

Available Online at http://www.recentscientific.com

**CODEN: IJRSFP (USA)** 

International Journal of Recent Scientific Research Vol. 14, Issue, 12, pp.4392-4396, December, 2023

International Journal of **Recent Scientific Re**rearch

DOI: 10.24327/IJRSR

# **Research Article**

# AN EVIDENCE BASED HOMOEOPATHY MANAGEMENT IN A CASE OF **"DENGUE FEVER" - A CASE REPORT**

Dr. Siddhartha Pal<sup>1</sup>, Dr. Shreyasi Sengupta<sup>2</sup> and Dr. Monoranjan Mondal<sup>3</sup>

<sup>1</sup>M.D. (Hom.) National Institute of Homoeopathy, Kolkata; J.R.F, Dr. AnjaliChatterjee Regional Research Institute, Kolkata <sup>2</sup>PG Scholar of Department of Practice of Medicine, The Calcutta Homoeopathic Medical College and Hospital, Kolkata <sup>3</sup>Homoeopathic Medical Officer, S.H.D., Mungpoo, Dist-Darjeeling, Govt. of West Bengal

DOI: http://dx.doi.org/10.24327/ijrsr.20231412.0825

#### **ARTICLE INFO**

Article History: Received 14th October, 2023 Received in revised form 23<sup>rd</sup> October, 2023 Accepted 17th November, 2023 Published online 28th December, 2023

#### Keywords:

Dengue, Dandy fever, Gelsemium, Homoeopathy

ABSTRACT

Dengue is a mosquito-transmitted viral disease as well as the leading cause of arthropodborne viral illness, continues to be a significant public health concern worldwide. It is also known as breaking fever because of the severity of the muscle spasms and joint pain, dandy fever, or seven-day fever because of the usual duration of symptoms. We are presenting here a case of 24-year-old male patient, diagnosed with dengue fever, who have sought for homoeopathic treatment. Management included the administration of Gelsemium200, a commonly used homoeopathic remedy for dengue fever. Over the course of treatment, the patient's fever subsided, and there was a notable improvement in overall well-being. The patient got relief from the characteristic weakness and muscle pain associated with dengue fever. The rationale of this report reflects the effective management of dengue fever with individualized homoeopathic medicine

Copyright<sup>®</sup> The author(s) 2023, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

# **INTRODUCTION**

#### **Etiology**

Dengue fever is caused by any of four distinct serotypes (DENV 1-4) of single-stranded RNA viruses of the genus Flavivirus. Infection by one serotype results in lifelong immunity to that serotype, but not to others.1,2,3

# *Epidemiology*

It is the fastest spreading mosquito-borne viral disease globally, affecting greater than 100 million humans annually. Dengue also causes 20 to 25,000 deaths, primarily in children, and is found in more than 100 countries. Epidemics occur annually in the Americas, Asia, Africa, and Australia. Two transmission cycles maintain the dengue virus: 1) mosquitos carry the virus from a non-human primate to a non-human primate, and 2) mosquitos carry the virus from human to human. The primary vectors of the disease are female mosquitoes of the species Aedesaegypti and Aedesalbopictus. Transmissions occurring perinatally, by blood transfusions, by breast milk, and organ transplantation have been reported. Transmission of dengue generally follows two patterns - epidemic dengue and hyperendemic dengue. When a single strain of DENV is responsible for introduction and transmission, it is referred to as epidemic dengue. Periodic epidemics in an area are linked to the emergence of hyperendemicity.4

SYMPTOMS: If symptoms occur, they usually begin 4-10 days after infection and last for 2-7 days. Symptoms may include:

- $\geq$ high fever  $(40^{\circ}C/104^{\circ}F)$
- $\geqslant$ severe headache
- $\geqslant$ pain behind the eyes
- $\geqslant$ muscle and joint pains
- $\geq$ nausea
- ≻ vomiting
- $\geqslant$ swollen glands
- $\triangleright$ rash.

Individuals who are infected for the second time are at greater risk of severe dengue.

Severe dengue symptoms often come after the fever has gone away:

- severe abdominal pain
- persistent vomiting  $\geq$
- rapid breathing  $\triangleright$
- bleeding gums or nose  $\triangleright$

#### \*Corresponding author: **Dr. Siddhartha Pal**

M.D. (Hom.) National Institute of Homoeopathy, Kolkata; J.R.F, Dr.Anjali Chatterjee Regional Research Institute, Kolkata, WB, India.

- ➢ fatigue
- ➢ restlessness
- blood in vomit or stool
- being very thirsty
- pale and cold skin
- feeling weak.

Dengue fever can be diagnosed by virus isolation, genome and antigen detection, and serological studies. Serology, which consists of dengue antigen NS1 (non-structural protein 1) and immunoglobulin M (IgM) and immunoglobulin G (IgG) antibodies against DENV (anti-dengue IgM and IgG), is currently the most widely used in routine diagnostics. Dengue diagnosis.

#### Treatment/Treatment

In the absence of targeted drugs for dengue fever, the second arm of basic dengue treatment is good supportive care with symptomatic treatment and judicious fluid administration to ensure adequate tissue perfusion during the critical phase of the disease. In cases of mild dengue, oral rehydration with fluids other than pure water such as milk, fruit juice, oral rehydration solution (ORS), rice or barley water is recommended5,6. Hospitalization and intravenous (IV) fluid therapy is recommended in cases of insufficient oral intake, vomiting, continuous rise in hematocrit (HCT) of 10-20% despite oral rehydration, development of warning signs, and in case of impending shock/shock5.

#### **Differential diagnosis**

Chikungunya fever (CHIK) is a viral disease characterized by a sudden onset of fever accompanied by skin rashes and joint pain, followed by persistent rheumatic symptoms.

Zika fever, like dengue, is a viral disease characterized by fever, rash, and non-purulent conjunctivitis.

# **CASE REPORT**

Mr. XY, aged 24 years, BMI 21.7KG/M2 , unmarried student with no previous co-morbidities, consults for high grade continuous fever (103\*F) associated with chills, severe generalised body ache, associated with profound weakness came in OPD on 22.10.2022. the fever appears suddenly and continued for last 3 days. His vitals at the time of examination were blood pressure 106/74 mm of Hg, pulse 80/ minute regular, and respiratory rate was 19/minute. His abdomen was soft, slightly tender over the right hypogastrium. On auscultation over the chest, there were normal vesicular breath sounds bilaterally. On neurological examination, muscles bulk and tone were normal. Power of limb was reduced and little trembling. Patient was drowsy, hot patient, absence of thirst. He had yellowish coated moist tongue. He passed urine clear and profuse. He had easy fatigue on exertion. He had insomnia last 2 days.

After thorough case taking, analysis and evaluation of symptoms, following symptoms were considered for totality:

- Drowsiness all the time
- Thirstlessness
- Muscular weakness, trembling
- Profuse urination
- Yellowish coated tongue
- ➢ Hot patient

On the basis of acute totality Gelsemium 200/4 doses twice for two day prescribed along with placebo<sup>7</sup>.

Patient and his parents have been directed to take foods that are rich in vitamins and nutrients. Fluids, plenty of liquids like orange juice, coconut water, ORS have also been recommended to help them remain hydrated.

Date	Follow-up	Prescription	Justification <sup>8</sup>
24.10.2022	Fever present but temperature reduced to 100*F, body ache little reduced, drowsiness less, trembling absent. Dengue NS-1-antigen 27.30, CRP 8.6 mg/L, Platelet 1.95 lakhs/cumm	Placebo	Patient was improving hence no medicine was prescribed
26.10.2022	Fever absent, body ache remains same, trembling absent, drowsiness little present	<i>Gelsemium</i> 200/2 doses, OD for 2 days	Patient improved certain amount but stand still in position, so required repetition of doses
28.10.2022	Fever absent, body ache absent, trembling absent, drowsiness absent	Placebo	Patient was improving hence no medicine was prescribed
01.112022	Complete resolution of fever, weakness, drowsiness. Dengue NS-1 antigen 3.20, CRP 0.9 mg/L, Platelet count 3.10 lakhs/cumm	Placebo	Patient was improving hence no medicine was prescribed



An evidence based homoeopathy management in a case of "dengue fever" - A case report





### DISCUSSION

The prescription was based on the principles of homoeopathy, which considers the individual signs and symptoms of the patient for remedy selection. *Gelsemium* 200 acted promptly not only reducing temperature, body ache, weakness but havealso increased the platelet count, decreased CRP and Dengue NS1-antigen in the patient blood picture.

Several case studies have reported positive results using homeopathic remedies to treat dengue fever.<sup>9,10</sup> Although these cases do not replace rigorous clinical studies, they offer insight into the potential of this homeopathic remedy. Visual evidence was provided here to support the outcome and treatment process.

### CONCLUSION

Successful result of this case report suggests a positive response of individual homoeopathic medicine in the treatment of dengue fever. Decrease of dengue NS-1 antigen and decrease CRP; with increase platelet count suggest improvement of dengue fever really fast and effectively with individual homoeopathic medicine in dengue fever. This report could serve as a basis for further research into the role of individualized homeopathic medicine in the treatment of dengue fever.

#### Limitations of the Study

This is a single case report. Case series may be recorded and published in the future to determine the efficacy of individual homeopathic remedies in dengue cases. It is important to recognize that further research, including controlled clinical trials, is needed to determine the effectiveness of Gelsemium in the treatment of dengue fever.

#### **Patient Consent**

The authors acknowledge receipt of the appropriate patient consent form. The patient agreed that his reports and other clinical information could be included in the diary. The patient understood that his name and initials would not be included in the manuscript and that reasonable efforts would be made to conceal his identity.

## ACKNOWLEDGMENTS

The authors deeply thank the patient for allowing us to collect the data.

### References

- Seixas, G., Salgueiro, P., Bronzato-Badial, A., Gonçalves, Y., Reyes-Lugo, M., Gordicho, V., Ribolla, P., Viveiros, B., Silva, A. C., Pinto, J., & Sousa, C. A. (2019, February 19). Origin and expansion of the mosquito Aedesaegypti in Madeira Island (Portugal). Scientific Reports, 9(1). https://doi.org/10.1038/s41598-018-383
- Ghani, N., Shohaimi, S., Hee, A., Chee, H. Y., Emmanuel, O., &AlabaAjibola, L. (2019, February 15). Comparison of Knowledge, Attitude, and Practice among Communities Living in Hotspot and Non-Hotspot Areas of Dengue in Selangor, Malaysia. Tropical Medicine and Infectious Disease, 4(1), 37. https://doi.org/10.3390/tropicalmed4010037
- Maia, L. M. S., Bezerra, M. C. F., Costa, M. C. S., Souza, E. M., Oliveira, M. E. B., Ribeiro, A. L. M., Miyazaki, R. D., &SIhessarenko, R. D. (2019, February 18). Natural vertical infection by dengue virus serotype 4, Zika virus and Mayaro virus in Aedes (Stegomyia) aegypti and Aedes(Stegomyia) albopictus. Medical and Veterinary Entomology, 33(3), 437-442. https://doi.org/10.1111/mve.12369
- Gubler, D. J. (2002, July). The Global Emergence/Resurgence of Arboviral Diseases as Public Health Problems. Archives of Medical Research, 33(4), 330-342. https://doi.org/10.1016/ s0188-4409(02)00378-8
- Shakoor, M., Ayub, S., &Ayub, Z. (2012). Dengue fever: Pakistan's worst nightmare. WHO South-East Asia Journal of Public Health, 1(3), 229. https://doi.org/10.4103/2224-3151.207018
- Englund, MD, J. A., Piedra, MD, P. A., &Whimbey, MD, E. (1997, March). Prevention and Treatment of Respiratory Syncytial Virus and Parainfluenza Viruses in Immunocompromised Patients. The American Journal of Medicine, 102(3), 61-70. https://doi.org/ 10.1016/ s0002-9343(97)00014-4
- 7. Boericke W. Pocket Manual of Homoeopathic MateriaMedica and Repertory. New Delhi:B.Jain Publishers, 13 th Impression 2015.p-299-302.
- Kent JT. Lectures on Homoeopathic Philosophy. New Delhi: B.Jain Publishers, 10<sup>th</sup> Impression 2012.p-238-239.
- Shakoor, M., Ayub, S., &Ayub, Z. (2012). Dengue fever: Pakistan's worst nightmare. WHO South-East Asia Journal of Public Health, 1(3), 229. https://doi.org/10.4103/2224-3151.207018

 Rath, P., Arya, B. S., Vichitra, A. K., & Singh, U. (2019, March). Case Series of Dengue Treated with Homoeopathic Intervention. Homeopathic Links, 32(01), 031-035. https://doi.org/10.1055/s-0039-1688454 **CONFLICT OF INTEREST:** Authors declares that there is no conflict of interest. **GUARANTOR:** Corresponding author is guarantor of this article and its contents. **SOURCE OF SUPPORT:** None

#### How to cite this article:

Siddhartha Pal, Shreyasi Sengupta and Monoranjan Mondal.(2023). An evidence based homoeopathy management in a case of "dengue fever" - A case report. *Int J Recent Sci Res.* 14(12), pp.4392-4396.

\*\*\*\*\*\*