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Therapeutic effectiveness of a siddha formulation *Vidathari chooranam*: A Review

Dr. D.Periyasami[1*], Dr. G. Ganapathy[2], Dr. N.J. Muthukumar[3], Dr. V. Banumathy[4]

[1.] Lecturer & part time PhD Research scholar, Dept of Sirappu Maruthuvam, National Institute of Siddha, Chennai - 47.
[2.] PhD Guide/Former professor & HOD, National Institute of Siddha, Chennai - 47.
[3.]Associate professor, HOD I/C Department of Sirappu Marutuam, National Institute of Siddha, Chennai-47.
[4.] Director, National Institute of Siddha, Tambaram Sanatorium, Chennai-47.
*Corresponding author: *sami2011nis@gmail.com*

Abstract

Siddha system of medicine is one of the ancient systems of medicine practised among Tamil speaking community. The medicine in this system prepared from raw drug from herbals, mineral, metals and animal products. '*Vidathari chooranam'* is a herbo -mineral preparation with ingredients of 6 herbal and one mineral ingredient. It is used to treat the skin diseases particularly for '*Kaanakadi* (Urticaria').This review is aimed to bring out scientific evidence for the therapeutic usage of '*Vidathari chooranam'* and focused on the pharmacological activity responsible for the curative nature of the drug. Most of the drugs have anti-inflammatory, and antihistamine activity hence justifying its usage in above mentioned disease.

Keywords: Siddha Medicibe, *Vidathari chooranam', Kaanakadi*, pharmacological activity .

Introduction

Siddha system of medicine is the primary system of all system of medicine and is originated and practised in southern India particularly in Tamilnadu. It is also called Tamil Maruthuvam because it evolved along with Tamilan's culture. Siddha medicines are known for its efficacy and safety. The reason for popularity of the Siddha system is attributed to its effective with minimal side effect. Siddhars, the founder of Siddha system possessed yoga siddhi powers (supernatural powers). They have left their imprints in many disciplines like medicine, alchemy, philosophy, yogam, and varmam.

'*Vidathari chooranam'* is classical Siddha compound drug which is mentioned in siddha text book of Siddha Maruthuvam Sirappu. This drug used for skin diseases particularly for' Kaanakadi(Urticaria)'. The drug review of '*Vidathari chooranam'*, a herbo mineral drug gives sound evidence for its therapeutic action mentioned in literature. The major ingredients of this drug are Kukkil, Manjisti, Silazet, and Vasambu. This review focused on the pharmacological activities of each ingredient which supports the traditional claim and the literature search is confined to that area. The search was made from the textbooks in the library

of National Institute of Siddha, journals, internet databases etc.

Standard operating procedure for preparation of *Vidathari chooranam*:

Purification of raw drugs:

All the raw drugs are purified as per the methods mentioned in Siddha literature.

Preparation of drug '*Vidathari chooranam*':

The mentioned ingredients in the table -1 are powdered separately and mixed well together then taken in a tightly closed container.

Table-1: Method of preparation of '*Vidathari chooranam*'[1].

Sl.no	Tamil name	Botanical name/chemical name	Part used	Quantity
1.	Kukkil (Karunkunilium)	*Canirium strinctum*	Resin	30 gm
2.	Manjisti	*Rubia cordifolia*	Root	20 gm
3.	Vengaipattai	*Pterocarpus marsupium*	Bark	10 gm
4.	Vasambu	*Acorus calamus*	Rhizome	10 gm
5.	Moongil uppu	*Bombusa arundinacea*	Crystal like substance	10 gm
6.	Gomuthira Silazet	*Asphalt mineral* Pitch	-	10 gm
7.	Maramanjal	*Coscinium fenestratum*	Stem	5 gm

Information on mineral ingredient (Silazet) as per Siddha text Gunapadam Thathu Jeeva Vaguppu:

Gomoothira Silazet:

Name in other language: Sanskrit: Silajit, English: Asphalt; Mineral pitch, Hindi: Guj, Mah, Tamil: Perangym; Uerangyum. silazet is a exudates and natural substance collected from Himalayans mountains present between India and Nepal[2]. Types of Silazet according to colour

1. Gold Silazet which is red
2. Silver Silazet which is white
3. Copper Silazet which is blue in colour
4. Iron Silazet which is blackish brown.

Iron silazet is most available and used in medicinal purpose

Silazet is of bitter taste and of a smell resembling cow's urine. So this is called as Gomuthra silazet. Silazet is a bituminous substance which is a compact of dark red gummy matrix interspersed with vegetable fibres, sand and earthy matter. Benzoic acid and benzoates which are present in silazet in large quantities are considered to be the main active principle. it is used in genito urinary tract disease, jaundice, eczema, chronic bronchitis, TB. Nervous diseases, anaemia, etc.[3]

Table-2: Information on herbal ingredients as per Siddha the text Gunapadam Mooligai Vaguppu[4].

Sl.no	Botanical name	Vernacular name				Part used
		Tamil	English	Hindi	Sanskrit	
1.	*Canarium strintum*	Karunkunkilium	Black dammar	Kala dammar	-	Resin
2.	*Rubia cardifolia*	Manjitti	Indian madder	Manjitti	Manjishta	Root
3.	*Acorus calamus*	Vashambu	Sweet-flag	Bach	Vacha,	Rhizome
4.	*Bombusa arudinaceae*	Mungkil	Bamboo	Bhans	Vamsa	Crystal like substance
5.	*Ptercorpus marsupium*	Vengai maram	The Indian Kino tree	Bijasar	Asanam	Bark
.6.	*Coccinium fenestratum*	Maramanjal	Tree turmeric	Jahar-haldi	Darvi	Stem

Pharmacological activities of ingredients of *Vidathari chooranam*

Kunkilium (*Canarium strinctum*):

The decoction or powder of the resin was given orally as a remedy for rheumatism, cough, fever, epilepsy, asthma, syphilis, blood impurity, chronic skin disease, varicose, poison, hernia, haemorrhage[5]. In vivo anti-inflammatory activity of essential oil obtained by hydrodistillation of resin of *Canarium strintum* has been observed in mice at the higher dose of EOCS 100mg/kg ($p<0.001$). The perceived anti-inflammatory activity might be due to inhibition of histamine, serotonin, kinins, substance and prosroglantins[6]. The resin used to treat the ENT diseases, syphilitic ulcer, skin diseases, neurological disorders, and urticaria[7].

Vashambu (*Acorus calamus*):

The anti-inflammatory activity of the boiled coconut oil extract of the rhizome was studied in rats using acute and chronic experimental models. The oral administration of 2ml of the extract produced 45% inhibition of the carrageenin induced paw oedema, 13.6% inhibition of cotton pellet granuloma formation and 61% inhibition of cotton oil granuloma pouch inflammatory response in rats[8]. The extract of rhizome (0.5ml/kg i.p) had significant anti inflammatory activity in, chronic and immunological models of inflammation[9]. *Acorus calamus* ethanolic extract possess nightly substantial antiasthmatic activity by significantly inhibited the histamine induced broncho construction of the guinea pig representing its h1 receptor antagonistic activity and support the plant by its anti-asthmatic properties[10].

Manjisti (*Rubia cordifolia*):

The aqueous extract of *Rubia cordifolia* showed anti inflammatory activity in Rat. The antiinflamatory activity is because of presence of rubimallin[11]. Mollugin, furomollugin and dehydro-a--lapchone are isolated from the chloroform fraction of *Rubia cordifolia* roots. Mollugin showed inhibition of passive cutaneous anaphylaxis (PCA) and protection of mast cell degranulation in rats[12]. Immuno modulator activity of *Rubia cordifolia* (50.100 and 200mg/kg per oral in rates in whom immune suppression was induced by a minimum effect dose of pyrogallol (50mg/kg). The treatment with alcoholic extract of *Rubia cordifolia* significantly prevented the influence of the minimum effect of pyrogallol on all immunological parameters and concurrently prevented the changes in the marker parameters of oxidative stress[13].

Vengai pattai (*Pterocarpus marsupium*):

In human peripheral blood *Pterocarpus marsupium* extract was shown to decreases the prostaglandin E2 levels possibly through inhibition of the inflammatory mediators' cyclooxygenase-2[14]. The methanol (100mg/kg) ($p<0.001$) and aqueous extract (100mg/kg) ($p<0.01$) has exhibited anti inflammatory activity in carrageenan induced rat paw oedema method flavonoids presents in stem bark may be responsible for anti inflammatory activity[15].The ethanolic extract of the heart wood of *Pterocarpus marsupium* on milk induced leukocytosis and eosinophillia in mice showed significant decreases in difference in number of leukocytes and eosinophil count in the compound 48/80 induced mast cell degranulation in rats, *Pterocaarpus marsupium* showed significant decreases in number of degranulated mast cell count and significant increases in number of intact mast cell count. In egg albumin induced passive paw anaphylaxis in rats, *Ptercarpus marsupium* showed decreases in paw oedema[16].

Maramanjal (*Coscinium fenestratum*):

The stem of the plant has antimicrobial, antidiabetic, anti inflammatory, antioxidant, properties. The extract of the stem is useful in snake bites and the stem bark is useful in treating intermittent fever[17]. The ethanolic extract of the *Coscinium fenestratum* was studied on inflammatory pain induced by formalin in the mice. The total extract and its polar and non polar fraction were administrated intra peritonaly 30 minutes before formalin injection. Total extract in dose induced significant reduction occurred[18].

Moonkil (*Bambusa arundinacea*):

The salt of *Bombusa arundinacea* is used to treat the asthma, and cough[21]. Anti inflammatory effect of the menthol extract of the leaves of *Bombusa arundinacea* against carrageanin induced as well as immunologically induced paw oedema and also antiulcer activity in albino rats have been studied and found to be significant when compared to the standard drugs[20].

Shilazet (*Asphalt mineral* Pitz):

Silazet stabilizes the mast cells and also prevent its degranulation. The effects of shilazet and its constituents, fulvic acids (FA), 4-methoxy 6 carboxyphenylmethyl (MCB) and 3,8-dihydroxy-dibenzo-a-pyrone(DDP) were studied for protective against mast cell degranulation. Shilajit or its combined active constituents were found to offer significant protection against experimental mast cell degranulation induced by allergens[21]. The immune modulatory potential of shilazet constituents were investigated by Ghosal et al. the screening was done on three crucial parameters. In all three selected immunological parameter fulvic acid (FA), 4-methoxy 6 carboxyphenylmethyl (MCB) showed significant immune stimulatory effect[22]. Aqueous suspension of an authentic sample of silazet was found to have significant anti-inflammatory activity in albino rats[23.]. Silazet was found to have significant anti-inflammatory effects in carrageenan induced acute pedal oedema in rats[24].

Conclusion

From this literature review it is evident that the most of ingredients of *Vidathari chooranam* has pharmacological activity like anti allergic, immunomodulatory, anti-inflammatory activity which are responsible for its therapeutic activity claimed in literature.

References

1 Dr.R.Thiagarajan, Siddha Maruthuvam Sirappu, Department of Indian medicine and Homoeopathy, Chennai-106, Second edition, 1995; p 303

2. R.Thiagarajan, Gunapadam Thathu Jeeeva Vaguppu (2nd and 3rd part), Department of Indian medicine and homoeopathy, 4th edition, 2004.p 542

3. Dr.K.M.Nadkarni's Indian Madeira Medica, third edition 1954, volume-II, p 23

4. Dr.M.Murugesa Muthaliyar, Gunapadam Mooligai Vaguppu , Department of Indian medicine and homeopathy 7th edition 2003, pages 349,722,723,782,787,852

5.K.N.Nadkarani,Indian Mederia medica, vol-I, popular, prakasham, Bombay (1980),p 254.

6. Ragunathan muthusamy, Senthamarai R. Anti-inflammatory activity of essential oil *Canarium strictum* roxb. International journal of Pharmaceutical Science 2013:9(2) 13-21.
7. Maruthuva Thavaraviyal, Prof. S. Somasundaram, Pub; Elangovan pathipakam 4th edition, 2004; p 49
8. A.B.Ainapure, S.S., Naik,S.R. and Amladi,S.R. 1988. Anti-inflammatory activity of coconut oil extract of *Acorus calamus, Ocimum sanctum,* and *Ocimum basilium* in rats. Indian drugs 25,226-228.
9. S.B., Shah, S.A., Sharma,K, Naqvi S.A.H. and Dandiya, P.C. 1989. Antibacterial, antipyretic,analgesic and antiinflamatory studies on *Acorus calamus* Linn. Ann Natl Aca Med Sci (India) 25,13-20.
10. Prachi saxena and Prianka saxena, Research Journal of Pharmaceutical sciences, volume-3 (5), pages1-6, august 2014.
11. Vandana meena an and Chaudhary, Manjistha (R.cordifolia)-a helping herb in cure of acne journal of Ayurveda and holistic medicine volume III Issue-II
12. D.P.Gupta, R.C. Srimal, Neeraj varma and J.J.Tandan biological activity of *Rubia cordifolia* and isolation of active princible. Pharmaceutical biology volume 37, issue 1999, p 46-49.
13. A.A.Johara parkar, M.M.Manjari, P.V.Pdixit, S.SP.Zambad,S.N.Umathe, pyrogallol: A Novel tool for screening immunomoduladars, Indian Journal of Pharmocology 2004/volume-36/issue-6/page 355-359.
14. Sander S.A, Smit H.F,Garssen J, Faber J, Hoijer M.A, *Pterocarpus marsupium* extract exhibit anti inflammatory activity in human subjects. International Research Journal of Pharmacology 2005, 71(5), 387-392.
15. Mohammed Rageeb,Mohammad Usman,Potham Ekbal K.H.A,H.Jainbharath, Pawar Sandeeph. *In vitro* anti inflammatory activity of *Pterocarpus marsupium* Roxb. Stem bark on albino rats, Journal of Pharmaceutical and Scientific Innovation 2, March 2012, 21-25.
16. Anupama A.Suralkar, Gayathri S Vaidya, Abhijeet R Borate, Ashas J. Jdhav and Kuldeep K.Gaikwad, International Journal of Research in Pharmaceutical and Biomedical Science vol-3(4),oct-dec-2012,1691-1697.
17. Ravishankar.V.Raj, P.S Rajea,Hyung min kim, medicinal use of *Coscinium fenestratum* Gaertn.) Coleber: a short review. Oriental pharmacy and experimental medicine, March 2013, volume1, issue-1,p1-9.
18. K.Chitra, C.Sujatha, S.H.Dhanuskha, K.Mangathayaru, J.Vasantha, S.Janani and K.Janani, antinociceptirve effect of *Coscinium fenestratum* (Gaertn.) on mouse formalin test, Biomedical Research 2004 15(1), 73-7521.
19. Dr.M.Murugesa Muthaliyar, Gunapadam Mooligai Vaguppu, Department of Indian medicine and homeopathy 7th edition 2003, pages 349,722,723,782,787,852.
20. M.Muniappan, T.Sundararaj, Journal of Ethnopharmocology, volume: 88, issue 2-3, October 2003, page 161-167.
21. Ghosal S.,J.Lal and S.K.Singh.et al.1989. Mast cell protecting effects of shilajit and its constituents, Phytotherapy Research 3(6):249-252.
22. Ghosal S.1989, the facets and facts of Silajit in research and development of indigenous drugs P.C.Dandiya and S.B.Vohora, pg 72-80.
23. Achrya S.B, Frotan mit, Goel R.K, Tripathi S.k, Das P.K, Pharmocological action of shilajit, Journal of Ethnopharmocology 1988 oct26(10) 775-7.
24. Goel R.K, Banerjee R.S, Acharya S.B, Antiulcerogenic and anti inflammatory studies with Shilajit, Journal of Ethnopharmcology 1990 April 29(7), 95-103.

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