

# Ayurvedic Perspective on Chandipura Virus: A Critical Review

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**Abstract:** This article provides a comprehensive review of the Chandipura virus from an Ayurvedic perspective. The discussion covers the virus history, transmission, pathogenesis, clinical features, and correlation with Ayurvedic concepts such as Sannipataja Jwara. The article emphasizes the importance of preventive measures, including hygiene and immuneboosting herbal products, in managing the virus. Additionally, Ayurvedic treatment approaches, such as Rasayana therapy and Jwara Chikitsa, are explored to offer a holistic management plan for the Chandipura virus.

**Keywords:** Chandipura virus, Gujarat, Phosphoprotein, sannipatajwar, Sandfly

## 1. Introduction

The purpose of this article is to critically review the Chandipura virus through the lens of Ayurveda, exploring its correlation with ayurvedic concepts and offering insights into preventive and therapeutic measures. Chandipura virus has become a major concern in the preceding month.

The significance of this article lies in its integration of modern virology with traditional Ayurvedic knowledge, which could contribute to a broader understanding and management of emerging viral infections such as Chandipura virus.

### What is Chandipura virus?



It is a rare and not so popular virus which existed before but wasn't in light but recently its outbreak has caught people's attention in India.

Chandipura virus also known as Chandipuravesciculovirus (CPHV) is a rod shaped RNA virus which belongs to Rhabdoviridae family which also includes Rabies virus<sup>3</sup>

### History:

The virus came into existence in the year 1965 from the vectors identified as SANDFLIES in India and West Africa. It has been found out that it spreads through the bite of infected sandflies. The nomenclature of Chandipura virus

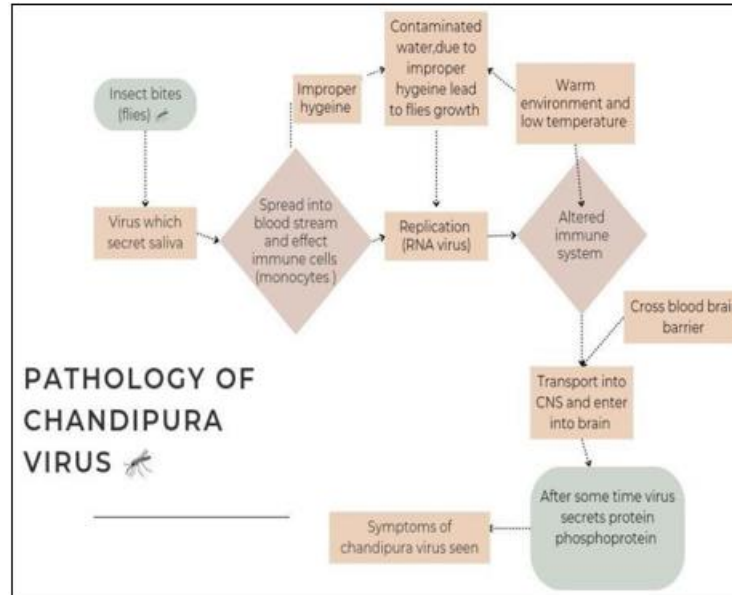
was based on the foremost occurrence of the virus in the Chandipura village of Maharashtra<sup>5</sup>. Some researchers in 1966 discovered the CHPV causing seizures. Till 2003, it wasn't known to much people but then around 300-350 children suffered from Acute Encephalitis Syndrome among which around 200 died. Later in 2004, some cases were reported in Gujarat. Later, some cases were reported in other states of India as Madhya Pradesh, Maharashtra, Andhra Pradesh<sup>1</sup>

**Current scenario:** Due to climatic changes and warm environment, Epidemiological outbreak of Chandipuravirus has been noted in Gujarat majorly affecting 12 or more individuals among which 6 died. Apart from this, atleast 38 people across the country died due to sudden outbreak of the virus.

### Transmission:



The major causative organism for the spread of this virus is Sand fly. Researchers have found mosquitoes as the cause for the spread. It has been taken into reference that wherever there are unhygienic measures, contaminated water and favorable conditions for the SANDFLY to grow, cases are more probable **Pathogenesis**<sup>2</sup>:



**Phosphoprotein: it's responsible for replication and counteract the immune system.**

#### Signs and Symptoms<sup>4</sup>

As the sand fly bites, the first and the foremost symptom is pyrexia. Then it spreads further and causes headache and body ache.

Sore throat  
Fatigue  
Cough  
Nausea  
Vomiting  
Diarrhea

If it is not treated at appropriate time, then it crosses blood brain barrier and causes some of the symptoms of Mental state alert such as convulsions, Meningitis, Encephalitis etc.

#### Ayurvedic critical analysis of sannipatajwara with Chandipura virus:

In ayurveda different onions are given for the disease manifestation. Here in Chandipura virus one of the cause is जनपदोद्ध्वंसनीय.

**What is the cause of Chandipura virus according to ayurveda :-**

#### 1) जनपदोद्ध्वंसनीय:

जनपदानामुद्ध्वंसनंकरेणतत्रन्यानांबहूनांमानवानांमरणेत्यर्थः।।(चक्रपाणि)  
Destruction of the large population due to sadharana (produced due to human activities) and asadharana factor (due to the influence of graha, nakshatra etc) may lead to जनपदोद्ध्वंसनीय.

A single ailment inflicts simultaneously the persons having dissimilar prakrati (constitution), ahara (diet), dehabala (physical strength), satmya (suitability), satva (mental faculties) and vaya (age) simultaneously. Even

though dissimilarity in the physical constitution of human beings, there are such factors as are common to individuals such as dushitajala, dushitavayu, dushita kala and dushitadesha and they effect in large population.

**Here, there are mainly 4 causative factors of जनपदोद्ध्वंसनीय<sup>6</sup>**

- 1) dushitajala
- 2) dushitavayu
- 3) dushitadesa
- 4) dushitakala

#### How dushitajala effect on body and it can be taken as one of the cause of Chandipura virus?

Among which dushitajala is the major influence in Chandipuravirus. Though remaining three factor such as vayu, desha and kala may also be responsible in some or the other way in Chandipura virus.

Because of the unhygienic precautions the water gets contaminated by the residents of this flies on it and these flies effect the human populations through bite due to which severe clinical manifestations are seen majorly in children.

**Here, we can co-relate different type of ज्वर depending upon symptoms:**

#### ज्वर:

Jwara is of different types and present of symptoms, agantuja Jwara can be co-relate with this.

#### 2) अभिषंगज्वर, is one of the type of agantuja Jwara<sup>7</sup>

ग्रहावेशौषधिविषमो धभीशोककामजः।

अभिषंगात् ..... 1० वा. नि. २/४०.

Graharoga is the one of the cause of Jwara. here graharoga

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is co-relate with the disease which is manifest in the children due to some external factors. Its also given in kashyapasamhita because its effect is seen on children.

Graharoga which can be taken as जीवाणुज्वर।

2) जीवाणुज्वर: it's the Jwara which is one of the reason of Chandipura virus<sup>8</sup>

Ayurveda is the vast classical literature which describes about various types of Jwara.in which different acharya have explained different type of Jwara.

Here, we will depict about clinical features of Chandipura virus according to ayurveda in perspective of Jwara.

According to bhavprakash: 13(type)<sup>9</sup>

Types	विस्फारक	आशुकारी	भल्लू	पाकल
लक्षण	कास	मूर्छा	कास	शिरोशुल
	मूर्छा	अतिसार	मूर्छा	कास,मूर्छा

दोषप्रधान्यः

अधिकवातमंदकफपित्तःसंधिशुल

अस्थिशुल

शिरोशुल

According to madhvanidana<sup>10</sup>:

शीघ्रकारी: क्लम

कफज: वमन

According to acharyasushruta some of it's symptoms found in णवषमज्वर<sup>8</sup>

According to acharyasushruta, In बाह्यज्वर, one of the types told is जीवाणुज्वर which can be co-relate with this flies bite.

Some other symptoms of णवषमज्वर<sup>11</sup>

अतिसार

शिरोशुल

मूर्छा

वमन

कंप

धातुगतज्वर:-

धातुगतज्वर is given in all the संहिता but here I have taken reference of माधवनिदान.(10)

But here I have taken reference

Here I have included some of the features of dhatusgata Jwara which has been found in Chandipura virus

1) रसधातु:- वमन

2) अस्थिधातु:- वमन, विरेचन, कास

3) रक्तधातु:- मोह, विभ्रम

If we considered मोह, विभ्रम with the altered mental state then it may lead to रक्तधातुगतज्वर and if we considered विक्लेपन then it may lead to अस्थिधातुगतज्वर.

Depending upon the symptom of disease, there are some srotas involvement seen which is

Srotas dushti:

रसवहस्रोतस

प्राणवाहस्रोतस

अत्रावहस्रोतस

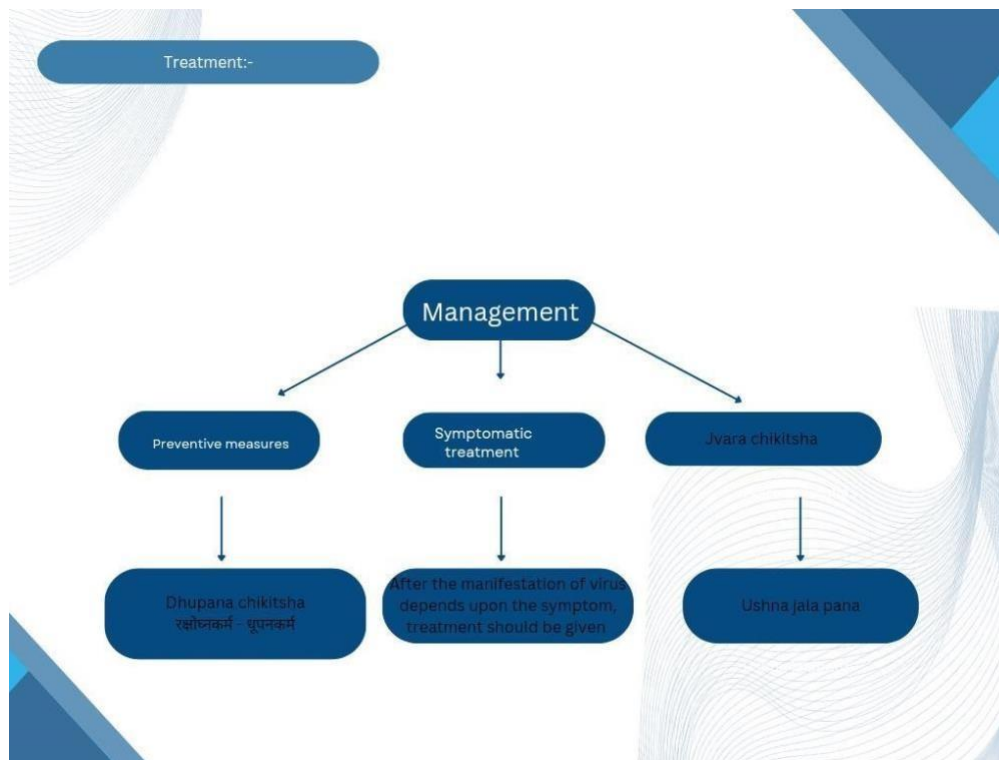
After the discussion of sign and Symptoms of Chandipura virus according to modern and ayurveda,

What is treatment of Chandipura virus and how we prevent this virus from spreading?

What is the management of Chandipura virus?

How can we prevent from the further complications?

Management of Chandipura virus:



### Preventive measures:

#### i) रक्षोघ्नकर्म<sup>12</sup>

Means the protective sterilization and antiseptic hygienic measures to be follow to prevent the infection. One should makes the environment clean and free from microbial contamination, for that different measures. Tie multiple pottali with antimicrobial herb powder

Spread the tikta, katurasauyuktaansushnaviryayuktadravya such as, atasi, sarshapa etc

#### ii) Hygiene maintenance

Its very important to maintain the hygiene to prevent the disease because the disease is occur because of not proper hygiene and contaminated water leads to manifestation of flies and which is one of the cause of Chandipura virus.

#### iii) Dhoopanachikitsha (fumigation)<sup>12</sup>

Its very important to prevent the disease. Burning of the different antimicrobial herbal drugs with ghee or other drug to produce the smoke and fumigation. Rakoshgana and Dhoopana karma is very much important to prevent the disease and its complication.

Different drugs are used in this such as:

Vacha  
Sarsapa

#### Balachaturbhadra churna<sup>13</sup>

घनकृष्णारुणाशृङ्गीचूर्णक्षौद्रेणसंयुतम्।शिशोर्वरातिसारघ्नश्वासकासवमीहरम्॥३९॥

(भैषज्यरत्नावली, बालरोगाधिकार; 71/39)

Other reference<sup>14</sup>

Ghee etc

These dravya have- Bacterial, bacteriostatic and insect repellent properties.

The procedure such as rakshogana karma or Dhoopana karma are used in the prevention of further spread of infection. which eventually prevents the manifestation of disease.

#### 1) Symptomatic Treatment

Based upon the symptoms treatment also given.

Rasayantreatment with proper medicine is adopted to restore the physical health. because one of the cause of Chandipura virus is जनपदोद्ध्वंसनीयं.

#### 2) Jwarachikitsha:-

According to the involvement of doshaJwara(fever) treatment is given. In that ushnajala is given depending upon the symptoms.

Some ayurvedic formulation:

Chandipura virus effects the children so most effective treatment for this is as follow:

कट्फलपौष्करं कृष्णाशृङ्गीचमधुना सह । श्वासकासज्वरहरः श्रेष्ठो लेहः कफान्तकृत् ॥१४०॥

लिहेज्वरान्तस्तिफलापिप्पलोसममाक्षिकाम् । कासेश्वासेचमधुना सर्पिषाचसुखी भवेत् ॥१४१॥

This herbal medicine is very much effective in this Chandipura virus.

In Chandipura virus immune system gets alert and due to this reason body is unable to fight against the virus and it has detoxifying effect and promotes overall wellness.

Its help in fortifying immune system, making it more resilient against seasonal challenges and daily stressors.

**In Chandipura** virus some of the symptoms is diarrhoea, cough and vomiting. It helps to fight against the Chandipura virus through boosting the immune system.

## 2. Conclusion

In conclusion, the Chandipura virus, while rare, poses a significant health risk, particularly to children in certain regions of India. Through the lens of Ayurveda, this review highlights the potential of integrating traditional Ayurvedic practices with modern preventive measures to manage the virus effectively. The use of formulations such as Balachaturbhadra Churna, along with preventive measures like Rakshogana karma, underscores the importance of a holistic approach to managing emerging viral infections.

Precautionary measures include: maintenance of hygienic condition, use of filter water, cleaning the surrounding, mosquito net and insecticide.

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