www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 06, Issue 01, January 2026, pp : 188-192

e-ISSN : 2583-1062
Impact Factor : 7.001

HOMOEOPATHIC MANAGEMENT OF THROMBOCYTOPENIA IN DENGUE FEVER WITH CARICA PAPAYA: A CASE STUDY

Dr. Ramesh Soni[1]

[1]Head Of Department, At Dept. Of Anatomy, Gondia Homoeopathic Medical College & Hospital, Gondia (Maha), India.

ABSTRACT

Dengue or break-bone fever is a viral infection that is spread from mosquitoes to people. It is more common in tropical and subtropical than in temperate climates.

The incubation period of dengue virus infection is 4–7 days. The disease spectrum ranges from asymptomatic infection and moderate febrile illness (dengue fever) to more serious manifestations such as dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS) [7]. The most severe clinical syndrome can manifest in the form of dengue shock syndrome (DSS), which also includes coagulation abnormalities, plasma leakage, and increased vascular fragility. The fluid loss due to increased capillary permeability leads to hypovolemic shock and multi-organ failure. Untreated cases can be proven fatal.

Dengue is the leading cause for thrombocytopenia i.e. decrease in platelets count & hence it is the most challenging for treatment strategies. This may result in fluid accumulation in the chest and abdominal cavity as well as depletion of fluid from the circulation and decreased blood supply to vital organs.

This case report evaluates the efficacy of CARICA PAPAYA Q in the management of decreased platelet count. The treatment followed classical homoeopathic principles of individualisation and dynamic cure. The case highlights the potential role of indicated homoeopathic remedies in acute viral condition, offering not only symptomatic relief but also prevention of life-threatening complications such as shock, internal bleeding, organ failure and even death.

Keywords: Dengue, Carica Papaya, Homoeopathy, Individualisation.

1. INTRODUCTION

Dengue fever is more than just a seasonal mosquito bite—it's a viral illness that can lead to severe health complications, especially if ignored or mistreated. Dengue is an arboviral infection commonly transmitted by the mosquito Aedes aegypti It affects millions every year, especially during the monsoon season in tropical and subtropical regions like India, where mosquitoes thrive in stagnant water.

Belonging to the Flaviviridae family, the dengue virus is a 50-nm virion comprising 3 structural and 7 non-structural proteins, a lipid envelope, and a 10.7-kb-capped positive-sense single strand of RNA. Infections are asymptomatic in up to 75% of affected individuals. The disease spectrum ranges from self-limiting dengue fever to severe haemorrhage and shock. A fraction of infections, between 0.5% and 5%, develop into severe dengue.

Without proper treatment, fatality rates may exceed 20%, particularly among children. The typical incubation period for the disease is 4 to 7 days, with symptoms lasting from 3 to 10 days. Symptoms appearing more than 2 weeks after exposure are unlikely to be attributed to dengue fever.

Initial targets by dengue virus are the Skin macrophages and dendritic cells but the dissemination occurs mostly through lymphatic system to other organs. Viremia, the presence of the virus in the bloodstream, may occur for 24 to 48 hours before the onset of symptoms.

The presentation of dengue fever, whether asymptomatic, typical, or severe, is influenced by a complex interplay of host and viral factors. Severe dengue fever, characterized by heightened microvascular permeability and shock syndrome, is often associated with infection by a second dengue virus serotype and the patient's immune response. However, severe cases of dengue fever can also arise from infection by a single serotype. Interestingly, microvascular permeability tends to escalate as viral titters decrease.

2. MODE OF TRANSMISSION

The primary vectors of the disease are female mosquitoes of the species *Aedes aegypti* and *Aedes albopictus*. Although *A aegypti* is associated with most infections, the geographic range of *A albopictus* is expanding. *A albopictus*, being more cold-tolerant, exhibits aggressive feeding behaviour but does so less frequently, which may contribute to its increasing numbers. These mosquito species typically inhabit indoor environments and are active during the day. Modes of transmission include perinatal transmission, blood transfusions, breast milk, and organ transplantation

www.ijprems.com
editor@ijprems.com
INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 06, Issue 01, January 2026, pp : 188-192
e-ISSN : 2583-1062
Impact Factor : 7.001

3. SIGNS & SYMPTOMS

Dengue typically develops in three stages. Recognizing these stages helps in managing the illness early and avoiding complications.

The Febrile phase: During the febrile phase, individuals typically experience a sudden onset of high-grade fever, reaching approximately 104 °C, which usually lasts for 2 to 7 days. Approximately 6% of cases may exhibit saddleback or biphasic fever, particularly in patients with DHF and severe dengue fever. The fever usually persists for at least 24 hours, followed by a subsequent spike lasting at least 1 more day.[10] Associated symptoms during this phase include facial flushing, skin erythema, myalgias, arthralgias, headache, sore throat, conjunctival injection, anorexia, nausea, and vomiting. Skin erythema manifests as a general blanchable macular rash within 1 to 2 days of fever onset and again on the last day. Alternatively, within 24 hours, a secondary maculopapular rash may develop.

The Critical phase: During the critical phase, defervescence marks a period when the temperature typically decreases to approximately 99.5 to 100.4°F or lower, occurring between days 3 and 7. This phase is associated with heightened capillary permeability and typically lasts for 1 to 2 days. Before the critical phase, there is often a rapid decline in platelet count, accompanied by increased hematocrit levels. Leukopenia may also occur up to 24 hours before the platelet count drops and warning signs emerge. If left untreated, the critical phase can progress to shock, organ dysfunction, disseminated intravascular coagulation, or hemorrhage.

The Recovery phase: The recovery phase involves the gradual reabsorption of extravascular fluid over 2 to 3 days. During this period, patients often exhibit bradycardia.

Expanded dengue virus syndrome refers to unusual or atypical manifestations seen in patients with involvement of various organs such as neurological, hepatic, and renal. This syndrome can be associated with profound shock. Neurological manifestations may include febrile seizures in young children, encephalitis, aseptic meningitis, and intracranial bleeding. Gastrointestinal involvement might present as hepatitis, liver failure, pancreatitis, or acalculous cholecystitis. In addition, this syndrome can manifest as myocarditis, pericarditis, acute respiratory distress syndrome, acute kidney injury, or hemolytic uremic syndrome.

4. CASE

Name: Mr. S.R	Age/Sex: 30/M	Religion: Hindu	Occupation: Student

Sr. No.	Presenting Complaints
1.	Fever: continuous type -High grade Fever Pain in eyes, with severe pain all over the body since past 3 days - 101-104^{o} F
2.	Generalized weakness with fatigue in lower limbs
3.	- loss of appetite. - nausea - vomiting (2-3 episodes/ day) - no history of diarrhoea
4.	Irritable and anxious due to myalgia.
5.	Restlessness due to pain.
6.	Desire for company.
7.	Emotionally distressed by the lack of improvement.
8.	Aggravation: Touch, motion, open air
9.	Amelioration: partially on lying.
10.	**O/E:** T-103^{0}F, SPO_2-98%, PR-112/min., BP-110/70 mm of Hg,

www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 06, Issue 01, January 2026, pp : 188-192

e-ISSN : 2583-1062
Impact Factor : 7.001

11.	**S/E: CNS-** conscious, oriented **R/S-** Clear, AEBE **P/A-** Grade II splenomegaly **CVS-** S1+, S2+ **Lymph-** No enlarged lymph nodes

INVESTIGATION: Adv. CBC, Dengue Ns-1, Antibodies (IgG & IgM)

WIDAL'S (TITER)	**TITER**				
	1/20	**1/40**	**1/80**	**1/160**	**1/320**
S. typhi Antigen O	+	+	-	-	-
S. typhi Antigen H	+	+	-	-	-
S. typhi Antigen AH	+	-	-	-	-
S. typhi Antigen BH	+	-	-	-	-

Impression: Typhoid Negative

DENGUE NS1	**POSITIVE**
IgG/IgM Dengue Antibodies	NEGATIVE
Method	CARD TEST
Kit	J. MITRA & COM. PVT. LTD.
Specificity	98%
Sensitivity	97%
Note	**NS-1 POSITIVE**

Impression: Dengue Positive

TEST	**OBSERVED VALUE**
Haemoglobin	- 14.6%
RBC	- 5.00 mill/cm
TLC	- 3,600/cu m.m
- Polymorphs	- 68%
- Lymphocytes	- 25%
- Eosinophils	- 03%
PLT	- 0.20 Lac./cmm

5. DIAGNOSIS

Diagnosis of Typhoid fever & Malarial fever was excluded. Considering the clinical presentation & lab investigations in above case Dengue Fever was diagnosed. Further clinically indicated homeopathic prescription was made.

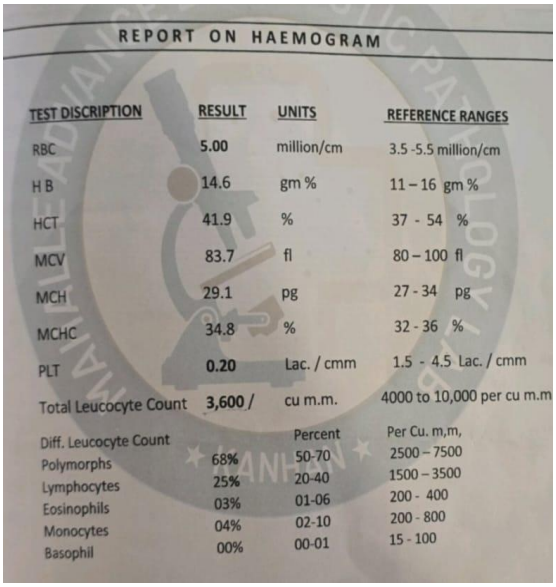
PRESCRIPTION: Carica Papaya Q

DOSE & REPETITION: 20 drops in half cup of water/ 8 hrs.

Before Rx (7/09/23)	After Rx (9/9/23)

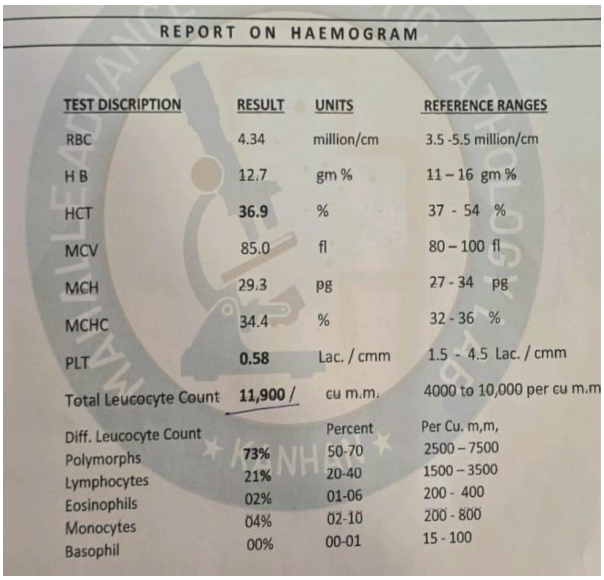
Carica papaya leaf extract, including mother tincture, boosts platelets by stimulating bone marrow production via gene activation (PTAFR, ALOX-12), preventing platelet destruction (antioxidants, membrane stabilization), and potentially inhibiting viruses that cause low counts, working through compounds like quercetin and carpaine to enhance platelet formation and survival, especially in conditions like dengue fever.

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 06, Issue 01, January 2026, pp : 188-192
www.ijprems.com
editor@ijprems.com
e-ISSN : 2583-1062
Impact Factor : 7.001



REPORT ON HAEMOGRAM

TEST DISCRIPTION	RESULT	UNITS	REFERENCE RANGES
RBC	5.00	million/cm	3.5 -5.5 million/cm
H B	14.6	gm %	11 – 16 gm %
HCT	41.9	%	37 - 54 %
MCV	83.7	fl	80 – 100 fl
MCH	29.1	pg	27 - 34 pg
MCHC	34.8	%	32 - 36 %
PLT	0.20	Lac. / cmm	1.5 - 4.5 Lac. / cmm
Total Leucocyte Count	3,600 /	cu m.m.	4000 to 10,000 per cu m.m
Diff. Leucocyte Count		Percent	Per Cu. m,m,
Polymorphs	68%	50-70	2500 – 7500
Lymphocytes	25%	20-40	1500 – 3500
Eosinophils	03%	01-06	200 - 400
Monocytes	04%	02-10	200 - 800
Basophil	00%	00-01	15 - 100



REPORT ON HAEMOGRAM

TEST DISCRIPTION	RESULT	UNITS	REFERENCE RANGES
RBC	4.34	million/cm	3.5 -5.5 million/cm
H B	12.7	gm %	11 – 16 gm %
HCT	36.9	%	37 - 54 %
MCV	85.0	fl	80 – 100 fl
MCH	29.3	pg	27 - 34 pg
MCHC	34.4	%	32 - 36 %
PLT	0.58	Lac. / cmm	1.5 - 4.5 Lac. / cmm
Total Leucocyte Count	11,900 /	cu m.m.	4000 to 10,000 per cu m.m
Diff. Leucocyte Count		Percent	Per Cu. m,m,
Polymorphs	73%	50-70	2500 – 7500
Lymphocytes	21%	20-40	1500 – 3500
Eosinophils	02%	01-06	200 - 400
Monocytes	04%	02-10	200 - 800
Basophil	00%	00-01	15 - 100

Key Mechanisms:

1. Increases Platelet Production:

- Gene Activation: Compounds in papaya leaf activate genes (like PTAFR and ALOX-12) that signal the bone marrow to produce more megakaryocytes, the stem cells that mature into platelets.
- Secondary Metabolites: Minerals and phytochemicals (e.g., quercetin, carpaine) in the leaves promote platelet formation.

2. Prevents Platelet Destruction:

- Antioxidant & Free Radical Scavenging: The extract has antioxidant properties that protect platelets from oxidative stress and premature breakdown (haemolysis).
- Membrane Stabilization: It helps stabilize the membranes of infected cells, preventing lysis, and may inhibit viral assembly, reducing immune-mediated destruction.

3. Specific Action in Dengue:

- Studies show *C. papaya* leaf extract helps manage dengue-induced thrombocytopenia by increasing platelet counts and reducing the need for transfusions.

Phytochemicals: Flavonoids, quercetin, carpaine, and enzymes like papain are key active ingredients.

6. DISCUSSION

After giving Carica Papaya Q,20 drops in ½ Cup of water TDS for 1 Week. Platelet count increases along with increase TLC count. That indicates an active response to infection. As shown in Investigations.

This case reflects significance of clinical homoeopathic approach in managing viral conditions like Dengue. Carica Papaya, selected on the basis of pathophysiological action of drug & it's clinical indications, offered rapid relief and complete recovery without any vital damage. This report adds to clinical evidence supporting the utility of homoeopathy in managing severely decreasing level of platelets in case of Dengue Fever.

7. CONCLUSION

Homoeopathy treats beyond the disease label, aiming to restore the disturbed vital force through individualised prescription. This case of Dengue Fever successfully managed with Carica Papaya Q. is a promising, evidence-supported drug supplement for managing low platelets, but it should be used as an adjunct to, conventional medical treatment for conditions like dengue. Further clinical trials and larger case series are required to validate its broader applicability and establish evidence-based guidelines.

Conflict of Interest: Not available

ACKNOWLEDGMENTS

I thank my father Late Dr.Manmohan Soni and my mother Mrs. Laxmi Soni. I thank my teachers Late Dr. R.S Agrawal and Dr. L.D Rathod for support .Special thanks to my junior Dr.Lucky Nagdev.

Financial Support: Not available

www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 06, Issue 01, January 2026, pp : 188-192

e-ISSN : 2583-1062
Impact Factor : 7.001

8. REFERENCE

[1] National Guidelines for Clinical Management of Dengue Fever (2023) (Government of India).
[2] Dengue: Guidelines for Diagnosis, Treatment, Prevention and Control (WHO) (World Health Organization).
[3] Hand Book of Materia Medica and Homoeopathic Therapeutics. By T. F. Allen. Presented by Médi-T.
[4] "A Review on Papaya leaf extract used to increase in platelets" By Pooja S. Ghutke, Mohini Hatzade. International Journal of Pharmaceutical Research & Application.
[5] Lotus Materia medica By Robin Murphy, ND. 2nd Revised Edition.
[6] K Park: Park's Textbook of Preventive & Social Medicine: 26th edition, Banarasi das Bhanot 2021 26th edition.
[7] Davidson's Principle & Practice of Medicine 23rd edition; Elsevier 2018 Ltd. Edition.
[8] Boericke's New Manual of Homeopathic Materia Medica with Repertory Third Revised &Augmented Edition Based on Ninth Edition. William Boericke, M.D. B. Jain Publishers (P) Ltd.