

## Title: Dengue Fever

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### ABSTRACT<sup>[1]</sup>:

They may cause undifferentiated fever, dengue fever, dengue haemorrhagic fever (DHF), or dengue shock syndrome, or they might be asymptomatic. Globally, 100 million cases of dengue fever and half a million cases of dengue hemorrhagic fever occur each year.

### INTRODUCTION<sup>[3]</sup>:

Dengue fever is a mosquito-borne illness that is caused by a viral family. Dengue flavivirus symptoms include fever and acute systemic illness. Aedes Aegypti mosquito-borne acute viral illness with saddleback high fever, strong headache, body rash, widespread lymphadenopathy, and hemorrhages. Headache, fever, tiredness, severe muscle and joint pain, swollen glands, and rash are all indications of this acute sickness with a benign course. Other names for Dengue fever include "Breakbone fever" and "Dandi fever." Dengue fever is characterized by severe joint and muscle pains, and it is also known as "breakbone fever." Dengue hemorrhagic fever is the most dangerous type of dengue fever.

### CAUSATIVE FACTOR<sup>[6][7]</sup>:

Fever and severe systemic disease are frequent symptoms of the dengue flavivirus. A striped Aedes Aegypti mosquito that has already bit the sick person spreads the infection. The mosquito thrives during the rainy season, although it may spawn all year in water filled area. There must be a person – mosquito – another-person-pathway.



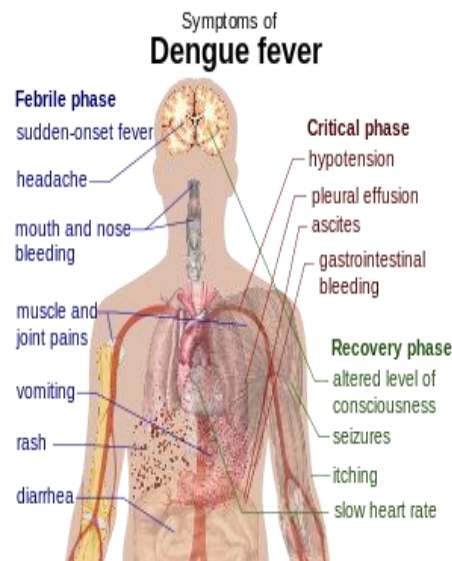
## SIGNS & SYMPTOMS<sup>[6][7]</sup>:

Dengue fever is characterized by chills, a headache, discomfort when moving the eyes, and a low backache. During the first hour of sickness, there is a painful hurting in the legs. With a relatively Bradycardia and hypotension, the temperature quickly increases to as high as 104 F. Fever may be either continuous or saddleback.

Rash appears as a temporary macular rash in the first one to two days, then as a maculo-papular rash over the trunk from days three to five, sparing the palms and soles.

Swollen lymph nodes and glands in the groin and neck are common.

Anorexia, nausea, and vomiting are all possible side effects.



## DENGUE HEMORRHAGIC FEVER[DHF]<sup>[6][7][8]</sup>:

DHF is a severe type of this condition that affects children under the age of ten years old.

It results in stomach discomfort, bleeding, and circulatory collapse (shock).

Dengue fever fever (DHF) is also known as "dengue shock syndrome." DHF is characterized by a high fever that lasts for many days, as well as headaches, sore throats, coughs, nausea, vomiting, and abdominal discomfort.

Shock is defined as abrupt collapse, chilly clammy extremities, a weak pulse, and blueness around the mouth that occurs 2-6 days after the onset of symptoms.

Hematemesis, malena, bleeding gums, and epistaxis are all common symptoms of DHF. Pneumonia is a prevalent ailment. It's possible that myocarditis is present.

## **DENGUE SHOCK SYNDROME:**

When a case of dengue hemorrhagic illness displays circulatory failure with the following signs, it is referred to as Dengue Shock Syndrome.

1. Hypotension
2. Cold Clammy skin, restlessness, rapid, weak pulse.
3. Narrow pulse pressure (<20mm of Hg.)
4. Profound Shock.

## **On Examination:**

Temperature: It is raised which comes down on 3<sup>rd</sup> Day but again rises on 5<sup>th</sup> day.

Rash: prodromal rash as blotch of erythema or simple flushing of face may occur.

On the sixth day, a true rash forms on the dorsal aspect of the hands or feet, then extends to the trunk, but the face is occasionally spared.

Generalized lymphadenopathy.

Pulse: relative bradycardia

B.P: Hypotension may be noted.

Delerium, Insomnia, agitation or depression may occur.

Spleen may rarely be palpable.

Transient loss of accommodation due to paralysis of ciliary muscles may occur.

## **INVESTIGATIONS<sup>[8][9]:</sup>**

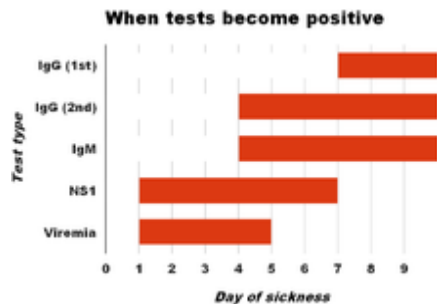
The diagnosis of dengue fever may be confirmed by microbiological laboratory testing .

This can be done by:

- 1} virus isolation in cell cultures
- 2} nucleic acid detection by PCR
- 3} viral antigen detection such as **NS1**

#### 4) specific antibodies : IgG,igM

Tests for dengue virus-specific antibodies IgG, IgM can be useful in confirming a diagnosis in later stages of the infection .Both IgG &IgM are produced after 5-7 days .



#### 5) CBC shows thrombocytopenia

### **PREVENTION:**

Protection from the bites of the mosquitoes that transmits it.

### **MANAGEMENT<sup>[2]</sup>:**

Dengue fever is caused by a virus for which there is no specific treatment or antibiotic. The treatment for normal dengue fever is only focused on symptom alleviation. Proper rest and water intake should be done for proper hydration of body.

### **HOMOEOPATHIC THERAPEUTICS<sup>[5][10]</sup>:**

#### **Aconitum Napellus:**

Aconite is an excellent fever reliever. Fever begins abruptly and brutally, with a rapid increase in body temperature. Severe chills at first, then violent and more chills as the evening and night progressed.

Face alternates between crimson and light red. The skin feels dry, heated, and irritated, with a burning feeling. The skin is bright red, shiny, and hot, and it is in excruciating agony. He tosses in anguish, filled with anxiousness and restlessness.

**Arsenicum Album:**

Intermittent fever, dry heat accompanying thirst, and a desire to be exposed At the conclusion of a fever, there will be perspiration, which will reduce discomfort and be chilly and clammy, with a foul and disagreeable odor.

**Belladonna:**

The beginning of belladonna is marked by a rapid and intense fever. The temperature rises suddenly, with a crimson face and throbbing carotids, and a strong and rapid pulse. Internally and outwardly, there is intense scorching heat. Sweat is only on the covered regions of the body, and fever sets at about 3 p.m. Mind-boggling confusion, worry, and trembling accompanied with ferocious madness.

**Bryonia Alba:** Bryonia is an excellent remedy for all types of fevers. The onset of the fever is gradual and subtle. The patient sleeps very quietly on the bed, refusing to move; in fact, he refuses to move, even refusing to talk or open his eyes, since even a little amount of activity causes the patient to deteriorate; there is low mumbling madness.

**Cinchona Officinalis:** China suffers from a variety of intermittent fevers. There are three stages: cold, heat, and perspiration. Debility, restlessness, lack of appetite or extreme hunger, anemia, congestion, backache, oedema, insufficient urine, and pain in the liver and spleen are all symptoms of apyrexia.

**Eupatorium Perfoliatum:**

Fever paroxysms usually occur between the hours of 7 and 9 a.m. kind of postponement In the back of skull, there is pain and pulsation. Before and during the cold, there is severe discomfort in the occiput and back. Eupatorium produces little perspiration, and the aches make the patient agitated.

**Gelsemium:**

Gelsemium is used to treat any sort of fever, whether it is intermittent, remittent, or persistent. I'm thirsty and frightened. The tongue trembles due to a total lack of thirst. A strong headache is present. The pulse is strong and fast. In the last stage, dreadful circumstances may occur.

**Ipecacuanha:**

The bones of the skull feel battered, and pain penetrates via the teeth and the root of the tongue. The bones were ripped to shreds, causing pain. All of the bones hurt like they've been bruised.

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