



Review Paper

LITERATURE REVIEW ON *Pini narambu adangal*- A SPECIALIZED SIDDHA PHYSICAL THERAPY FOR THE MANAGEMENT OF *Valippu noi* (SEIZURE)

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Abstract

Adangal pullikal are nothing but *varmam* points used in the management of emergency as well as disease conditions. *Varma* Maruthuvam is a speciality branch in Siddha Medicine. It is based on *Thonnootraaru Thathuvangal* (Ninty six Basic principles). *Varmam* or *Vaasi* imbalance will affect the *uyir thathukkal* (*Vaatham, Pitham and Kabam*) which is manifested as a disease condition. *Valippu noi* (seizure) is one among the 4448 diseases mentioned in Siddha Medicine. It occurs primarily due to vitiation of the *kabam* humour accompanied by *vaatham* and *pitham*[1]. Literatures mentions the reason for *valippu noi* as *mega noi*, physical and mental tiredness. In *Varmam* literature *Pini narambu adangal* is indicated for *valippu noi* [2]. Anatomically, auricular branch of vagus nerve can be compared to this *adangal pulli*. Nowadays neuromodulation-based treatments such as Vagus nerve stimulation have become increasingly important in epilepsy treatment.

Key words: Siddha Physical Therapy- *Varmam*, *Valippu Noi*(Seizure), *Pini narambu adangal*, Sensory part of Vagus.

INTRODUCTION

“*Paathaathi kesamengum kathinthodum vaasinilai varmam*” [2] meaning, *Varmam* is the science of *vaasi* (the vital energy circulating inside the body). It is the regulating force of *uyirthathukkal* (*vaatham, pitham, kabam*) and hence, any irregularities in this circulating energy will cause diseases. Causes of *varmam* injury can be Internal or External. External causes includes trauma, environment changes and internal causes are

idiopathic. Injured *Varmam* can be regulated physically through *Adangal pullikal* (retrieval points). *Adangal* points are nothing but *varmam* points used in the management of emergency as well as disease condition[3]. “*Naamenra narambu than pinnivarum nalamaana thanamathe adangalaakum*” (Ref- varma sarasoothira thirvukol-36) the verse defines *Adangal* as junction of *narambukal* (nerves, blood vessels). Different kinds of *adangal* are seen in Siddha literatures like *Varma odivu murivu sarasoothiram* – 1200, *Varma sarasoothira thiravukol* – 36, *Varma laada soothiram*- 300 etc. Its number also varies from literature to literature.

Epilepsy is defined as a group of disorders in which there are recurrent episodes of altered cerebral function associated with paroxysmal excessive and hypersynchronous electrical discharge of cerebral neurons. Each episode of neurologic dysfunction is called seizure, which may be convulsive or non convulsive. The estimated proportion of the general population with active epilepsy (i.e. continuing seizures or with the need for treatment) at a given time is between 4 and 10 per 1000 people. However, some studies in low- and middle-income countries suggest that the proportion is much higher, between 7 and 14 per 1000 people. Globally, an estimated 2.4 million people are diagnosed with epilepsy each year. In high-income countries, annual new cases are between 30 and 50 per 100 000 people in the general population. In low- and middle-income countries, this figure can be up to two times higher.[5]

Valippu noi mentioned in Siddha literatures can be compared to seizure. In Siddha literatures, we can see 2 group of classifications for *Valippu noi*. One group of classification describes 5 types of *Valippu noi* and the other group describes 21 types. Common symptoms mentioned includes loss of awareness, involuntary movements of upperlimb and lowerlimb, frothy saliva, deviation of mouth and eyeball¹. In *Varmam* based literatures certain terms like *Vettal*, *Sanni vettu*, *Kai kaal virayal*, *vali* are related with *Valippu noi*. Etiology described is primary vitiation of the *kabam* humour along with *vatham* and *pitham*. It may also happen due to consequence of *mega noi*, physical and mental tiredness.

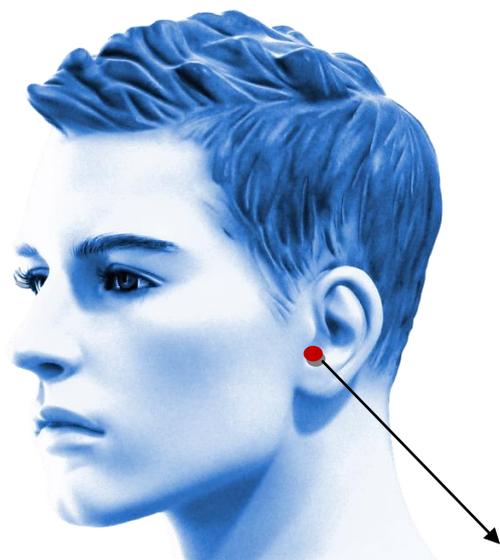
PINI NARAMBU ADANGAL

Pini narambu adangal is one among the *adangal* point indicated for *valippu* (seizure). It is described in literature *Varma laada soothiram* - 300

மயக்கமும் சன்னிவெட்டால் மறுத்துதான் முடிப்புதாளால்
கயக்கமும் கைகால்விறையல் கலக்கம் இப்படியே கண்டால்
தியக்கமும் செவிசுற்றி குழியின் திடம்பிணி நரம்படங்கல்
வியக்கவே செய்யநன்று வினையில்லை கருதிக்கொள்ளே

(Varma laada soothiram-300)

Explanation- *Pininarambu adangal* is located in *Sevikutri kuzhi*(below the tragus of the ear). Physical therapy at this point cures seizure along with loss of awareness and stiffness of upper and lower limb [2,3,4].



Pini narambu adangal

Manipulation method - Upward pressure at the site with the tip of the ventral surface of index and middle finger for 3 seconds.

Maaththirai (pressure exerted) – $\frac{1}{4}$ *maaththirai* (mild pressure)

Notes

- Avoid lifting heavy weight and indulging in strenuous activities immediately after treatment
- *Varmam* treatment should not be given immediately after meals

BASIC PRINCIPLES OF VARMAM

Varmam is based on the *Thonnootraaru thathuvangal* (*The Ninty Six Fundamental principles of Siddha Medicine* which encompasses the Physical, Mental and Spiritual components of a man). Since this *adangal pulli (varmam)* is situated in the head its relations to the concerned *Thonnootraaru thathuvangal* is described as-

<i>Aathaaram</i>	- <i>Aakinai</i>
<i>(chakras)</i>	<i>(between the eyebrows)</i>
<i>Naadi</i>	- <i>Siguvai, Suzhumunai</i>
<i>(Vital channels)</i>	
<i>Mandalam</i>	- <i>Chandra mandalam</i>
<i>(Regions of body)</i>	<i>(Above the neck)</i>
<i>Uyir thaathu</i>	- All the 3 humours especially <i>kabam</i>
<i>(Three humours)</i>	
<i>Thasa vaayu</i>	- <i>Viyanan</i>
<i>(Vital force)</i>	<i>(Life force located all throught out the body)</i>
<i>Pancha bootham</i>	- <i>Aakaayam</i>
<i>(Five elements)</i>	<i>(Space)</i>

ANATOMICAL RELATION

Location	- Below the tragus of both ears
Bone of the	- Condylod process of the mandible and zygomatic process skull
Joint	- Temperomandibular joint
Muscles	- Masseter
Ligaments	- Joint capsule, Tempero mandibular ligament

Artery	- Maxillary artery, superficial temporal artery
Vein	- Superficial temporal vein
Nerve nerve	- Auriculotemporal nerve, Greater auricular nerve, Vagus
Sensory supply	- Auicular branch of Vagus nerve
Gland	- Parotid gland

Management of epilepsy in modern medicine can be divided into primary and secondary measures. Primary measures include Prophylactic management and treatment for acute convulsions. Secondary measures are antiepileptic medication and social rehabilitation. Antiepileptic drug (AED) therapy, the mainstay of treatment for most patients, has four goals: to eliminate seizures or reduce their frequency to the maximum degree possible, to evade the adverse effects associated with long-term treatment, to aid patients in maintaining or restoring their usual psychosocial and vocational activities and in maintaining a normal lifestyle. The ideal AED should suppress all seizures without causing any unwanted adverse effects. Unfortunately currently available AEDs not only fail to control seizure activity in some patients but also frequently produce adverse effects that range in severity from minimal impairment of the CNS to death from aplastic anemia or hepatic failure.[6]

In current scenario neuromodulation-based treatments such as Vagus nerve stimulation have become increasingly important in epilepsy treatment. Electrical stimulation of the auricular vagus nerve (aVNS) is an emerging technology in the field of bioelectronic medicine with applications in therapy. Modulation of the afferent vagus nerve affects a large number of physiological processes and bodily states associated with information transfer between the brain and body.

From the above described details we are attempting to draw a relation between Pini nambu adangal which is a specialized Siddha Physical therapy mentioned in Varma laada soothiram-300 and Modern Neuromodulation technique involving stimulation of afferent nerve fibres of Auricular branch of Vagus nerve.

CONCLUSION

Epileptic management should be focused on seizure freedom in patients. Effective medicinal therapy for epilepsy treatment is not attained till date. Nowadays neuromodulation or neurostimulation therapy gives hope in the above condition. *Pini narambu adangal* which is situated in the *sevikutri kuzhi* (below the tragus) can be anatomically related to the sensory part of Vagus nerve (Auricular branch). When this *Pininarambu adangal* is stimulated by physical therapy it carries the signals to the central nerve system via the Auricular branch of Vagus nerve. So we can assume that by stimulating the *Pini narambu adangal* we can reduce the epileptic episode and improve the quality of life. Clinical trials have to be performed to validate the effectiveness of Pininarambu Adangal in management of Seizure.

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