

Purgation therapy (*bhedhi*) in the treatment of Trigeminal neuralgia and evaluation using Siddha diagnostic tool *neerkuri* and *neikuri* – A Case study

Case Report

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Abstract

Siddha science is an immortal science, which has its origin from 'Siddhars'. The Siddha system is mainly based on the humoral theory. The three humors namely *Vatham*, *Pitham* and *Kapham*. Any increase or decrease in the ratio of the three humors causes disease in the human body. In the *Siddha* system of medicine, diseases are classified into 4448 in number. Out of these Yugi Munivar classified *Vatham* as 80 types. The symptoms of Trigeminal Neuralgia come under this *Vatha* classification. The elevated *Vatham* is decreased by giving purgation therapy based on the quote '*Bhedhiyaal Vatham Thaalum*'. *Agasthiyar Kuzhambu* is one of the best commonly used purgative medicine in the *Siddha* System. Trigeminal neuralgia is one of the painful disorders involving the fifth cranial nerve and causes severe unilateral pain in the face over regions supplied by the branches of the trigeminal nerve. The present study is conducted to know the efficacy of *Siddha* Purgation Therapy for the management of trigeminal neuralgia on the basis of the quote "*Bhedhiyaal Vatham Thaalum*". A female patient of 56 years, diagnosed with trigeminal neuralgia approached our hospital and got purgation therapy using *Agasthiyar Kuzhambu* for 3 days. Patient complaints were assessed before and after treatment with 1) *Siddha* diagnostic tool *neerkuri* and *neikuri*, 2) Questionnaire about increased *Vatha* symptoms and 3) Visual Analog Scale (VAS) pain scale. After giving *Agasthiyar Kuzhambu* follow up the patient she got relieved from their symptoms and got satisfactory results with the *Siddha* line of management. The possible understanding of the case and therapeutic protocol in *Siddha* has been discussed.

Keywords: *Agasthiyar Kuzhambu*, *Bhedhi* (Purgation Therapy), *Vatham*, *Neerkuri* and *Neikuri*, *Trigeminal Neuralgia*.

Introduction

The *Siddha* system is providing curative, preventive, rejuvenating, and rehabilitative health care. There are three vital forces responsible for a healthy life (*Vatham*, *Pitham*, *Kapham* in the ratio 1:1/2:1/4). Any alteration in the ratio will lead to a diseased condition(1). Treatment in the *Siddha* system is based on normalizing the altered ratio of trihumor. Therapeutic purgation will normalize the vitiated *Vatham*. Trigeminal Nerve is the 5th cranial nerve which is the Largest mixed cranial nerve. It supplies the sensation of the face, mucous membrane, and other structures of the head. The sensory function of the trigeminal nerve is to provide Tactile, Proprioceptive,

and Nociceptive afference to the face and mouth. It is also the motor nerve for the muscles of mastication 3 branches 1. Ophthalmic (V1), 2. Maxillary (V2), 3. Mandibular (V3)(5). Trigeminal neuralgia: It is characterized by a sharp, shooting, lightning-like, or electrical sensation that typically lasts seconds to minutes in the distribution of one or more branches of the trigeminal nerve. The V2 – V3 distribution is the most common location, followed by V2 the ophthalmic division is involved in only 5% of cases. These attacks are severely painful often followed by lucid(pain-free) intervals. The facial pain caused by this nerve is called Trigeminal neuralgia (Tic Douloureux) Tic – spasms and douloureux – painful. The pain resulting from Trigeminal neuralgia imposes a substantial burden on patients.(5,6,7) This case study is prepared according to CARE guidelines.

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Patient Information

A 56-year-old female patient came to OPD of Government Siddha Medical College, Palayamkottai, Tirunelveli with severe pain in the left side of the face

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for 20 days. She was following a mixed diet (Mostly Chicken, Fish, Egg). Her appetite was good. Sleep was disturbed due to pain, but bowel and bladder habits were normal. No known history of Diabetes Mellitus and Hypertension. She had no relevant family history or traumatic history.

The episodes occurred initially on average two or three times per week and were characterized by brief episodes of unilateral left-sided face sharp, lancinating pain, lasting initially on an average for less than two minutes. But progressively duration and frequency both were increased and predominantly affected the left side of the face where the trigeminal nerve is supplied. Attacks were typically triggered by actions such as washing her face or smiling.

Clinical Findings

The patient complained of pain in the left side of her face, and difficulty in smiling and washing her face. The vital signs were normal.

Pain score, Siddha Assessment Urine Examination *Neerkuri* and *Neikuri* were recorded which is mentioned in Table No.2 and 3.

Therapeutic Intervention

Purgation therapy

Purgation is defined as the process or act of purging, by the use of purgatives. Purgatives is used for evacuating and cleansing the bowels (8). Purgation therapy in *Siddha* system is used to normalize the vitiated *Vatha* humour. *Agasthiyar kuzhambu* with Adjuvant: *Inji Surasam*(The extract of Ginger juice is kept for few minutes without shaking for the sedimentation. Then filter the juice without sedimented portion and then it's heated for few seconds till the sound like 'sur' will be produced which is called *Surasam*) for three days as shown in Table 1, monitoring the patient symptoms for 3 consecutive days.

Table 1: Treatment protocol

S.No.	Duration	Medication	Dose	Adjuvant
1	1 st day	<i>Agasthiyar Kuzhambu</i>	130mg	<i>InjiSurasam</i>
2	2 nd day	<i>Agasthiyar kuzhambu</i>	100mg	<i>InjiSurasam</i>
3	3 rd day	<i>Agasthiyar kuzhambu</i>	70mg	<i>InjiSurasam</i>

Diagnostic Assessment

Visual Analog Scale (VAS)

Pain intensity measured by Visual analog scale(VAS). VAS scale are psychometric measuring instruments designed to document the characteristics of disease-related symptom severity in individual patients and use this to achieve a rapid (statistically measurable and reproducible) classification of symptom severity and disease control. VAS can also be used in routine patient history taking and to monitor the course of the disease.(9). The score value 10-Worst pain possible,7-9-Very Severe,6- severe,4- Moderate,1-3 Mild,0-No pain. The pain score of this patient before the purgation

therapy was 9/10. The assessments were done before treatment, 1st day, 2nd day and 3rd day of after treatment were recorded. After treatment the pain score was reduced to 1/10 as shown in Table 2.

Siddha Diagnostic Tool

The *Siddha* diagnostic tool is very useful for perceiving the increased symptoms of *Vatham*. *Siddha* diagnostic tools are Tongue (*Naa*), Colour (*Niram*) , Voice (*Mozhi*), Eyes (*Vizhi*) , Touch (*Sparisam*), Pulse (*Naadi*) , Feces (*Malam*), and Urine (*Moothiram*).(1).In Urine Examination (*Moothiram*) - *Neerkuri* and *Neikuri* play an important role in comparing the increased *Vatha* symptoms before and after treatment. On the first day, the urine sample of the patient were collected.

Neerkuri

Based on our literature the color of the urine indicates which humour (either *Vatham*, *Pitham*, *Kapham*) is deranged. Among that the urine which is passed in the colour of white indicates the *Vatha* humour got derangement in its nature. If the urine is in the colour of *Citrus grandis*, shining like perchloride of mercury, gingelly oil indicates *Pitha disease*. If the urine is white with froth and bubbles, like pure drinking water, like ghee with several colours indicate the vitiation of *Kapham*. If in *Thontha pinineer* (*Thontham* means mixing of 2 among *Vatham*, *Pitham*, and *Kapham*)(1).

Table 2: Pain Score and Neerkuri

Name	Before Medication	After medication		
		1 st day	2 nd day	3 rd day
Pain score	9	5	2	1
<i>Neerkuri</i>				
Colour	5	1	1	1
Smell	1	1	1	1
Froth	0	0	0	0
Sediment	0	0	0	0
Volume	1500	1500	1450	1400

- Colour: (1-Yellow, 2-Red, 3-Black, 4-Green, 5-White) -
 - Pale colour of urine indicates *Vatha Neerkuri*,
 - Yellow colour of urine indicates *Pitha Neerkuri*,
 - Colourless with white foam nature of urine indicates *Kapha Neerkuri*,
 - Black colour indicates heart disease,
 - Green colour indicates excessive chillness
- Smell: (Odour 1 and Non Odour 2),
- Froth: (Present 1 and Absent 0),
- Sedimentation: (Present 1 and Absent 0) and
- Volume

The colour of the urine indicates before Purgation therapy the *Neerkuri* was white in colour which means *Vatham* is dominant. After taking Purgation therapy the colour of the *Neerkuri* was changed to yellow colour which means *Pitham* is dominant which is mentioned in figure in 2a,2b,3a,3b,4a &4b respectively.

Neikuri

Diagnosing diseases with the help of *Neikuri* method (a method by putting a drop of Gingelly oil on the surface of patient's urine). The urine should be collected in a crystal bowl and the test should be done before 90 minutes from drawn. It should be kept in a place where there is no wind which may cause the urine to stir. One drop of Gingelly oil should be installed on the center of the urine. The changes that take place in the urine should be observed carefully to diagnose the ailments. If the Gingelly oil drop extends like a snake it indicates *Vatham*. If the Gingelly oil takes a circular shape it indicates *Pitham*. If the Gingelly oil stands like a pearl without movement it indicates *Kapham*.(1)

Before treatment in Urine Examination (*Neikuri*) was taken the shape of *Vatham* at immediate, 2 minutes, 5 minutes, 8 minutes and 10 minutes. The assessments were done before treatment and 1st day, 2nd day and 3rd day of treatment were recorded. After taking purgation the *Neikuri* pattern changed to *vatha pitham*, *pitham* and *pithavatham*. Table 3 shows the *Neikuri* before purgation and after purgation.

Table 3: Neikuri Before and after medication

Name	Immediate	2mins	4mins	6mins	8mins	10mins
Before treatment	V	V	V	V	V	V
After treatment						
1 st day	V	V	V	V	V	V
2 nd Day	V	V	V	V	VP	VP
3 rd Day	P	P	P	PV	PV	PV

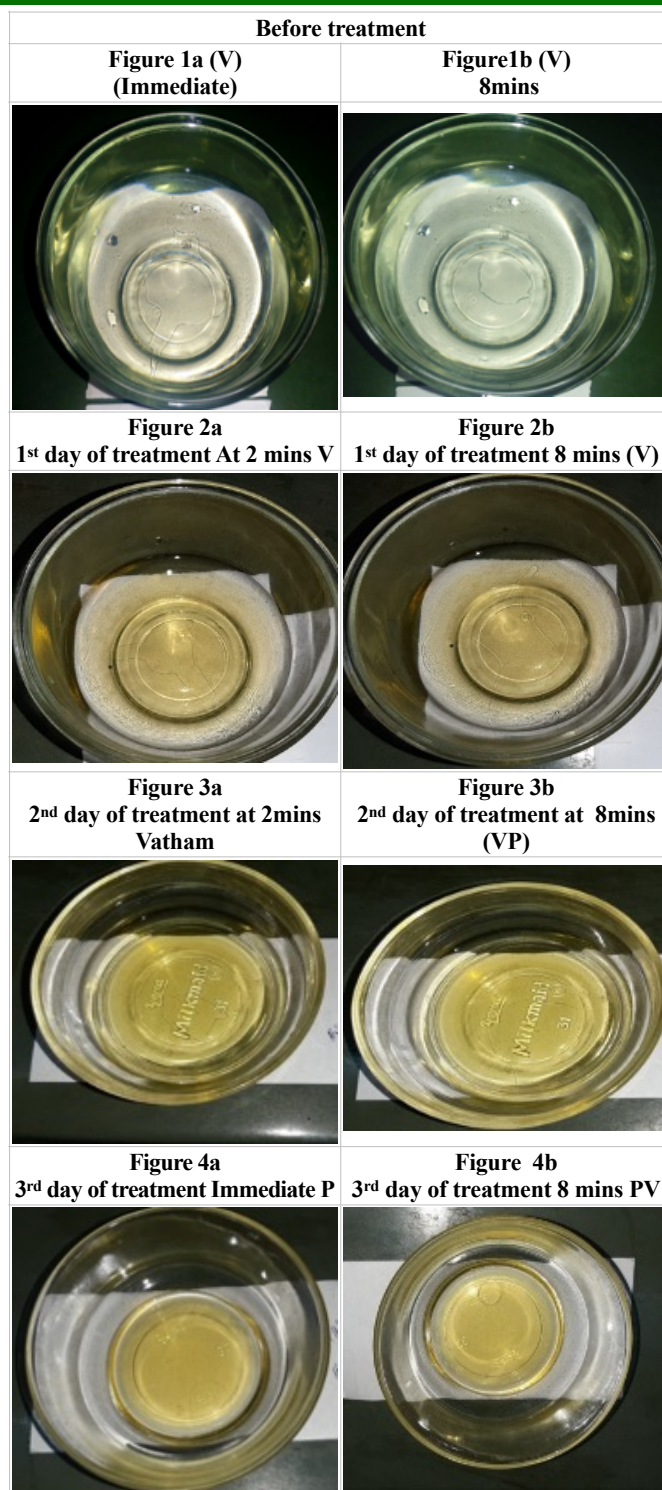
*V –Vatham, P- Pitham, K- Kapham., VP-Vatha Pitham, PV- Pitha Vatham

Follow up and outcomes

After the treatment for 3days, the pain was reduced. The pain score was reduced from 9/10 to 1/10. Based on the Pain Score VAS (Visual Analog Scale) 90 % of Marked relief from the pain was found in the left side of the face after taking purgation. The condition of the patient is improved compared to before by regular consumption of Siddha medications. The changes in the pattern of *Neikuri* from *Vatham* in before treatment to *vathapitham*, *pitham*, and *pithavatham* after treatment manifested that the increased *vatha* symptoms were reduced by purgation therapy.

Discussion

Trigeminal neuralgia comes under 80 types of *Vatham* described by *Yugi Munivar*. Siddha classical texts have described 80 types of *Vatham*. The pain is very intense and agonizing in Trigeminal Neuralgia. It occurs due to vitiation of *Vatham*. The vitiated *Vatha* symptoms are pain in the body, weakness of the nerve, pricking and excruciating pain, weariness and boring pain, the pain felt traumatic cause, dryness, etc (1,10,11,12,13,14,15). *Agasthiyar kuzhambu* is a commonly used purgative drug to ascertain *Vatham*. Its ingredients are *Trachyspermum ammi* (*Omam*), *Nigella sativa* (*Karunjseeragam*), *Ferula asafoetida*



(*Perungayam*), *Croton tiglium* (*Nervaalam*), *Brassica nigra* (*Kaduggu*), *Aconitum ferox* (*Naabi*), Sodium chloride impura {*Inthuppu*}, Sodium baborate (*Venkaaram*), Trisulphate of arsenic {(yellow orpiment) *Aritharam*}, Mercury quick silver (*Rasam*), Arsenic disulphidum bisulphuret or arsenic realgar {[Red orpiment] *Manosilai*}. Adjuvant: *Inji Surasam*. The *Agasthiyar kulambu* have anti-*Vatha* activity ingredients. The Seeds of *Croton tiglium* possess anti-nociceptive effect(15). *Ferula asafoetida* (*Perungaayam*) possessing the property for treating *Vatha* diseases and body pain. *Brassica nigra* (*Kadugu*) used for treating pain, and arthritis. For treating *Vatha* diseases *Croton tiglium* (*Nervaalam*) is used.

Hydrargyrum (Rasam)- is used to treat pricking pain. For treating *Vatha* disease and pain the Arsenic disulphidum (*Arithaaram/Thaalagam*) is used. Sodium chloride impure (*Indhuppu*) are used to treat pricking pain and vatha disease. Adjuvant for *Agasthiyar kuzhambu* is *Zingiber officinale* (Ginger) has anti-diabetic, antiemetic, antibacterial, hypolipidaemic, and hepatoprotective. The Gastrointestinal motility of *Zingiber officinale* (Ginger) increases the number, frequency, and amplitude of gastric contractions in the fasting state and after following a meal to lesser extent (10,11,12,13,14,15,16,17). It enhance the muscle strength and lowers joint pain. So the ingredients of *Agasthiyar kuzhambu* have anti-Vatha activity. It can help restore the optimum *Vatha* levels in the body. Based on the quote "*Bhedhiyaal Vatham Thaalum*"- *Agasthiyar kuzhambu* acts on GIT and it reduces vatham by producing Purgation (Bhedhi).

Conclusion

On the basis of the single case study, it can be concluded that *Siddha* treatments like *Bhedhi* (Purgation) have been effective in the management of Trigeminal Neuralgia. Further clinical trials with large populations needed for better results.

Informed consent: Written consent was obtained from her. She understands that her name will not be published. The patient has given her consent for her images and other clinical findings for publication. We guaranteed to conceal her identity.

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