



**W.U.S. HEALTH CENTRE
UNIVERSITY OF DELHI
DELHI – 110007**

VECTOR BORNE DISEASES

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 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 effusion, 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. **Frusemide** 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.



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- Water contained in coolers should be replaced after scrub cleaning weekly and add 2 tablespoon full of petrol/1table spoon **temephos/temefos** granules if it is not possible to change water.
- Use mesh on doors and windows.
- Wear full sleeves cloths and trousers that cover arm and legs.

Chief Medical Officer