



Favipiravir Shows Promise Against Chandipura Virus (CHPV)

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The [ICMR-National Institute of Virology \(NIV\)](#), Pune has identified Favipiravir as a **potential therapeutic drug** against [Chandipura virus \(CHPV\)](#). In **preclinical mouse studies**, it showed **reduced viral load** and **improved survival**, but the results are **preliminary**. Further **animal model validation** is required before progressing to **human clinical trials**.

Chandipura Virus (CHPV)

- **About:** The **Chandipura virus (CHPV)** is a neglected [arbovirus](#) classified under the **Vesiculovirus** genus of the **Rhabdoviridae** family.
 - It is a **cytoplasmic, negative-sense, single-stranded RNA virus**, known for its ability to cause **rapid-onset encephalitic illness**, particularly in children.
 - It is a **neurotropic virus** capable of affecting the [central nervous system](#).
- **Epidemiology and Endemicity:** CHPV was first detected in **1965 in Maharashtra**. Major outbreaks occurred in **2003 in Telangana** (300+ cases, >50% fatality) and in **2024 in Gujarat and Maharashtra**.
 - It is now **endemic to central India**, especially **rural and tribal areas**, with outbreaks **peaking during monsoon** due to increased **sandfly breeding**.
- **Transmission and Vectors:** It is transmitted primarily by **Phlebotomine sandflies**, including *Phlebotomus papatasi*, and, in some cases, by **Aedes aegypti mosquitoes** (vectors for **dengue**).
 - The virus resides in the **salivary glands** of these insects and is spread through their **bites**.
- **Vulnerable Population:** The infection **predominantly affects children under 15 years**.
- **Symptoms:** Early symptoms mimic **influenza**, such as **fever, headache, and body aches**. Severe cases may progress to **encephalitis**, causing **seizures, altered mental status, respiratory distress, anaemia, and bleeding tendencies**.
 - The virus can cause **rapid neurological deterioration** and high fatality rates if untreated.
- **Current Treatment Status:** There is **no specific antiviral drug or vaccine** for CHPV. **Management is symptomatic and supportive**.

Favipiravir

- **Favipiravir** is a **broad-spectrum antiviral drug** originally developed in Japan for the treatment of **influenza**.
- It functions by **inhibiting RNA-dependent RNA polymerase (RdRp)**, an enzyme essential for the replication of RNA viruses.
- As an oral drug, it has been repurposed for use against several **emerging RNA viruses**, including [Ebola](#), [Lassa fever](#), [Zika](#), and [SARS-CoV-2 \(Covid-19\)](#) in emergency settings.

Read More: [Chandipura Virus Infection](#), [Antiviral Drug Umifenovir](#)

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