Chikungunya

Chikungunya is an infection caused by the Chikungunya virus (CHIKV). It is mainly spread by the *Aedes albopictus and Aedes aegypti* mosquitoes

Cases of chikungunya are usually reported in Africa and Asia but there have been few instances of it happening in North America and Europe as well.

This article will give details about Chikungunya within the context of the IAS Exam.

Recorded outbreaks of the Chikungunya Disease

Each year, outbreaks of Chikungunya cause about 3 million infections every year. It's the developing nations in Africa and Asia that report the most cases. The transmission of the pathogen is high in urban environments where contact between humans and mosquitoes is at its peak.

There is no data available to ascertain when did Chikungunya find its way into Asia from Africa or how it did find its way, but the Asian strain outbreaks primarily happen in India and Southeast Asia.

To know more in detail about Viruses, candidates can checkout the linked article

Transmission and Diagnosis of Chikungunya

As stated before, Chikungunya is mainly spread by the *Aedes albopictus* and *Aedes aegypti* mosquitoes which bite during the day. Another form of transmission is vertical transmission as in, mother to child during birth or pregnancy. Although in theory it is possible for an infection to happen through tainted blood samples and organ donation, no cases have been reported as of late.

A chikungunya diagnosis is done through blood testing for the virus's RNA to find antibodies of the virus. At times, symptoms can be mistaken for dengue and Zika virus fever as well. It has been reported that those previously infected with Chikungunya become immune to the virus

At present there is no proven method to test for chronic symptoms associated with Chikungunya fever although nonspecific laboratory findings such as C reactive protein and elevated cytokines can correlate with disease activity.

Symptoms of Chikungunya

The following are the common symptoms of Chikungunya are as follows:

- High fever
- Joint pain
- Rash
- Headache
- Fatigue
- Digestive problems,
- Conjunctivitis

In about 40-50% cases, rashes occur after two to five day after onset of symptoms. Abdominal pain, nausea vomiting or diarrhea may also occur. Normal activity is limited due to fatigue.

Sometimes, inflammation of the eyes may occur in the form of iridocyclitis, or uveitis, and retinal lesions may occur.

Treatment and Prevention of Chikungunya

There is no specific method of treatment for chikungunya at present. Supportive care and treatment of its symptoms are the best known methods to fight against chikungunya.

No vaccine against the disease has been made and the most effective methods of prevention is protection against contact with disease-carrying mosquitoes and controlling mosquito populations by destroying or limiting their habitats. This involves eliminating standing water bodies, preventing mosquitoes from laying eggs. If this isn't possible then insecticides and repellents need to be employed.

Other preventive measures include:

- Wearing bite-proof clothes such as long sleeves and trousers
- Treating garments with pyrethroids (a type of insect repellent)
- Securing windows or any other points of entry with meshes or anti mosquito nets.

Relevant Question regarding Chikungunya

What is the recovery time for a person afflicted with Chikungunya?

Most people recover fully, with symptoms resolving in three to 10 days. For some people, joint pain may continue for months, or even years. Death from complications of chikungunya is very rare.

What are the long term effects of chikungunya?

Joint pain can persist in subacute or chronic form for several months or even years, particularly in older patients.

When was the first recorded outbreak of Chikungunya in India?

In India, the first outbreak of Chikungunya was reported in Kolkata in 1963. This was followed by epidemics in Chennai, Puducherry, and Vellore in 1964; Visakhapatnam, Rajahmundry, Kakinada, and Nagpur in 1965; and Barsi in 1973.