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# A SIDDHA HERBAL DRUG SILVISHA USIDHAM AND PUZHUVETTU THYLAM FOR THE MANAGEMENT OF PUZHUVETTU (ALOPECIA AREATA): A DRUG REVIEW

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## ABSTRACT

Siddha system of medicine is the most popular traditional system of medicine followed by the people. With strong basic principles and cultural background, Siddha system of medicine is providing health care solutions to a number of health issues of the modern era. Alopecia areata is a common skin condition characterized by localized hair loss usually over the scalp region. But the condition is frequently seen in children. Alopecia areata is an autoimmune disease. Prevalence is approximately 0.2% of the population and lifetime risk is believed to be between 1% and 2%. There is a history of familial occurrence in 10% - 20% of the affected individuals. Incidence of the disease is 17.2/100,000 population affecting 1:1000 individuals at a given time. Both sex are equally affected although some study report a male-to-female ratio 2:1. Many formulations are indicated for Puzhuvettu (Alopecia areata) in Siddha literature, among them Silvisha Usidham and Puzhuvettu Thylam are the herbal drug indicated for Puzhuvettu. The ingredients of drug possess Immunomodulator activity. Hence this article gives an insight on the efficacy of the drug for Puzhuvettu (Alopecia areata) based on review of various literatures and scientific studies.

**KEYWORDS:** Alopecia areata, Hair loss, Immunomodulator, Puzhuvettu.

## INTRODUCTION

Siddha system is a vast and unique system which defines health as a prefect state of physical, psychological, social and spiritual well being of an individual. The basic principle of Siddha

system of Medicine is Panchapootham theory. According to Panchapootham theory the universe is made up of five elements of nature. The human body is also made up of five elements. Alterations of the three vital humours Vali, Azhal and Iyyam which leads to disease manifestation. According to Mukkuttram concept Puzhuvettu is consider as vadha disease "Vathamaladhu meni kedadhu". In Siddha system of medicine, there are 4448 group of disease are classified in human being. Among 4448 group of disease kurumi noi is described in the text of Noi Nadal Thirattu. Kirumi is one of the reason of Puzhuvettu.[1]

Alopecia areata is a common skin condition characterized by localized hair loss usually over the scalp region. Alopecia areata is an autoimmune disease of the hair follicle. Alopecia areata typically presents with sudden appearance of one or more round or oval well defined patches of hair loss. The hair loss may occur overnight or over a period of several days. In some children, the initial patch may not be well defined and may show scattered long hairs within the bald area. Occasionally, the initial loss may be diffuse and the patches of baldness may be apparently only after 1 or 2 weeks.[2] Alopecia areata associated with atopy; nail changes as pits, ridges, opacification, and serration of the free nail edge, dystrophy and red lunula.

A complete hair loss of the scalp is seen in alopecia totalis. Alopecia of all hair- bearing surfaces including eye lashes, eye brows, body hair seen in alopecia universalis. In ophiasis a circumferential hair loss extending around the temporal and occipital hairlines. It affects all age group and the first episode usually occur in patient less than 25 years of age. Lifetime risk of alopecia areata is increased in individuals with personal or family history of autoimmune disorders such as vitiligo, thyroid disease and pernicious anemia.[3]

In the text, Anuboga Vaithiya Navaneedha Thirattu - Silvidam, **Puzhuvettu**, Viranam, Kadi, Kuttam., page no:108. A Siddha formulation **SILVISHA USIDHAM AND PUZHUVETTU THYLAM** has been specially indicated for Puzhuvettu. The ingredients of this formulation possess **Immunomodulator, Anti- inflammatory, Antimicrobial and Antifungal activities.**

**DRUG DETAILS[4]**

**Trail drug**: Silvisha Usidham and Puzhuvettu Thylam.

**PREPARTION OF THE DRUG**

**Ingredients**

1. Gingelly oil (Sesame indicum) - 40 palam (1400gm)
2. Peyathi saru (Ficus hispida) - 80 palam (2800gms)
3. Elarisithool (Elettaria cardamomum) - 1 palam (35 gms)
4. Arisithippili (Piper longum) - 1 palam (35 gms)

**Purification of the ingredients**

All the drugs mentioned here were purified as per the Siddha literature.

**Method of preparation**

The above said elarisithool and arisithippili powder mixed with peyathi juice together combined with gingelly oil and heated till the waxy consistency is obtained.

**Dosage:** 2- 4ml twice a day

**Indication:** Puzhuvettu (Alopecia areata)

**Vehicle:** Warm water

**Ingredients of Puzhuvettu Thylam**

1. Castor oil (Riccinus comminus) - 5 Palam (175gm)
2. Venkungiliyam (Shorea robusta) - ¼ Palam (8.75gm)
3. Avuri leaf (Indigofera tinctoria) - 5 Palam (175gm)

**Method of Purification**

All the drugs mentioned here were purified as per the Siddha literature.

**Method of Preparation**

Take avuri paste and venkungiliyam powder in equal quantity then mixed with castor oil afterwards boiled it well till it reaches waxy consistency.

**Indication:** External application for Puzhuvettu for 45 days.

Potency of the Ingredients of Silvisha Usidham and Puzhuvettu Thylam in the treatment of Puzhuvettu (Alopecia areata).

| S.No | Drug | Parts used | Action |
|---|---|---|---|
| **1.** | Gingelly oil (Sesamum *indicum*) | Seed oil | Demulcent<br>Laxative<br>Nutritive<br>Diuretic<br>Emollient<br>Nourishing<br>Lactogogue |
| **2.** | Peyathi (Ficus *hispida*) | Leaf | Emetic<br>Laxative<br>Cooling<br>Astringent |
| **3.** | Elarisithool (Eletteria *cardamomum*) | Fruit | Aromatic<br>Stimulant<br>Carminative<br>Stomachic<br>Diuretic |
| **4.** | Arisithippili (Piper *longum*) | Fruit | Stimulant<br>Carminative<br>Stomachic<br>Digestive<br>Expectorant<br>Emollient<br>Antiseptic |
| **5.** | Castor oil (Ricinus *communis*) | Seed oil | Galactagogue<br>Anti-vatha<br>Laxative<br>Emollient |
| **6.** | Kungiliyam (Shorea *robusta*) | Resin | Stimulant<br>Expectorant<br>Diuretic |
| **7.** | Avuri (Indigofera *tinctoria*) | Leaf | Stimulant<br>Alternative<br>Deobstruent<br>Germicide |

| | **Pharmocological activity** | **Phytochemicals** |
|---|---|---|
| Sesamum *indicum* | Immunomodulator activity[5]<br>Anti- Inflammatory.[6] | Diosgenin, β-Sitosterol, lanosterol, solasonine, solamargine and solasodine.[7] Seed contains Protien, carbohydrate, mucilage. oil contains Stearin, palminitin, Myristin, a crystalline substance Sesamine and a phenol compound Sesamol. |
| Ficus *hispida* | Anti-inflammatory activity.[8] | Bergapten, Psoralen, beta –Amyrin and beta – sitosterol.[9]<br>Hispidine, Phenanthraindolizidines[10], n – triacontanyl, Gluanol acetates[11], Tannin, a caoutchouc – like substance and saponin. |

| | | |
|---|---|---|
| Eletteria *cardamomum* | Anti- Inflammatory[12] Antimicrobial[13] Antifungal[13] Immunomodulator activity.[14] | Terpinyl acetate, cinole, free terpinol and limonene.[15] α- pinenes, β- pinenes, camphene, P-Cymene, terpinene, α-terpineol and alpha- humulene isolated from essential oil of fruits and leaves.[16] |
| Piper *longum* | Anti-Inflammatory activity.[17] Immunomodulator.[18] | Two new piperidine alkaloids – pipernonaline and Piperundecalidine – isolated from fruits and their structures determined.[19] Volatile oil, resin, starch, gum, fatty oil, Inorganic matter and an alkaloid, Piperine, Rutin, β-caryophyllene, piperyline, piperoleines, piperamine, sabinene, chavicin, pinene, phellandrene, pentadecane, β-bisabolene, linalool and limonene. |
| Ricinus *communis* | Anti-Inflammatory activity.[20] | Ricin, Ricinoleic acid, Fatty acid, Linoleic acid, oleic acid, Palmitic acid, Stearic acid, linolenic acid and triacylglycerols.[21] |
| Shorea *robusta* | Anti-Inflammatory activity.[22] | Chalcone,-4-hydroxychalcone-4-O-β-`D-glucopyranoside.[23] *S. robusta* resin has been reported to contain several mono- sesqui- and tri-terpenoids includes ursolic acid, tri and tetra hydroxy ursenoic acid, asiatic acid, α and β-amyrin, α – amyrenone, mangiferonic acid, benthamic acid and uvaol.[24] |
| Indigofera *tinctoria* | Immunomodulatory activity[25] Hairgrowth promoting activity.[26] | Indican (Glycoside), Indigotin or Indigo-blue, Indicom, Indigotine, indirubin and Glactomannan.[27] |

## CONCLUSION

Each ingredients of this drug **Silvisha Usidham and Puzhuvettu Thylam** shows a good activity related Alopecia areata. By various literature shows that the drug possess Anti inflammatory activity, Immunomodulatory activity, Antifugal activity, Antimicrobial and Hairgrowth promoting activity. So, it can be concluded that the formulation will be helpful in the management of **Puzhuvettu** (Alopecia areata).

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