

TMS

Volume



TMSS Medical College Journal

January 2017

**An Official Publication
of
TMSS Medical College, Bogra**

TMSS Medical College Journal

Vol. 8, No. 1, January 2017

An Official Publication of TMSS Medical College, Bogra, Bangladesh

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Published by

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 on behalf of the TMSS Medical College

Graphic Designer

Md. Sirajul Islam
 TMSS, Bogra

Printed by

TMSS Printing Press
 Bogra, Bangladesh
 e-mail: tmssprintingpress@gmail.com

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Editorial**Chikungunya : an emerging health problem.****Key Facts**

- Chikungunya is viral disease transmitted to humans by infected mosquitoes. it causes fever and severe joint pain. Other symptoms include muscle pain, headache, nausea, fatigue and rash.
- Joint pain is often debilitating and can vary in duration.
- Chikungunya is a virus transmitted to humans through the bite of infected mosquito. These infected mosquitoes can also carry other diseases like dengue and yellow fever.
- The disease shares some clinical signs with dengue and zika , and can be misdiagnosed in areas where they are common.
- There is no cure for the disease. treatment is focused on relieving the symptoms.
- The proximity of mosquito breeding sites to human habitation is a significant risk factor for chikungunya.
- The disease mostly occurs in Africa, Asia and the Indian subcontinent. However a major outbreak in 2015 affected several countries of the Regions of the Americas.

Chikungunya is a mosquito – borne viral disease first described during an outbreak in southern Tanzania in 1952. It is an RNA virus that belongs to the alpha virus genus of the family Togaviridae. The name “chikungunya” derives from a word in the Kimakondi language, meaning “to become contorted” and describes the stooped appearance of suffers with joint pain(arthralgia).

Signs and symptoms.

Chikungunya is characterized by an abrupt onset of fever frequently accompanied by joint pain. Other common signs and symptoms include muscle pain, headache, nausea, fatigue and rash. The joint pain is often very debilitating but usually lasts for a few days or may be prolonged to weeks. Hence the virus can cause acute, subacute or chronic disease.

Most patients recover fully, but in some cases joint pain may persists for several months or even years. Occasional cases of eye, neurological and heart complications have been reported as well as gastrointestinal complaints.

Transmission

Chikungunya has been identified in over 60 countries in Asia, Africa, Europe and the Americas.

The virus is transmitted from human to human by the bites of infected female mosquitoes. Most commonly, the mosquitoes involved are *Aedes aegypti* and *Aedes albopictus* , two species which can also transmit other mosquito-borne viruss including dengue. These mosquitoes can be found biting through daylight hours, though there may be peaks of activity in the early morning and late afternoon. Both species are found biting outdoors but *Aedes aegypti* will also readily feed indoors.

After the bite of an infected mosquito, onset of illness occurs usually between 4 and 8 days from 2 to 12 days.

Diagnosis

Several methods can be used for diagnosis. Serological tests, such as

enzyme-linked immunosorbent assays(ELISA) may confirm the presence of IgM and IgG anti-chikungunya antibodies. IgM antibody levels are highest 3 to 5 weeks after onset of illness and persist for about 2 months. Samples collected during the first week after the onset of symptoms should be tested by both serological and virological methods(RT-PCR).

The virus may also be isolated from the blood during the first few days of infection. Various reverse transcriptase -polymerase chain reaction(RT-PCR) methods are available but are of variable sensitivity.

Treatment

There is no specific antiviral drug treatment for chikungunya. Treatment is directed primarily at relieving the symptoms including the joint pain using

anti-pyretics, optimal analgesics and fluids. There is no commercial chikungunya vaccine.

Prevention and control

The proximity of mosquito vector breeding sites to human habitation is a significant risk factor for chikungunya as well as for other diseases that these species transmit. Prevention and control relies heavily on reducing the number of natural and artificial water- filled container habitats that support breeding of the mosquitoes. This requires mobilization of affected communities. During outbreaks, insecticides may be sprayed to kill flying mosquitoes , applied to surfaces in and around containers where the mosquitoes land and to treat water to kill the immature larvae.

For protection during outbreaks of chikungunya, clothing which minimizes skin exposure to the day-biting vectors is advised, repellents can be applied to exposed skin or to clothing in strict accordance with product label instructions.

Repellants should contain DEET (N, N-diethyl- 3- methylbenzamide), IR 3535(3-[N-acetyl-N butyl]- aminopropionic acid ethyl ester) or icaridin (1-piperidinecarboxylic acid , 2-(2-hydroxyethyl)-1- methylpropylester).

For those who sleep during the daytime, particularly young children, or sick or older people, insecticide-treated mosquito nets afford good protection.

Mosquito coils or other insecticide vaporizers may also reduce indoor biting

Basic precautions should be taken by people travelling to risk areas and these include use of repellents, wearing long sleeves and pants and ensuring rooms are fitted with screens to prevent mosquitoes from entering.

Reference : w.w.w.who.int/mediacentre/factsheets/fs327/en

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