

DENGUE AS DANDAK JWARA**Dr. Chaudhary Robin¹ and Rana Deeksha^{2*}**¹Assistant Professor, Dayanand Ayurvedic College, Jalandhar, Punjab.²Intern, Dayanand Ayurvedic College, Jalandhar, Punjab.Article Received on
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Corresponding Author*Rana Deeksha**Intern, Dayanand Ayurvedic
College, Jalandhar, Punjab.**ABSTRACT**

Dengue is an acute, infectious arbovirus disease caused by dengue viruses, transmitted by bites of mosquito *Aedes aegypti*. In *Ayurveda*, the symptoms of Dengue are similar to *Dandak jwara*. *Dandak jwara* means fever with severe joints and muscle pains, that why it is named “*breakbone fever*”. In Modern medicines there is no exact treatment for this disease. The treatment they do in dengue is only symptomatic. But in *Ayurveda* there is exact treatment for this disease, which not only cure the dengue but also destroys it from its roots as well as

prevents its complication and reoccurrence. Here in this article, we had mentioned its signs and symptoms with its modern comparison along with Ayurvedic management of Dengue.

KEYWORDS: Dengue, *Dandaka*, Ayurveda, Aegypti, Fever.**INTRODUCTION**

The word dengue is derived from African word ‘denga’

The word dengue is derived from Swahili phrase “*ka – dinga – pepo*” meaning cramp like seizure caused by evil spirit.

Over the past 3 decades, Dengue fever has been a serious disease in the tropical and subtropical areas of the world.^[1] It is endemic in more than 100 countries in tropics and subtropics. An estimated 50 million dengue infections occur annually. In India 1st epidemic occurred in Tamil nadu in 1956. Another in 1996 in Delhi. About 10 thousand cases and 400 deaths were reported. During 2003, there were about 12750 cases with 217 deaths in country.^[2]

In *Ayurveda* the signs and symptoms of Dengue are similar to the *Dandaka jwara*. The description of *dandaka jwar* is given in *parishista* chapter of *Madava Nidana*. The 'break bone' pain is the cardinal feature of *Dandaka jwara*.^[3]

Also the similar symptoms are visible in *Vata* dominant *sannipataj jwara* of *charak samhita*.^[4]

Dengue Virus

Dengue virus, a member of Flavi-virus group belongs to family *Togaviridae*. The virus was isolated in 1943 by kimora and Hotta. It is of 4 sero types, DEN-1, DEN-2, DEN-3, DEN-4.^[2]

All serotypes circulate together in tropical and subtropical regions around the world. After recovering from an infection with 1 serotype, a person has immunity against that particular serotype. After that, person can be infected with any of remaining 3 serotypes.

Aedes Aegypti – the vector

The mosquito breeds in standing water, so the dengue transmission is being highest during and after rainy season, when mosquitos are numerous.^[5]

In *Ayurveda*

“*Vishisth Masko Udbhavo*”^[3]

that means the fever spread from person to person by a special type of mosquito.

Other Names



Incubation period

Modern	Ayurveda
5 – 10 days	<i>Saptaha (1 week)</i>

Reason for Re-emergence of Dengue^[1]

1. Rapid expansion of urbanization
2. Inadequate supply of piped water

3. Increased movement of human populations within or between countries.
4. Development of Insecticide resistance in mosquitoes.

PURVARUPA OF DANDAK JWARA (Prodromal symptoms)^[3]

1. *Aangamarda* – Generalized body aches.
2. *Klam* – Malaise
3. *Aruchi* – Anorexia
4. *Utklesho* – Nausea
5. *Avsado* – Depression

RUPA (Signs and Symptoms)^[3]

Ayurveda	Modern
1. <i>Dandahnajsama peeda</i>	– “Break bone pain”
2. <i>Kshipraudalayashali</i>	– Abrupt onset
3. <i>Visarp</i>	– Erythematous Rash
4. <i>Sanchari sandhishoola</i>	– Arthralgia
5. <i>Standhishotha</i>	– Arthritis
6. <i>Kasa</i>	– Cough
7. <i>Kanthe peeda</i>	– Sore throat
8. <i>Pratishyay</i>	– Coryza
9. <i>Punaravartak jwar</i>	– “Saddle back fever”
10. <i>Janpada janma</i>	– Pandemic
11. <i>Balanamatha jartam</i>	– Commonly affect children and adults.

MANAGEMENT

The basic principle of *ayurveda* is to prevent and treat illness by maintaining balance in the body, mind, consciousness. The 1st step is to treat with balanced *Aahar* and *Vihar*.

1. ***Aahar***^[6] - According to *ayurveda*, it is important to take a lighter but nutritious diet during dengue infection. A light diet consists of food that easily and quickly transforms into *Ahar rasa*.

So some important nutritious but light foods are

- *Mong dal yusha* (Green gram soup) – It is a excellent source of energy and is also easy to digest.

- *Krishara* (*Kichari / kichadi* – a nutritious combination of rice, moong beans, vegetable and ghee.
- *Kanji* (a warm drink made from organic brown rice)
- *Narikel jal* (Coconut water) It rehydrate body and eliminate toxins.
- *Dugadha* (Milk) – It help to boost up immunity.
- *Mansarasa* (Chicken soup) – It provide a good amount of energy and proteins.
- *Sattu* (Barley water) It detoxify the liver.
- *Naaranga swaras* (Orange juice) it is good source of Vit. C.

Foods to be avoided are *Guru* (Heavy meals), *virrudh Anna* (Incompatible diet) and *Katu Ras Yukta ahara* (spicy food).

2. *Vihar*^[2]

If we completely eliminate the breeding sources of the mosquitos, keep the environment clean and properly use *rakshoghan* medicine (pesticides), the, we can reach the target of eliminating the *aedes aegypti* and reducing its proliferation.

- Flower – Vase and Air coolers must be periodically emptied and kept dry at least for a day, before they are refilled.
- Repair or prevent outside leaks.
- Eliminate or fill the nooks and holes.
- Trim back tall weeds and bushes.
- Grow mosquito repelling herbs like
 - Basil, lavender, peppermint.
 - Marigold, garlic, rosemary
- Get some fish for water garden.

Single Drugs

S. No.	Name of Drugs	Chemical consist	Properties
1.	<i>Papaya</i> leaves (<i>Carica papaya</i>)	Flavonoid – Quercetin Alkaloids – Carpain - Pseudo carpain - Papain - Chymopakain	Antiviral activity against DEN-2 Increase thrombocyte count
2.	<i>Kalmegha</i> (<i>Andrographis paniculata</i>)	Andrographolide	Antiviral activity against DEN-1
3.	<i>Dugdika</i> (<i>Euphorbia hirta</i>)	<ul style="list-style-type: none"> • Alkanes • Triterpenes • Phytosterols • Tannis • Flavanoids 	<ul style="list-style-type: none"> • Prevents bleeding
4.	<i>Giloy</i> (<i>Tinospora cordifolia</i>)	<ul style="list-style-type: none"> • Columbin • Tinosporasid • Berberine • Palberine • Palmatine • Tino sporic acid • Tembeterine 	Anti-inflammatory and antipyretic properties
5.	Wheat grass	<ul style="list-style-type: none"> • Electrolytes like K⁺ Ca⁺ Mg Na 	Flushes virus through fluid excretion Maintain hydration
6.	Spirulina	<ul style="list-style-type: none"> • High protein • Vitamins content • Essential oils • Carbohydrate 	Antioxidant
7.	<i>Amla saar</i> (<i>Embelica officinalis</i>)	<ul style="list-style-type: none"> • Emblicanin A & B • Puniglucenin • Pedunculagin • Vit. C • Ellagic acid 	Increases Immunity
8.	Garlic cloves	<ul style="list-style-type: none"> • Sulphur compounds like * Allicin * Allylpropl * Aliin * Ajoene – Argine 	Decreases multiplication of DEN virus.
9.	<i>Shali chawal</i> (<i>Oryza sativa</i>)	<ul style="list-style-type: none"> • Oryzaterpenyl caffeoate • Fatty acids * Linoleic acid. * Stearic acid * Myristic acid 	Quickens Healing process in dengue.
10.	Basil leaves (<i>Ocimum sanctum</i>)	<ul style="list-style-type: none"> • Oleanolic acid • Ursolic acid • Rosmarinic acid • Carvacrol 	Strengthen body's defense mechanism
11.	Alligator weed (<i>Alternanthera philoxeroids</i>)		Inhibitory effect of DV

12.	Neem (<i>Azadirachta indica</i>)	<ul style="list-style-type: none"> • Terpenoids • Alkaloids • Phenolic compounds 	Decrease Replication of DEN-2
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Compounds Drugs for Fever^[7]

1. *Tribhuvankirti ras*

2. *Jayamangal ras*

3. *Swaranamalinivasanta ras*

4. *Aanandbhaerav ras*

5. *Sanjeevani vati*

6. *Guduchighanvati*

7. *Chandraprabha vati*

8. *Sudarshan churna*

9. *Draksharishta*

10. *Kalingadi kashyam*

11. *Patoladi kashyam*

12. *Nimabadi kashyam*

13. *Kirtiktadi kashyam*

14. *Guduchyadi kashyam*

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