



W.U.S. HEALTH CENTRE  
UNIVERSITY OF DELHI  
DELHI - 110007

DENGUE FEVER : ADVISORY

Dengue fever is a mosquito-borne tropical disease caused by the dengue virus.

Symptoms and Signs :- Dengue triad: High fever, severe headache, skin rash

1. **Sudden onset high fever** biphasic or saddleback in nature, breaking & returning.
2. **Severe headache behind the eyes**, severe muscle and joint pains.
3. Characteristic **skin rash** similar to measles. In some it develops into the life-threatening dengue hemorrhagic fever, resulting in bleeding, low levels of platelets and blood plasma leakage or into dengue shock syndrome when low blood pressure occurs.
4. **During critical phase** : lymphadenopathy, mouth & nose bleeding, low blood pressure, accumulation of fluid in the chest, accumulation of fluid in abdominal cavity, depletion of fluid, organ dysfunction, gastrointestinal bleeding.
5. **During recovery phase** : altered level of consciousness, seizures, itching, slow heart rate, peeling of the skin, slow heart rate, fatigue .
6. **Dengue shock syndrome.**
7. **Dengue hemorrhagic fever** – usually affects children less than 10 years of age.

The incubation period ranges from 4 to 7 days.

Diagnosis :-

On examination :- Lymphadenopathy, Pleural effusions, Ascites.

- Low white blood cell count (WBC); positive tourniquet test or any warning sign.
- The earliest change is a low white blood cell count, low platelets and metabolic acidosis. Elevated level of Aminotransferase (AST and ALT) rising hematocrit and hypoalbuminemia
- Check for the virus or antibodies to the virus.

Treatment :-

- No specific treatment. There is no vaccine to prevent dengue fever.
- Drink plenty of fluids.
- Intravenous fluids with electrolyte replacement to maintain urinary output of 1 ml/kg/hr.
- Acetaminophen can alleviate pain and reduce fever.
- Avoid Aspirin, Ibuprofen and Naproxen Sodium.
- Transfusion with packed red blood cells or whole blood to replace blood loss.
- During recovery phase intravenous fluids are discontinued to prevent a state of fluid overload or else loop diuretic e.g. furosemide if the patient is outside the critical phase.

Prevention :-

- Stay away from heavily populated residential areas, if possible.
- Use mosquito repellents, even while indoors.
- When indoors, live in air conditioned room and in well screened houses.
- Make sure window and door screens are secure and free of holes. If sleeping areas are not screened properly or air conditioned, use mosquito nets.
- To decrease mosquito population get rid of old automobile tires, cans, flower pots.
- Use insect repellent 10% DEET, Permethrin.
- Generalised spraying of environs with Organophosphate or Pyrethroid Insecticides.
- Overhead water tank (OHT)/cemented tanks should have well fitted lid and should be kept locked.
- Water outlet/air bent pipe of OHT should be covered with metallic/plastic net of sufficient size.
- Ensure that there is no water logging at roof tops and in the ground areas.
- Water contained in money plant/bamboo plant should be changed at least once a week.
- Water contained in coolers should be replaced after scrub cleaning weekly and if not possible to change water, add 2 tablespoon full of petrol/1table spoon temiphos granules.
- Use mesh on doors and windows.
- Wear full sleeves cloths and trousers that cover arm and legs.

(Dr. Sunil)  
Chief Medical Officer

30<sup>th</sup> June, 2017

Copy to : Joint Registrar Secretariat of Hon'ble Vice Chancellor, Pro-Vice Chancellor, Director South Campus, Dean (Colleges), Treasurer, Proctor, Registrar, Chairman - ICH, W.U.S. Health Centres,



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**ADVISORY : CHIKUNGUNYA**

Chikungunya is a viral disease spread by mosquitoes *Aedes aegypti* and *Aedes albopictus*. The incubation period : 1-12 days (Average 3-7 days).

**Symptoms** : are similar to those of dengue and Zika disease

|  |                            |                |   |
|--|----------------------------|----------------|---|
| Severe and persistent peripheral joints pain for weeks                 | Body rash, Headache        | joint swelling | Extreme fatigue                               |
| Sudden high byphasic fever 2-4 days after infection and lasts 2-7 days | Nausea, Vomiting, Diarrhea | Conjunctivitis | GBS, Palsies, Neuropathy, Meningoencephalitis |

**Transmission** : From mosquitoes to human and by Vertical transmission.

**Diagnosis** :

- ELISA assay to measure chikungunya – specific IgM antibodies levels in blood serum.

**Prevention** :

Control mosquito populations by limiting their habitat.

Mosquito control focuses on eliminating the standing water where mosquitos lay eggs and develop as larva; if elimination of the standing water is not possible, insecticides or biological control agents.

Insect repellents with substances such as DEET, Icaridin, PMD.

Wear bite-proof long sleeves and trousers and garments can be treated with pyrethroids. Vaporized Pyrethroids in mosquito coils are also insect repellents.

**Treatment** :

- There is no vaccine to prevent or medicine to treat chikungunya virus.
- To Treat the symptoms:
  - Take sufficient rest.
  - Drink fluids to prevent dehydration.
  - Take medicine such as Paracetamol (Acetaminophen) to reduce fever and pain.
  - Do not take Aspirin and other non-steroidal, anti-inflammatory drugs (NSAIDS until dengue can be ruled out to reduce the risk of bleeding).
  - If you are taking medicine for another medical condition, talk to your healthcare provider before taking additional medication.
- If you have chikungunya, prevent mosquito bites during the first week of illness.
  - During the first week of infection, chikungunya virus can be found in the blood and passed from an infected person to a mosquito through mosquito bites.
  - An infected mosquito can then spread the virus to other people.

30<sup>th</sup> June 2017

(Dr. Sunil)  
Chief Medical Officer

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