

## Effect of *Gas Bulathadi Nasya*, *Suwandakottamadi Kashaya* and *Iramusuadi Lepa* in the form of *Thalam* on *Ardhavabhedaka* (Migraine) - A case study

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### ABSTRACT:

*Ardhavabhedaka* is a type of *Shiro Roga* described in Ayurveda and clinical features are severe tearing and pricking pain in one half of the head and giddiness. Pain tends to appear fortnightly, every ten days or suddenly. *Ardhavabhedaka* can be related with migraine. In migraine, headaches often come with nausea, vomiting, and sensitivity to light. It can last hours or days. *Nasya Karma* is the best treatment for diseases above clavicle (*Urdhavajatrugata Roga*) including *Ardhavabhedaka*. *Thalam* is a treatment procedure practice in Kerala by applying herbal paste on head. *Hisagallum*, application of herbal paste on head is a Sri Lankan traditional method of treatment has some similarities with *Thalam*. *Gas Bulathadi Nasya*, *Iramusuadi Lepa* and *Suwandakottamadi Kashaya* are mentioned in traditional medicinal texts as treatment for *Ardhavabhedaka*. So far, no known scientific study has been conducted to evaluate the effect of these treatments. Therefore, it was decided to study the effect of these treatments in *Ardhavabhedaka*. The selected patient was treated for total of 10 days by performing *Nasya Karma* with *Gas Bulathadi Nasya* for a period of three days followed by *Iramusuadi Lepa* in the form of *Thalam* and *Suwandakottamadi Kashaya* orally for 7 days. After conducting *Gas Bulathadi Nasya*, complete (100%) relief was observed in vertigo (*Bhrama*). Partial relief between 33.3 % to 75% was observed in other symptoms of the patient. Complete relief (100%) was observed in all the symptoms such as headache, nausea, vomiting, vertigo, anorexia and photophobia in the patient after completion of entire treatment. Based on the results, it was decided that the selected treatment regimen is effective in treatment of *Ardhavabhedaka* (migraine).

**KEYWORDS:** *Ardhavabhedaka*, *Gas Bulathadi Nasya*, *Iramusuadi Lepa*, *Peperomia pellucida*, *Suwandakottamadi Kashaya*, *Thalam*.

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**INTRODUCTION:**

*Ardhavabhedaka* is a disease described under *Shiro Roga* in Sushruta Samhita.<sup>[1]</sup> Clinical features of *Ardhavabhedaka* are severe tearing and pricking pain in one half of the head (*Uttamanga Ardha Athiva Janthoh Sambheda Toda*) and giddiness (*Bhrama*). Pain tends to appear fortnightly, every ten days or suddenly.<sup>[1]</sup> It is a disease occurring due to vitiation of *Tridosha*.<sup>[1]</sup> *Ardhavabhedaka* can be correlated with migraine. In migraine usually there may be a moderate or severe headache; hemicrania or generalized, nausea, vomiting, anorexia and photophobia. Migraine with Aura and Migraine without Aura are two varieties of migraine.<sup>[2]</sup> Sushruta, prescribes to conduct *Nasya Karma* and *Lepa* (application of pastes on the head) in treatment of *Ardhavabhedaka* (migraine).<sup>[3]</sup> *Thalam* is a treatment method practiced in Kerala by applying herbal paste on the head. In this treatment, oil and pastes are applied on head. *Thalam* has some similarities with *Hisagallum*, a Sri Lankan Traditional medical procedure practiced in treatment of *Ardhavabhedaka* (migraine) by applying herbal paste on head. *Iramusuadi Lepa* as a *Hisagallum* is described in Sri Lankan Traditional medicine in treatment of *Ardhavabhedaka* (migraine).<sup>[4]</sup> *Gas Bulathadi Nasya* along with *Suwandakottamadi Kashaya* is also prescribed as a treatment for *Ardhavabhedaka*.<sup>[5]</sup> No known scientific research has been conducted to evaluate the effect of these treatments. Therefore, it was decided to study the effect of *Iramusuadi Lepa* in the form of *Thalam*, *Gas Bulathadi Nasya* and *Suwandakottamadi Kashaya* in treatment of *Ardhavabhedaka* (migraine).

**CASE STUDY:**

A patient suffering from *Ardhavabhedaka* (migraine) was selected from OPD, Ayurveda Hospital, Rathnapuram, Sri Lanka. She complained that she is having headache, nausea, vomiting, vertigo, anorexia and photophobia for the past three years. The selected patient was thoroughly examined, and severity of the symptoms were recorded using a specially prepared grading scale as used in previously published research papers.<sup>[6]</sup> The grading scale of clinical features are given below.

**Grading scale of the clinical features****Severity of Headache**

Normal = 0 = No headache

Mild = 1 = Mild headache, patient is aware only if he/she pays attention to it

Moderate = 2 = Moderate headache, but does not disturb the routine work

Severe = 3 = Severe headache cannot ignore but can perform usual activities

Very Severe = 4 = Excruciating headache cannot perform chores

**Frequency of Headache**

Normal = 0 = No headache

Mild = 1 = Occurring  $\geq 20$  days

Moderate = 2 = Occurring  $\geq 15$  days

Severe = 3 = Occurring  $\geq 10$  days

Very Severe = 4 = Occurring  $\geq 5$  days

**Duration of Headache**

Normal = 0 = No headache

Mild = 1 = 1-3 hours/day

Moderate = 2 = 3-6 hours/day

Severe = 3 = 6-12 hours/day

Very Severe = 4 = More than 12 hours/day

**Nausea**

Normal = 0 = No nausea

Mild = 1 = Occasional nausea

Moderate = 2 = Moderate nausea, can ignore at times

Severe = 3 = Severe nausea, disturbing routine work

Very Severe = 4 = Severe nausea, small amount of fluid regurgitating from mouth

**Vomiting**

Normal = 0 = No Vomiting

Mild = 1 = Vomiting only if headache does not subside

Moderate = 2 = Vomiting 1-2 times during attack

Severe = 3 = Vomiting 3-4 times during attack

Very Severe = 4 = Forced to take medicine to stop vomiting

**Bhrama (Vertigo)**

Normal = 0 = No vertigo

Mild = 1 = Feeling of giddiness

Moderate = 2 = Patient feels as if everything is spinning

Severe = 3 = Spinning signs accompanied by black outs

Very Severe = 4 = Unconscious

**Anorexia**

Normal = 0 = No anorexia

Mild = 1 = Occasional anorexia

Moderate = 2 = Intermittent anorexia

Severe = 3 = Frequent anorexia

Very Severe = 4 = Hate the sight of food

**Photophobia**

Normal = 0 = No photophobia

Mild = 1 = Occasional photophobia with onset of migraine

Moderate = 2 = Intermittent photophobia with onset of migraine

Severe = 3 = Frequent photophobia with onset of migraine

Very Severe = 4 = Photophobia occurs always when migraine occurs

**Treatment method**

Duration of the treatment was 10 days and follow up period was 14 days. Treatment method is given in table 1.

**Preparation of Suwandakottamadi Kashaya**

12 g each of pericarp *Terminalia chebula* (Family: Combretaceae; Sinhala name: *Aralu*), entire plant of *Solanum virginianum* (Family: Solanaceae; Sinhala name: *Katuwelbatu*), stem of *Tinospora cordifolia* (Family: Menispermaceae; Sinhala name: *Rasakinda*), rhizomes of *Zingiber officinale* (Family: Zingiberaceae; Sinhala name: *Inguru*) and root of *Saussurea lappa* (Family: Compositae; Sinhala name: *Suvandakottam*) taken, mixed with 1920ml of water and boiled down to 240ml. [5]

**Preparation of Iramusuadi Lepa in the form of Thalam**

10 g each of rhizomes of *Acorus calamus* (Family: Araceae; Sinhala name: *Vadakaha*), roots of *Hemidesmus indicus* (Family: Periplocaceae; Sinhala name: *Iramusu*) and *Glycyrrhiza glabra* (Family: Fabaceae; Sinhala name: *Welmi*) and *Saussurea lappa* (Family: Compositae; Sinhala name: *Suvandakottam*) were taken and ground well in order to make a paste. 10 gm of seeded fruit pulp of *Tamarindus indicum* (Family: Fabaceae; Sinhala name: *Siyambala*) was dissolved in 50ml of water so as to make a thick solution and this was mixed with the ground paste. [4]

**Preparation of Gas Bulathadi Nasya Aushadha**

10gm each of entire plant of *Peperomia pellucida* (Family: Piperaceae, Sinhala name: *Gas Bulath/ Wathura Gas/Diya Bulath/ Diya Tippili*) (Figure1) and

*Desmodium triflorum* (Family: Fabaceae; Sinhala name: *Undupiyaliya*) and 2 gm of cloves of *Allium sativum* (Family: Fabaceae; Sinhala name: *Sudulunu*) were taken, pounded and juice was extracted by squeezing. The resultant juice used in *Nasya Karma* as *Gas Bulathadi Nasya Aushadha*. [5]

### Procedure of *Nasya Karma*

*Snehana* was carried out by applying *Nirgundyadi Taila* on neck and face. Then *Nadi Sweda* was performed using steam emitting from boiling water. Then the patient made to lie down on a bed, keeping a pillow under the neck so as to tilt the head back and position the head a little below the body level. Six drops of *Gas Bulathadi Nasya Aushadha* was put into each nostril alternatively and made to inhale. The

phlegm arising was spat out. After *Nasya Karma*, that *Pashchat Karma* such as *Kawalagraha* (gargling with lukewarm water) was performed.

### Procedure of *Thalam* using *Iramusuadi Lepa*

The patient was first anointed by applying 10ml of *Nirgunyadi Taila* on the head. Then the patient was made to sit on a stool and *Iramusuadi Lepa* applied thickly over the vertex of the head, approximately in an area of 10 cm in diameter. This was retained for 45 minutes (Figure 2). After the stipulated time, the paste was removed from head and the vertex was rubbed with dry cloth. Then the patient was made to bathe and after bathing, *Rasnadi Choorna* was applied on the top of the head.

**Table 1: Treatment Plan**



Day	Treatment
Day 1-3	<i>Gas Bulathadi Nasya</i>
Day 4 -10	120ml of <i>Suwandakottamadi Kashaya</i> twice a day before meals <i>Iramusuadi Lepa</i> in the form of <i>Thalam</i> once a day at 10.00 am

**Table 2: Reduction of Symptoms**

Clinical features	BT	After <i>Nasya Karma</i>		After completion of entire treatment	
	Grade	Grade	Percentage of relief	Grade	Percentage of relief
Severity of Headache	4	1	75%	0	100%
Frequency of Headache:	3	2	33.3%	0	100%
Duration of Headache	3	1	66.7%	0	100%
Nausea	4	2	50%	0	100%
Vomiting	4	1	75 %	0	100%
<i>Bhrama</i> (Vertigo)	1	0	100%	0	100%
Anorexia	4	1	75%	0	100%
Photophobia	4	2	50%	0	100%

**Table3: Scientifically proven bioactivities of Ingredients of *Gas Bulathadi Nasya*, *Iramusuadi Lepa* and *Suwandakottamadi Kashaya***

Medicine	Ingredient	Analgesic	Anti-inflammatory
<i>Gas Bulathadi Nasya</i>	<i>Peperomia pellucida</i> ( <i>Gas Bulath</i> ) [9]	+	+
	<i>Desmodium triflorum</i> ( <i>Undupiyaliya</i> ) [10]	+	+
	<i>Allium sativum</i> ( <i>Sudulunu</i> ) [11, 12]	+	+
<i>Iramusuadi Lepa</i>	<i>Acorus calamus</i> ( <i>Vadakaha</i> ) [13]	+	+
	<i>Hemidesmus indicus</i> ( <i>Iramusu</i> ) [14]	+	+
	<i>Glycyrrhiza glabra</i> ( <i>Welm</i> ) [15]	+	+
	<i>Saussurea lappa</i> ( <i>Suvandakottam</i> ) [16]	+	+
	<i>Tamarindus indicum</i> ( <i>Siyambala</i> ) [17]	+	+
<i>Suwandakottamadi Kashaya</i>	<i>Terminalia chebula</i> ( <i>Aralu</i> ) [18]	+	+
	<i>Tinospora cordifolia</i> ( <i>Rasakinda</i> ) [19]	+	+
	<i>Zingiber officinale</i> ( <i>Inguru</i> ) [20]	+	+
	<i>Saussurea lappa</i> ( <i>Suvandakottam</i> ) [16]	+	+
	<i>Solanum xanthocarpum</i> ( <i>Katuwelbatu</i> ) [21]	+	+

	
<b>Figure1: <i>Peperomia pellucida</i> (<i>Gas Bulath</i>/ <i>Wathura Gas</i>/ <i>Diya Bulath</i>/ <i>Diya Tippili</i>)</b>	<b>Figure2: Application of <i>Iramusuadi Lepa</i> in the form of <i>Thalam</i> on head</b>

#### RESULTS:

After conducting of *Gas Bulathadi Nasya*, complete (100%) relief was observed in *Bhrama* (Vertigo). Partial relief (33.3 % to 75%) was observed in other symptoms in the patient.

Complete relief (100%) was observed in all the symptoms such as headache, nausea, vomiting, vertigo, anorexia and

photophobia in the patient after completion of entire treatment. Results are tabulated in Table2.

#### DISCUSSION:

*Ardhavabhedaka* is a disease described under *Shiro Roga*. It is a disease occurring due to vitiation of *Tridosha*. *Nasya Karma* is the best treatment for diseases in *Urdhava*



*Jatrugata Pradesha* especially head. [7] As *Ardhavabhedaka*, is also disease in head (*Urdhava Jatrugata Pradesha*), *Nasya Karma* can be considered as one of the best treatments to expel vitiated *Dosha* in patients suffering from *Ardhavabhedaka*.

As ingredients of *Gas Bulathadi Nasya*, *Iramusuadi Lepa* and *Suwandakottamadi Kashaya* possess *Madhura Rasa*, *Lavana Rasa*, *Snigdha Guna* and *Ushna Veerya*, they pacify vitiated *Vata Dosha*. These ingredients possess the properties of *Madhura Rasa* and *Tikta Rasa*. So, it pacifies vitiated *Pitta Dosha*. As these ingredients possess *Katu Rasa*, *Tikta Rasa*, *Kashaya Rasa*, *Theekshna Guna*, *Ushna Veerya* and *Katu Vipaka* it pacifies vitiated *Kapha Dosha*. Therefore, conduction of *Nasya Karma* using *Gas Bulathadi Nasya*, conduction of *Thalam* using *Iramusuadi Lepa* and oral administration of *Suwandakottamadi Kashaya* are beneficial in treatment of *Ardhavabhedaka* (migraine). [8]

Analgesic, anti inflammatory activities of ingredients of *Gas Bulathadi Nasya*, *Iramusuadi Lepa* and *Suwandakottamadi Kashaya* are scientifically proven as shown in Table 3. Therefore, these drugs are beneficial in management of *Ardhavabhedaka* (migraine)

### CONCLUSION:

Based on the results, it is decided that conducting of *Gas Bulathadi Nasya*, followed by oral administration of *Suwandakottamadi Kashaya* and *Thalam* using *Iramusuadi Lepa* is beneficial in treatment of *Ardhavabhedaka* (migraine). Further, it is recommended that this research should be performed with a larger number of patients.

### Limitation of study:

This is a single case study. Therefore, this research should be carried out with a larger sample which will make results more acceptable.

### Patient consent:

The patient gave the informed consent for reporting of the case study in the journal.

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