

# Scientific validation of Urakka Varmam stimulation with special reference to Baroreflex activation therapy

M.Navin Kumar<sup>1</sup>K.Sivaranjani<sup>2</sup>P.Pandi Selvi<sup>1</sup>M. Ahamed mohideen<sup>3</sup>

1. PG Scholar, Department of Sirappu Maruthuvam, GSMCH, Palayamkottai

2. Research Officer (Siddha), Siddha Clinical Research Unit, Palayamkottai

3. Associate Professor, Department of Sirappu Maruthuvam, GSMCH, Palayamkottai

## Abstract:

Varma therapy has been dealt in various literatures like Varma birangi, Varma kandi, Varma nool alavu, Varma kannadi 500 etc. Therapeutic and traumatic effects of Varma Points are discussed in these literatures. The therapeutic effect of Varma points can be achieved by giving desired manipulation in the desired area. *Urakka Varmam*, is one such varma point that is manipulated in the management of Hypertension. Recently baroreflex activation therapy is being used by the conventional system for Hypertension. This baroreflex activation therapy is given in the place of *Urakka Varmam*. This article aims at scientifically validating the *Urakka Varmam* stimulation for the management of hypertension.

**Keywords:** Siddha, Varma therapy, *Urakka Varmam*, Barareflex activation therapy, Hypertension

## Introduction:

Varma therapy is one of the Siddha therapeutic modality that emerged from southern parts of Tamilnadu. In Siddha system of medicine, Varma points have been emphasized as key elements that have therapeutic property. According to classical varma texts there are approximately 108 major varma points and the required therapeutic effect is obtained by precise manipulation of this points. These varma points may work through activation of particular central nervous pathways. For some diseases a group of varma points has to be manipulated and for some manipulation of single varma point is enough. One such varma point is *Urakka Varmam* for hypertension/*Athikuruthialutham*. Hypertension is the most important risk factor for chronic disease burden in India. About 207 million persons (men 112 million, women 95 million) are living with hypertension in India<sup>1</sup>. Despite best efforts to control blood pressure, resistant hypertension (RH) may occur<sup>2</sup> In spite of increased recognition and therapeutic interventions, studies show that the efficiency of blood pressure control in hypertensive patients continues to decline<sup>3,4,5</sup> with an increase in the incidence of Resistant Hypertension worldwide<sup>6,7,8,9</sup>. Resistant hypertensive patients are forced to take three or more classes of anti hypertensive agents. Risk associated with those anti hypertensive agents are also more. Recently baroreflex activation therapy is used in the treatment of advanced high blood pressure. It works by electrically stimulating the carotid sinus, leading to reduced sympathetic tone<sup>10</sup>. This baroreflex activation therapy can be correlated with the manipulation of *Urakka Varmam*. This article deals with the location of *Urakka Varmam* and its stimulation.

## Materials and Methods:

Various databases like Pubmed, Google scholar, GT health, CADTH, and varmam classical texts like Varma nithanam-500, Varma birangi- 100, Varma saari -205, Varma kannadi – 500, Varma nool alavu, Varma kandi, Varma birangi thiravu kol-16, Varma nooleni – 200 were reviewed.

Urakka VarmamLocation of *Urakka Varmam*<sup>11</sup>:

Āmappāk īz Nāṭia Oṭṭuavarmam

Ataṇanukil Uṛakka Meṇ ṛakālamāmē

Neriyānak īz Nāṭia Oṭṭuavarmam

Niṇ ṛua Vāyarukil Iraṇṭua Uṛakkakālam.

Tuṭiyāna m̄Oṭṭaiyiṇ Kīz Aṭappu Varmam

Tukaiyānāṛua Viraliṇ Kīz Uṭirakālam.

Vaṭivāna Muṇṭirukki Uṛakkakālam

Uamāka Muṇ Conna Uṛakkakālam

Uttamanē Mūviraluakkua Uyarattānē

Tānēttānē Oṭṭuavarmam En ṛua Nāmam

Āppānai Muṇṭikki On ṛua Uṛakkam Raṇṭua

Kavaḷavarmattuakku Nāluaaviraluakkua Kīz Uṛakka Kālam

Kazuttua Cuaṛṛalaviṇ Eṭṭial Ōrua Pakuti

Nīlattai Muṇpakkamuaḷḷa Muṇnākkua

Talḷi Varmattiliruantua Mēl Pakkavāṭ Ṭil Aḷantāl

Uṛakka Kālattai Ariyalām

Kiruapai Uṭaṇ Kokki Enṛa Kālattiliruantua Tānē

Kuriyāka Nelliṭaikkum Valattē Uṛakka Kālam Uḷḷatu.

Kokki Varmattuk Aṭuattua Inuvacamum

Uṛakkakālam Koṇṭāl.....

Uḷḷa Paḍiyē Kazuththi Kiḷnāṭi Thaṇṇil

Uththamanē Aruku Paṛri Uṛakka Kālam

Kīznāṭia Arukupaṛri Uṛakkakālam

Āmappā Nāṭiyarukua Paṛriyē Tān

Āṭavāna Uṛakkattiṇ Kālamon ṛua

Kulamāna Kuralvaḷaiyil Caṅkutiri Kālam

Kuṇakkēṭāy.....

Pilamāna Caṅkutiri Arukil Uṛakkakālam

Poruntavē.....



**Location of carotid sinus:**

The **carotid sinus** is a dilated area at the base of the internal carotid artery just superior to the bifurcation of the internal carotid and external carotid at the level of the superior border of thyroid cartilage<sup>12</sup>.

**Injury to Urakka Varmam**

Injury to *Urakka Varmam* will results in loss of sensation or tingling sensation in the limbs, dizziness and nasal rhinorrhea. When proper manipulation was the patient recover after 90 kadigai<sup>13</sup>

Ūkkamāy Kīznāṭia Arukupaṛri Uṛakkakālam  
 Untavē Attalattil Aṭikaḷ Koṇṭāl  
 Pākkavē Kaṭṭaipōl Kaikāl Timirttua  
 Paṭuttiṭua Vāṇnāci Ilēnī Roḷikkum  
 Tākkavē Toṇṇūrua Kaṭikai Nēram  
 Cayanittua Uṛaṅkiṭuavān Taḷareccai Yālē  
 Ākkamāy Aṭuttiruatti Piṭiattua Koṇṭua  
 Aṭavāka Piṭarivaṭṭam Taṭavittātua  
 Tāttua Mukam Nāṭia Iruppakkam Acaittua Koṇṭua  
 Tayavāka Ucci Taṭṭia Tēkam Acaittua  
 Kāttuakai Kāṭṇai Vazittua Viṭṭāl  
 Karuttāka Inta Varmam Muṛintāl Cākum  
 Paṇ Pāka Toṇṇūrua Nāzi Kaik Kua  
 Cēttuamē Avatiyātua Kazinti Iṭṭāluam  
 Kaṭṭiyē Uṛakkamōṭua Inuma Luṇṭām  
 Kiruvukēṭṭua Vayiratilē Kānta Luṇṭām  
 Kaṇattua Mēl Viṅkamunṭāy Uyiruam Pōkum  
 Peṭṭiyē Intavarmam Koṇṭa Pērkku  
 Picakāmal Enṇai Yōṭua Kaśāyam Ceytāl  
 Oṭṭiyē Oruvēlai Tīmtālācci  
 Uttamanē Paṭṭuviṭum Varmamonrua Kēlē

**Risk involved in Carotid sinus massage**

There is a risk of some temporary loss of feeling, weakness, pins and needles in the limbs or disturbance in vision in about 1 in 1000 patients but this usually recovers within 24 hours. These symptoms can be permanent<sup>14</sup>.

**Therapeutic Uses of Urakka Varmam<sup>15</sup>:**

*Urakka Varmam* should be stimulated simultaneously using both side index finger. It should be pressed for 30 seconds and should be externally rotated for 30 seconds

Or

Both side *Urakka Varmam* should be gently hold using the right side index and thumb fingers, mild vibratory pressure should be applied.

As it is a sensitive varma point sharp pressure should not be given

Therapeutic Indications
1/4 <sup>th</sup> Pressure(fhy; khj;jpiu)
<ul style="list-style-type: none"> <li>○ Hypertension</li> <li>○ Stammering speech</li> <li>○ Sore throat</li> <li>○ Depression</li> <li>○ Insomnia</li> <li>○ Asthma</li> <li>○ Vertigo</li> </ul>

### **Therapeutic indication in carotid sinus**<sup>16</sup>

The device is implanted into upper chest with the electrodes placed in the neck. First, an incision is made in the neck to visualise the carotid bifurcation. The electrode is placed over the carotid artery and positioned where stimulating through it elicits a blood pressure reduction. The electrode is then sutured in place. The main part of the device (also called the pulse generator) is then placed in a pocket underneath the skin.

Adjustments of the stimulation pattern (size and frequency of pulses) are made using a device programmer which communicates with the implanted device through short-range radio signals. Stimulation is set at a level that reduces blood pressure but does not cause discomfort.

### **Conclusion:**

From the above article it is very clear that the location of the *Urakka Varmam* and Carotid sinus are almost similar. Baroreflex activation therapy uses electrical stimulation of the baroreceptors of the carotid arteries. When the carotid baroreceptors are stimulated, afferent nerve activity increases. Ultimately this modulates the autonomic nervous system and causes decrease in Blood pressure<sup>13</sup>. Similarly manipulation of the *Urakka Varmam* stimulates the afferent nerve activity and reduces blood pressure. Clinical trial has to be carried out to prove the statistical significance. When proven clinically this *Varma* therapy will be a cost effective.

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