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Chikungunya

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ABSTRACT

Now a days, Chikungunya has become the principal jolt in the world. Chikungunya is a form of viral fever caused by an Alphavirus that is spread by mosquito bite of the *Aedes aegypti* mosquito. The condition known as Sandhi jwara in Sanskrit has the similar symptoms to Chikungunya. The symptoms of Chikungunya include sudden fever, joint pain with or without swelling, chills, headache, nausea, vomiting, lower back pain, and skin irritation. Chikungunya spreads from one individual to another through the bite of the mosquito and is generally observed among family members. Chikungunya mainly occurs in the continents of Africa and Asia. Several countries including India have increased surveillance for this disease since 2006. In 2007, limited transmission of Chikungunya virus occurred in Italy. This disease is rarely life-threatening. Epidemics of fever, rash and arthritis, resembling Chikungunya fever have been recorded as early as 1824 in India. However, the virus was first isolated in 1952 from both, human beings and mosquitoes in Tanzania during an epidemic of fever that was considered clinically indistinguishable from dengue. Till date, there is neither any specific anti-viral treatment available for Chikungunya nor any vaccine. The treatment of Chikungunya at present is only symptomatic. Medicines such as naproxen, acetaminophen, or paracetamol are employed to relieve fever and joint pain. Aspirin should be avoided as it increases the risk of bleeding.

Key words : *Aedes aegypti*, Chikungunya, Chills, Fever

INTRODUCTION

“One fine morning, I experienced while talking with one of my close friends, a growing pain in my right hand, and the joints of the lower arm, which proceeded step by step upwards to the shoulder and then continued onto all the limbs; so much so that by evening, I was already in my bed with high fever. I often found myself crawling to perform day-to-day household activities, as I was not in a position to stand erect. It has now been three weeks that I have not been able to go out of my home due to severe and continuous pain in my joints, arthralgia, severe fatigue and swelling in my both the ankles. Climbing the stairs up and down has become a terrible task due to stiffness and pain in my feet.” These are the wordings of a patient suffering from Chikungunya.

Background:

The word Chikungunya has no connection for its origin to chickens. The term Chikungunya is derived from the word ‘Swahili’, which means stooped posture (In Makonde language which is spoken in East Africa). The disease was first described by Marion Robinson and W.H.R. Lumsden (Lumsden, 1955). Chikungunya fever is a viral

illness that is spread by the bite of infected *Aedes aegypti* mosquito. It is caused by an insect-borne single stranded RNA virus, called as Chikungunya virus (CHIKV) or Buggy Creek Virus. This virus is an arthropod borne virus (arbovirus), a member of the genus, *Alphavirus*, in the family *Togaviridae*. This virus is spherical in shape and 60 nm in diameter. A burst of infection occurred in Africa in 2006, through a new species of mosquito called *Aedes Albopictus*. About 1 million people are infected with Chikungunya annually since 2006 around the Indian Ocean and causes intense joint pain, which can persist for years.

History:

The first outbreak of Chikungunya virus infection (CHIKV) occurred in Tanzania of East Africa in 1952. Soon thereafter, epidemics were noted in the Philippines (1954, 1956, and 1968), Thailand, Cambodia, Vietnam, India, Burma, and Sri Lanka. In 1999, an outbreak had occurred in Port Klang of Malaysia. Since 2003, there have been outbreaks in the islands of the Pacific Ocean, including Madagascar, Comoros, Mauritius, and Reunion Island, with a surge in numbers of cases after the December 2004 Tsunami. In January 2006, over ten thousand cases have been reported in an epidemic on