

**TO EVALUATE THE ROLE OF HOMEOPATHIC MEDICINES IN
PATIENT OF POST VIRAL ARTHRALGIA- A CASE REPORT****Ranjan Kumari Verma*¹ and Amit Mehrotra²**

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ABSTRACT

A 45 years old female patient visited our OPD with chief complaint of polyarthralgia, swelling in right wrist and interphalangeal joints, restricted movement of right hand, pain and numbness in right interphalangeal joints and other associated symptoms. On enquiry patient informed us that she was suffered from Chikungunya fever one year back. Chikungunya is viral fever caused by single-standard; message-sense, heat labile RNA virus. The disease may affect patient from six months up to two years and can leads to post viral arthralgia as complication. The immune response against this virus causes cross reactivity which leads to the inflammation of tissue and damage in cell resulting pain, swelling, tenderness, restricted range of motion, morning stiffness and difficulty in performing day to day activity. All

these affects quality of life resulting work hour lost. The line of treatment according to homeopathy including yoga and physiotherapy provides symptomatic relief and helps to achieve fast recovery to provide better quality of life. In this current case report charts were drawn to analyze affected joints; degree of impairment was analyzed by questionnaire and activities. Charts drawn before and after treatment showed remarkable results.

KEYWORDS: Chikungunya, Post viral arthralgia, Homeopathy.

INTRODUCTION

Chikungunya is a mosquito born viral disease primarily found in non-human primates but the infection transmitted to human by bite of infected female *Aedes aegypti* and *Ae. Albopictus*.^[1]

mosquito. It belongs to alphavirus genus along with other arthritogenic viruses within the Togaviridae family.^[2,3&4] The CHIKV was first recognized as human pathogen when it isolated from serum of an infected patient during an outbreak of debilitating arthritis disease in 1952.^[5] It has been cited as most common human epidemics in Africa and Asia. These epidemics extend from the Indian Ocean islands to India, where large outbreak occurs in 2006. Once introduced in India it affects 17 out of 28 states. This infection occurs in 1.39 million people before the end of year. Chikungunya has been identified over 60 countries in Asia, Africa, Europe and Americas.^[6] The incubation period of 2-7 days, approximately 95% patients will develop symptoms.^[7] The symptoms of Chikungunya are high grade fever, severe headache, chills, rashes on limb and trunk, fatigue, nausea, vomiting, severe joint and muscle pain.^[8] Most of the patients fully recover in approximately two weeks but in some cases joints pain may persist for several months to year's^[9] leads to post viral arthralgia as a complication of this viral infection. Arthralgia is the one of most consistent and debilitating manifestation of Chikungunya virus occurring in 85-100% of patients.^[10] The Chikungunya infection even after the virus is eliminated from the body but the changes in the joints continue to cause tenderness and swelling because of tenosynovitis and enthesopathy. Patients of post viral arthralgia develop symmetric oligo or polyarthralgia mostly in distal extremities like wrist, metacarpal and interphalangeal joints along with ankles and metatarsophalangeal joints^[11&12] less commonly affected joints are hip joint shoulder joint cervical, sacroiliac and lumbosacral joint as well.^[13] The histopathology describes vascular proliferation, perivascular macrophages and synovial hyperplasia.^[14] In earlier stage of infection CD_4^+ T cells are indispensable in inflammatory process and intense activation of these cells along with (DC) dendritic cells, Natural killer cell (NK), and CD_8^+ T cell have been associated with development of chronic arthralgia while synovitis is often assumed to major component of Chikungunya associated arthritis.^[15]

Diagnosis- in acute stage of the disease symptoms shows close resemblance with other arthritogenic alphaviruses such as dengue and Zika. Therefore definitive diagnosis is required. The serological assays such as enzyme linked immune-sorbent assays (ELISA), may confirm the presence of IgM and IgG anti-chikungunya antibodies. After onset of infection, IgM antibody levels are elevated from first few weeks and persist about two months. Sample collected during first week after onset of symptoms should be tested by both serological and virological methods. Reverse-transcriptase polymerase chain reaction (RT-PCR) or virus isolation can be performed during the acute stage.^[16] The world health

organization has not prescribed any vaccine and drug for treating Chikungunya till now. In modern system of medicine drugs like Asprin, NSAIDs are used to reduce fever and body pain. Some supportive therapies like administration of non-steroidal and anti-inflammatory drugs used to deal with the symptoms. WHO encourages to develop strategies and to detect and confirm the case, manage patients and implement social communication strategies to reduce the presence of the mosquito vector.^[17]

AIM'S AND OBJECTIVES

To observe the effect of homeopathic therapy in post viral arthralgia.

MATERIALS AND METHODOLOGY

Case presentation:- A 45 years old female visited our OPD number-04 with the central registration number-23785 of Pt. Jawahar Lal Nehru homeopathic medical college Kanpur, with the chief complaints of polyarthralgia, swelling in right wrist, restricted movement of right hand, pain and numbness in left hand. Mild pain in hip joint while lifting left leg and walking. Other associated symptoms like malaise, fatigue and gastritis since last one year.

History of present illness- According to the patients she suffered from Chikungunya fever one year back. She recovered from fever after taking allopathic medicines. But the pain and swelling in multiple joints sustained. The pain and swelling subsided on taking pain killers, but resurfaced on doing household work. Condition worsened with advancement of winters debilitating her lifestyle.

Past history- History of Chikungunya fever one year back.

Family history- She had no history of diabetes mellitus, hypertension, thyroid dysfunction also she had no family history of Rheumatoid arthritis or gouty arthritis in her primary relatives.

Treatment history- Patients was hospitalized for the primary care of Chikungunya fever. After that she took NSAIDs and steroid for joint pain.

General examination- At the time of first OPD visit, patient was examined properly and following observation was noted.

BP- 110/70 mmHg

P/R- 76/min

Pallor- Absent

Icterus- Absent

CVS- S₁ S₂, normal

Chest- B/L equal air entry, no added sound.

CNS- Conscious well oriented with name, place and person.

Locomotors system- Gait was mild lumping due to pain in hip joint; SLR as well as FST both was negative bilaterally. Rise of temperature in right hand and wrist. No pitting oedema in affected parts. Tenderness present in right arm. Pinch grip, key grip activities involves fingers movement were absent in right hand. Gripping bottle activity was difficult with left hand and absent in right hand because of involvements of fingers and wrist of right side. Eating, brushing teeth activities involve forearm and elbow joint were difficult. Dressing, hair care activities involve forearm, elbow joint and shoulder joint were difficult for her with right hand. Toileting, cleaning perineum activities involve wrist, fore arm, elbow joint, shoulder joint were difficult to perform by her right hand.

Investigation reports brought by patient revealed-

1. CBC- within normal limits
2. ESR- Slightly raised
3. RA-factor (Quantitative)- <10.0 IU/ml (Negative)
4. CRP- Negative
5. ASO- 25 IU/ml (Normal)

Treatment

1. Rhas-T 200 TDS
2. Magphas 6X TDS
3. Formica Rufa 30 TDS

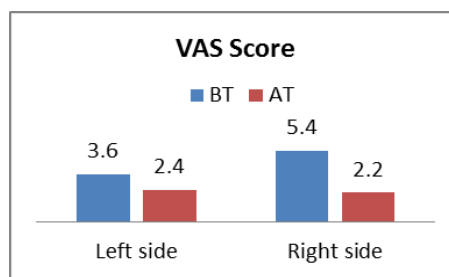
Life style- Advised home made light, worm and fresh food, plenty of water and to avoid fast food, spicy food and cold drinks. Patient also advised to perform Yoga and Physiotherapy.

OBSERVATIONS AND RESULTS

Total 28 days of treatment along with restricted diet, Yoga and Physiotherapy, her improvement charts were drawn which showed following results.

Table 1: (Improvement noted in VAS score)

Left Hand			Right Hand	
BT	AT	Joints	BT	AT
2	2	Shoulder	3	1
4	3	Elbow	5	2
4	2	Wrist	6	2
5	2	MCP	7	3
3	3	PIP	6	3

**Table 2: (Charts were drawn to count tenderness and swelling in number of joints before and after treatment.)**

Left Hand							Right Hand					
ROM		Tenderness		Swelling		Joints	Swelling		Tenderness		ROM	
BT	AT	BT	AT	BT	AT		BT	AT	BT	AT	BT	AT
FM	FM	0	0	0	0	Shoulder	0	0	2	0	RM	FM
FM	FM	0	0	0	0	Elbow	0	0	2	0	NM	FM
FM	FM	0	0	0	0	Wrist	0	0	2	0	NM	FM
FM	FM	2	0	0	0	MCP-1	0	0	3	2	NM	RM
FM	FM	2	1	1	0	MCP-2	2	1	3	2	NM	RM
FM	FM	2	0	2	1	MCP 3	2	1	3	1	NM	RM
FM	FM	0	0	1	0	MCP 4	2	0	2	0	RM	FM
FM	FM	0	0	0	0	MCP 5	1	0	2	0	RM	FM
FM	FM	0	0	0	0	PIP 1	0	0	2	1	RM	FM
FM	FM	0	0	0	0	PIP 2	0	0	0	0	FM	FM
FM	FM	0	0	0	0	PIP 3	0	0	2	0	RM	FM
FM	FM	0	0	0	0	PIP 4	0	0	0	0	FM	FM
FM	FM	0	0	0	0	PIP 5	0	0	0	0	FM	FM

(FM- Free movement, RM- Restricted movement, NM- No movement.)

Criteria for assessment

Severity (tenderness/Swelling)	Grading
Continues joint pain with swelling	3
Moderate	2
Mild	1
No pain/swelling	0

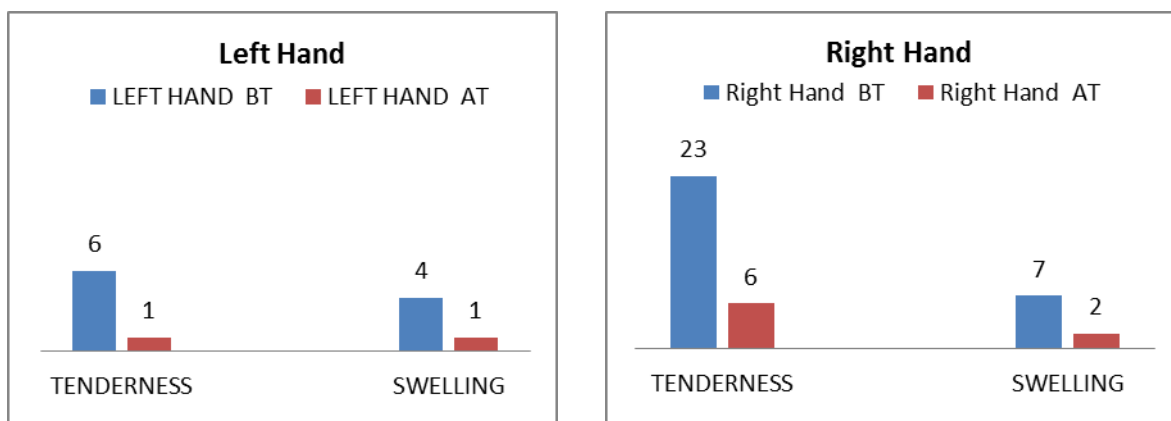


Table 3: (Before and after treatment Chart on cardinal sign of inflammation.)

Joints	Redness		Swelling		Temperature		Pain		Function loss	
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT
Right wrist/ phalanges	-	-	+/-	-	-	-	+	-	-	-
Left wrist/ phalanges	+	-	+	-	+	-	+	-/+	+	-

DISCUSSION

The Chikungunya patients present with oedema and pain of joints, excessive salivation, sleep disturbance, mild coughing, malaise and generalized pain. Homeopathic medicines straighten the immune system to maintain homeostasis aiming to reduce the disease burden and to improve overall health with following the holistic approach not only alleviating the symptoms along. The remedy *Rhus Toxicodendron* was being chosen because it affects fibrous tissue markedly-joints, tendons, sheaths, aponeurosis etc, producing pains and stiffness. It affects right side more than the left. Rheumatic drawing and tearing pained in the limbs worse during rest, relieved by continued motion. Powerlessness of the lower limbs cannot draw them up. The pain and stiffness is worse on commencing to move but continued motion relieves. Patients cannot bear cold air.^[18] The another remedy *Magnesia Phosphorica* is the great anti- spasmodic effect along with cramping of muscles with radiating pains. Neuralgic pains relieved by warmth specially suited to tired, languid, exhausted subjects. Weakness in arms and hands, finger-tips, stiff numbness and general muscular weakness. Worse right side, cold and touch, better warmth and pressure.^[19] And the *Formica Rufa*- is an arthritic medicine. Gout and articular rheumatism, pains worse from motion and better pressure. Right side most affected. Chronic gout and stiffness in joints. Rheumatic pains, stiff and contracted joints. Muscle feel strained and torn from their attachment. Weakness of lower extremities and rheumatism comes on with suddenness and tlessness.^[20] The aforementioned

prescribed remedies along with Yoga and physiotherapy together helps to reduce pain, swelling and improve range of motion. Improvement also noted in cardinal symptoms like redness and raise in temperature normalized after treatment where as improvement in functiolagia was also noted like many of joints becomes free movement who was restricted or no movement before.

CONCLUSION

In this current case report, management of post viral arthralgia through Homeopathy is intended. The result reveals that homeopathic medicines have significant effects in management of post viral arthralgia.

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