

## EFFICACY OF SIDDHA MEDICINAL PLANTS UNDER LAMIACEAE IN THE TREATMENT OF *PEENISAM* (SINUSITIS)

G. Ganga devi<sup>1</sup>, R. Soundarya<sup>1</sup>, T. V. Sundari<sup>1</sup>, S. Theboral<sup>1</sup>, Thomas M Walter<sup>2</sup>.

<sup>1</sup>Second Year BSMS, Government Siddha Medical College, Palayamkottai, Tirunelveli, Tamil Nadu, [ragavi240499@gmail.com](mailto:ragavi240499@gmail.com)

<sup>2</sup>Lecturer, Government Siddha Medical College, Palayamkottai, Tirunelveli, Tamil Nadu, [siddhawalter@gmail.com](mailto:siddhawalter@gmail.com)

### ABSTRACT

Siddhars classified the disease into 4448 types. Among them the disease of nasal origin are 86 and *Peenisam* is one of them. *Peenisam* is otherwise known as *Mookadaippu* or *Neerkovai* as per Siddha literature and known as Sinusitis in modern medicine. The signs and symptoms of *Peenisam* according to Siddha literature are thick nasal mucus, plugged nose, fever, headache, sore throat, cough etc. As per records number of adults diagnosed with sinusitis is 29.4 million and percentage of adults diagnosed with sinusitis is 12.1%. Approximately, 0.5% of all upper respiratory tract infection is complicated to sinusitis. Every year 1000 persons are affected by sinusitis. In this review paper we have listed out the commonly identifiable, easily available, cost effective herbs, especially in family Lamiaceae which are against *Peenisam*. In this paper we have listed out effective herbs against sinusitis in the family Lamiaceae and additional information about *peenisam* in Siddha literature.

### KEYWORDS

Sinusitis, *Peenisam*, Lamiaceae, Siddha medicine

### INTRODUCTION

Sinusitis is an infection of paranasal sinus that often complicates upper respiratory tract infection. As per modern science, symptoms are pain present in face, thick purulent nasal discharge, fever, tooth ache, sneezing and halitosis. Sinusitis refers to an inflammatory condition involving the four paired structures surrounding the nasal cavities. Sinusitis affects 90% of the population which accounts for millions to visit physicians each year. Nowadays world is moving towards herbal remedies for complete healing of such tragic ailments. Many

herbs are used in treating sinusitis because of their ant-inflammatory and antioxidant property. Siddha literatures have mentioned about many remedies for the treatment and management of sinusitis which includes both herbal and poly-herbal formulations. Some of those are mentioned and briefly explained in this paper based on the specific characters of the family.

## **METHODOLOGY**

Out of the 55 plants we identified as having effectiveness in treating sinusitis 6 plants belonged to this LAMIACEAE family. Most of the plants in Lamiaceae have expectorant and stimulant actions. Hence these are considered to have activity against Sinusitis.

## **PEENISAM IN SIDDHA**

According to Siddha system of medicine, sinusitis is caused by the dearrangement of the humours (*Mukkutram*) due to various factors.

## **CAUSES**

1. *Miguntha kulirntha neerai parugal* (Over consumption of cold water)
2. *Kulirntha kaatril eedupadal* (Exposure to cold air)
3. *Puzhuthi padinthula kaatrai svaasithal* (Inhalation of polluted air)
4. *Thummalai undupanum porutkalai nugarthal* (Inhalation of substance which cause dust allergy)
5. *Udal veppamadainthirrukum pothu iyathaai perruka kudiya kulirntha neeril thalai mulugal* (Intake of very cold water when the body is of much heat)
6. *Kulirchiyana porutkalai utkolal* (over consumption of chilled foods)
7. *Than dhesamallathu veru naadugaluku sendru sila samayam asuthamaana neerai payanpaduthuthal* (Frequent change of water and drinking contaminated water)
8. *Kaneer vadithal* (Dribbling of water from eyes)
9. *Alavukku migunthu allathu kurainthu nithirai kollal* (insomnia and excessive sleeping)
10. *Meganoi* (Veneral diseases)

## **SYMPTOMS**

1. *Mookil namaichal* (Irritation in the nose)
2. *Kankal sivanthu kaneer vadithal* (Redness and dribbling of water from eyes)
3. *Thalai noi* (Head ache)
4. *Moochu thinaral* (Wheezing)
5. *Mukilirunthu Pani Neer pola sottuthal* (Dribbling of water from nose)
6. *Kaathil namaichal* (Itching in the ears)

## **MUKKUTTRAM**

Due to the increase in body heat and food habits, the *pitha* is increased in the body and at the same time the *kabham* gets dominated over *pitham*. And finally the disease is reflected as the domination of *kabham*.

## **NAADI**

*Pithakabham*

## **CLASSIFICATIONS OF PEENISAM**

According to the texts *siddha maruthuvam and noinadal noi muthal nadal*

*Peenisam* has been classified into nine types. They are

1. *Vali peenisam*
2. *Azhal peenisam*
3. *Iya peenisam*
4. *Neer peenisam*
5. *Kuruthi Peenisam*
6. *Seezh Peenisam*
7. *Siraai peenisam*
8. *Mulai peenisam*
9. *Kazhuthu peenisam*

## MODERN ASPECTS OF SINUSITIS

### CAUSES

Sinusitis can stem from various factors but it always result from fluid becoming trapped in the sinuses.

### TYPES

1. Acute sinusitis
2. Sub-acute sinusitis
3. Chronic sinusitis

Herbs effective against sinusitis

Plants for the treatment of sinusitis in Lamiaceae family.

1. *Thumbai* (*Leucas aspera*)
2. *Karuppuravali* (*Anisochilus carnosus*)
3. *Thazhuthalai* (*Clerodendrum phlomoidis*)
4. *Pidangunari* (*Premna tomentosa*)
5. *Kandubharangi* (*Clerodendrum serratum*)
6. *Thulasi* (*Ocimum sanctum*)

### HERBS BELONGING TO LAMIACEAE

S.No	Botanical name (Tamil name)	Common name	Phytochemical constituents	Diseases cured
1.	<i>Leucas aspera</i> ( <i>Thumbai</i> )	Thumba	Isoquinoline, Pyridine, Pyrrolidine	<i>Peenisam</i> (sinusitis), <i>Irumal</i> (cough), <i>Thalaivali</i> (head ache)
2.	<i>Coleus aromaticus</i> - ( <i>karuppuravalli</i> )	Thick leaved lavender	Flavonoids, Saponins, Alkaloids	<i>Peenisam</i> (sinusitis), <i>Irumal</i> (cough), <i>Sali</i> (cold)
3.	<i>Clerodendrum phlomoidis</i> - ( <i>Thazhuthaazhai</i> )	Wind killer	Flavonoids, Terpenoids	<i>Peenisam</i> (sinusitis), <i>pandu</i> (anaemia), <i>Siruneer kadupu</i> , <i>erivu</i> (UTI infection)

4.	Premna tomentosa- ( <i>Pidangu nari</i> )	Premna	Petroleum ether,ethyl acetate,methanol	<i>Peenisam</i> (sinusitis), <i>serriyamai</i> (Indigestion)
5.	Clerodendrum serratum- ( <i>kandubharangi</i> )	Beetle killer	Saponins,sterols ,flavonoids	<i>Peenisam</i> (sinusitis), <i>Suram</i> (fever), <i>Eraippu</i> (Asthma)
6.	Ocimum sanctum- ( <i>Thulasi</i> )	Holy basil	Saponin,flavonoids, triterpenoids ,tannins	<i>Peenisam</i> (sinusitis), <i>Suram</i> (fever), <i>Sali</i> (cold)

### RELEVANT STUDIES- DATA COLLECTION

Botanical name- Tamil name	Activity	Interpretation	Reference
1)Leucus aspera- <i>Thumbai</i>	Anti- staphylococcus aureus	Control sinusitis	Ai Lan chew et al,2012
2)Coleus aromaticus- <i>karuppuravalli</i>	Anti- staphylococcus aureus	Control sinusitis	Vijaya .P.P et al 2016
3)Clerodendrum phlomoidis- <i>Thazhuthalai</i>	Anti-staphylococcus aureus	Control sinusitis	A.Hannah Hepsibah et al 2017A
4)Premna tomentosa- <i>pidangunaari</i>	Anti- staphylococcus aureus	Control sinusitis	R.Perumalsamy et al 2000
5)Clerodendrum serratum- <i>Kandubharangi</i>	Anti- staphylococcus aureus	Control sinusitis	Vidya.S et al 2010
6)Ocimum sanctum- <i>Thulasi</i>	Anti-staphylococcus aureus	Control sinusitis	Surender singh et al 2005

### DISCUSSION

Untreated sinusitis may lead to many complications such as asthma, bronchitis and tuberculosis. The aetiology of this condition is due to many factors like pollution, etc. In modern medicine surgical treatment includes Sub Mucosal Remission (SMR), for Deviated Nasal Septum (DNS), other such treatment includes Ethmoidectomy and Antrostomy, Sphenoidotomy, Frontal sinustomy, CSF Rhinorrhoea, Caldwell Luc, Orbital and Optic nerve decompression which are invasive in nature. Herbs which reduces *kabham* and increases *pitham* may be a better selection for the non-invasive type of treatment.

## CONCLUSION

In this paper, we reviewed herbal medicines for sinusitis which are found in the family Lamiaceae. This is just a preliminary work. Further extensive research works are to be done.

## REFERENCES

1. G.S.Uthamarayan H.B.I.M, *Thottra kirama araichiyum siddha maruthuva varalarum*, 2016.
2. G.S.Uthamarayan H.B.I.M, *Siddha maruthuvanga surukam*, 2016.
3. Vaithiya rathinam et al, *Siddha materia medica (Mooligai)*.
4. M.Sanmugavelu, H.B.I.M, *Siddha maruthuva noinal noimuthal nadal thirattu* (Part 1&2), 2016.
5. Ai LAN chew et al, Anti oxidant and antibacterial activity of different parts of *Leucus aspera*, *Asian pacific journal of tropical biomedicine*, 2012
6. Vijaya.p.p et .al, Antimicrobial activity and characterization of biosynthesized silver nanoparticles from *Anisochilus carnosus*, *International journal of Nano dimesion (IJND)*, 2013.
7. A.Hannah hepsibah et al, Anti microbial activity and TLC profiling of *Clerodendrum phlomoidis* Linn.Leaf extract against multi drug resistant clinical pathogens, *International journal of pharmacy and pharmaceutical sciences*, 2017.
8. R.Perumalsamy et al, Antibacterial activity of some folklore medicinal plants used by tribals in western ghats of India, *Journal of Ethnopharmacology*,2000.
9. Poornima BS et al, Pharmacological review on *Clerodenderum serratum* Linn.Moon, *Journal of Pharmacognosy and Phytochemistry*, 2015.
10. Shahedur rahman et al, A review of phytochemical and pharmacological profile of *Ocimum sanctum* L., *American journal of drug discovery and development*, 2011.
11. M. Dharani et al, Role Of Pugai (Fumigation) In Siddha System, *Siddhapapers*, ISSN: 0974-2522