescent patients, and remaining for years). RT-PCR is also used, mainly in blood samples obtained during the initial phase.

Treatment

The treatment for the disease is symptomatic, with paracetamol being the medicine of choice for pain; additionally, non-steroidal antiiflamatories are also used when necessary. It is recommended to avoid steroids, as well as aspirins, during the acute period of the disease. For recovering patients, gently physiotherapy is recommended. Suspected cases must remain under mosquito nets during the febrile period.

Recommendations

- Inform about the disease to health professionals; also, inform about the risk of spread in the Region.
- Establish hospital outbreak surveillance, especially in emergency services.
- Strengthen laboratory diagnostics.
- Apply the pertinent measures to reduce the vector's density, attempting to obtain the acceptance and collaboration of the local population in the adoption of these measures.
- Offer quality and transparent information on this disease through local communication outlets.