



Potency of Vellai Parpam on Neer Chiruppu Noi (Stranguria) management—A Review.

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ABSTRACT

Strangury (or stranguria) is the symptom characterized by painful, frequent urination of small volumes that are expelled slowly only by straining and despite a severe sense of urgency, usually with the residual feeling of incomplete emptying. The drug was selected from *Agathiyar Vaithiya Kaaviyam 1500* which is indicated for *Kalladaippu*, *Mahodharam*, *Neerchiruppu*, *Kuttam*. *Neerchiruppunoi* in modern system of medicine is called Stranguria. Aim is to explore the efficacy of the *Vellai Parpam* for Stranguria in *siddha* literature and highlight the activities of *Vellai Parpam* like urolithiatic, diuretic and anti-inflammatory. Ingredients are Purified *Karpoorasilasathu* (Asphalt), Purified *Porikaram* (Borax), Decoctions of *Paruthiver* (*Gossypium herbaecum*), *Athiverthol* (*Ficus racemose*) and Egg white. This is a literature review of the formulated drug. The literary evidence of the drug *Vellai Parpam* strongly support that it possesses anti-urolithiatic, diuretic and anti-inflammatory activity. In the pharmacological studies, the drug *Vellai Parpam* exhibits significant anti urolithiatic, diuretic and anti-inflammatory. *Vellai Parpam* reveals that the presence of Calcium, Chloride and Magnesium. From the results, it is proved that the drug *Vellai Parpam* is significant of anti urolithiatic, diuretic and anti-inflammatory activity in the management of *Neerchiruppu noi*.

Keywords:

Neerchiruppunoi, *Vellaiparpam*, Stranguria

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CODEN : IJRPHR

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To access this article online

Website : <http://www.ijrphr.com/>

DOI : 10.121/ijrphr/03.0104.374

Quick response code



How to cite this article:

Tharshanodayan et al, *Potency of Vellai Parpam on Neer Chiruppu noi (Stranguria) management—A Review*, International Journal of Reverse Pharmacology and Health Research, 2020, 3(1), 1-5.

Received: Dec 2019.

Accepted: Feb, 2020.

INTRODUCTION

Strangury (or stranguria) is the symptom characterized by painful, frequent urination of small volumes that are expelled slowly only by straining and despite a severe sense of urgency, usually with the residual feeling of incomplete emptying⁽¹⁾. Cases of urinary infection, urinary stone, tuberculosis, tumor, prostatitis and chyluria in modern medicine with stranguria as the major symptoms may be differentiated and treated with the principles mentioned in this section⁽²⁾. The *Siddhars* categorized the disease into 4448 types. One among the disease which comes under the disorder of urinary system or *Visarkauruppugal* is *Neerchiruppunoi* in modern system of medicine is called Stranguria. *Siddhars* gifted us a lot of medicinal treasures to treat human illnesses. If we go in search of that particular disease in depth, we may get better medicinal approach to the patients with the disease⁽¹⁴⁾.

Sample Collection and Preparation:

In this study, the Pooranathi chooranam drug compounds such as Saranaiver (*Trianthema portulacastrum*), Poduthalaiverchaaru (*Phyla nodiflora*), Kazharchikaai (*Caesalpinia bonduie*), Chukku (*Zingiber officinale*), Millagu (*Piper nigrum*), Thippili (*Piper longum*),

Western aspect of etiology and pathogenesis

The cause of stranguria can be summarized into three categories:

- Retention of dampness-heat in the bladder; the affection of exogenous origin may come from the external genitals or other organs such as heat (fire) and small intestine (heat), and that of endogenous origin may be due to improper diet or alcoholic indulgence, which leads to production of dampness-heat;
- Deficiency of the spleen and kidney; commonly seen in the chronic case aged, the debilitated and the overstrained.
- Stagnation of liver.
- Summer is peak season for urinary tract discomfort with estimated one third more cases.

In sum, an incipient case of stranguria usually manifests itself as a sthenic syndrome, while chronic case as an asthenic syndrome. However, both syndromes may appear simultaneously when the evil still exists, and the health qi is already impaired. The organs chiefly involved are the kidneys and bladder, but the liver and spleen are also affected⁽¹⁾.

Syndrome Differentiation and Therapeutic Principles

A. Syndrome differentiation

- Differentiation of the type of stranguria, such as heat, stone, blood, chyle, overstrain, etc.
- Differentiation between asthenia-syndrome and sthenia-syndrome: Generally speaking,

stranguria due to retention of dampness-heat, stagnated liver-qi or stones and marked by burning and painful urination with discharge of turbid and red urine is usually attributed to sthenia-syndrome, while that due to deficiency of spleen and kidney marked by less severe dysuria and discharge of clear and light-colored urine to asthenia-syndrome.

(c) Identification of the primary and secondary syndromes: Since different types and syndromes of stranguria may be changeable or appear at the same time, the primary type and syndrome must be identified in order to establish a correct therapeutic principle.

(d) Differentiation between stranguria and retention of urine, hematuria and chyluria: Although both stranguria and retention of urine are characterized by difficult urination, the cases with stranguria often have frequent and painful urination, and their total volume of urine discharged daily is normal, while the cases with retention of urine have a painless micturition and a decreased urine excretion or even anuria. Hematuria and chyluria differ from stranguria complicated with the corresponding disorder by the absence of painful and slow discharge of urine⁽²⁾. The drug was selected from *Agathiyar Vaithiya Kaaviyam 1500* which is indicated for *Kalladaippu*, *Mahodharam*, *Neerchiruppu*, *Kuttam*. The studies substantiated the literary evidence of *Vellai Parpam* in the management of Stranguria.

OBJECTIVE

To explore the efficacy of the *Vellai Parpam* for Stranguria in *Siddha* literature and highlight the activities of “*Vellai parpam*” like urolithiatic, diuretic and anti-inflammatory.

METHODOLOGY

This is a literature review of the formulated drug. The reputed *siddha* literatures were consulted and data obtained from thesis, research articles and the journals were referred through globally accepted website.

Drug profile of *Vellaiparmam*⁽³⁾

Purified <i>Karpoorasilasathu</i> (Selenite)	- 1 palam (35 gm)
Purified <i>Porikaram</i> (Borax)	- 1 palam (35 gm)
Decoctions: <i>Paruthiver</i> (<i>Gossypium herbaecum</i>)	-1 palam (35 gm)
<i>Athiverthol</i> (<i>Ficus racemosa</i>)	- 1 palam (35 gm)
Egg white	- Q.s
(<i>Agathiyar vaithiya kaaviyam, R.Madhavan</i>)	

Purification of the drugs

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

Roots of *Ficus racemosa* and *Gossypium herbaecum* was washed in the running tap water to remove the soil and impurities. The *Karpoorasilasathu* was purified by boiling it in tender coconut water until the water evaporates. The drug is removed, washed and then dried. *Vengaram* was fried using heat until the removal of its entire water content⁽⁴⁾.

Preparation of the Drug

The decoction will be prepared from *Athiverthol* and *Paruthi ver*. The *Karpoorasilasathu* and *Porikaram* Will be powdered and ground with the above decoction and made in to *Villai*, which is subjected to *Putam* process with 5 cow dunk cakes. The same process will be repeated with egg white finally the *Parpam* will be collected and stored in air tight container.

Therapeutic dose : 200 mg twice a day

Adjuvant/Vehicle : Honey

Indication : *Kalladaippu*, *Mahotharam*, *Neerchiruppu*.

Date of expiry: 100 years⁽⁵⁾

Review of ingredients

1. *Karpoorasilasathu (Asphalt)*

English : Asphalt , Mineral pitch , Plaster of Paris

Hindi : Silajita

Action : Locally antiseptic, anodyne, parasiticide, and antiphlogistic. Internally diuretic, lithontriptic, alterative, tonic, slightly laxative, respiratory stimulant, expectorant, intestinal stimulant⁽⁶⁾.

Validations of *Karpoorasilasathu*

1. The *Karpoorasilasathu* is one of the ingredients of the drug *Jalamanjari chendooram* is an effective and significant hyponatraemic, hypochloraeamic, hypokalaemic and diuretic activity is present.

2. The *karpoorasilasathu* is one of the ingredients of *karasoodasathu parpam* is indicated for urolithiasis and diuretic activity.

3. The drug *Silasathupaavanai* contains essential elements, which are considered the inhibitors of stone formation. Moreover, the drug has good anti -microbial activity against *E. coli* which causes the commonest associated urinary tract infection.

2. *Vengaram (Borax)*

Borax (sodium borate) is a naturally occurring mineral composed of sodium, boron, oxygen and water.

Tam : Vengaram, Venkaram

Eng : Sodium Biborate, Borax

Sans : Tankana

Tel : Velligaram

Mal: Ponkaram

Source: It occurs as a natural deposit. Crude borax is found in masses by evaporation of water, on shores of dried up lakes in India and Tibet.

Taste: Sweet with astringent.

Potency: Heat

Pirivu: Pungent

Action: Diuretic, Astringent, Antacid, Local sedative, Anti-septic⁽⁶⁾.

Validations of *Venkaaram*

The *Vengaram* is one of the ingredients of the drug *Jalamanjari chendooram* is an effective and significant hyponatraemic, hypochloraeamic, hypokalaemic and diuretic activity is present.

Toxicity study of *Vengaram* and *Silasathu* : Acute oral toxicity study; NK and VSP at the dose of 2000mg/kg/po did not exhibit any mortality in rats. Repeated oral toxicity for 28 days; Test drug NK and VSP at the dose 500mg/kg/po when administered for 28 days in rats orally did not show toxicity inhaematological parameter.

Atti(Ficus racemose)

Synonyms: *Ficus racemose*, *Ficus glomerata*, *Ficus lucescens*.

Name: Udumbara, Gular fig, Cluster fig, Country fig, Cluster Fig Tree, Goolar Fig

Vernacular name: Tamil -Atti, Hindi -Goolar⁽⁷⁾.

Uses

The root is useful in hydrophobia. Bark is cooling, acrid, galactogogue, good for gravid uterus. Unripe fruit is acrid and astringent to bowels, tonic, styptic, useful in *Kabam*, biliousness, leucorrhoea and blood disorders.

Ripe fruit is acrid sweet, cooling, useful in blood disorders, burning sensation, urinary discharges, thirst, leprosy, menorrhagia, nose bleeding and intestinal worms.

Bark - useful in asthma and piles given as an astringent and as a wash for wounds.

Leaves - astringent to bowels and good for bronchitis. The fresh juice of the ripe fruit is used as an adjuvant to a metallic preparation which is given in diabetes and other urinary diseases.

Paruthi (Gossypim herbaceum.Linn)

Synonyms: *Erioxylum rose* & Standl, *Seleraulbr*, *Ultragossypium roberty*.

Common name: Cotton plant.

Vernacular name: Karpashtula, Tula.

Tamil- Paruthi

Hindi - Kapas

Properties: All parts are Cooling, Sweet, Acrid, Anti-dysenteric⁽⁷⁾.

Uses

- Root decoction is given for Urinary problems.
- Tincture of the fresh inner root bark is used to treat amenorrhoea, dysmenorrhoea.
- Used to treat abscess of the labia.
- The root is used to stop bleeding, especially internally.
- Externally, used for rheumatism, a dressing for freckles, herpes, scabies, Neuralgia, Chemical analysis of *Vellai-parpam* chronic headache, ulcers, sores, swellings and wounds.

RESULTS AND DISCUSSION

The drug *Vellai Parpam* was selected to study the anti urolithiasis, diuretics and anti- inflammatory activity. The drug was selected from *Agathiyar Vaithiya Kaaviyam 1500* which is indicated for *Kalladaippu, Mahodharam, Neerchiruppu, Kuttam*. The studies substantiated the literary evidence of *Vellai Parpam* in the management of Stranguria.

Chemical analysis:

Fig 6: Indication of *Vellai Parpam* in *Agaththiyar Kaviyam 1500*

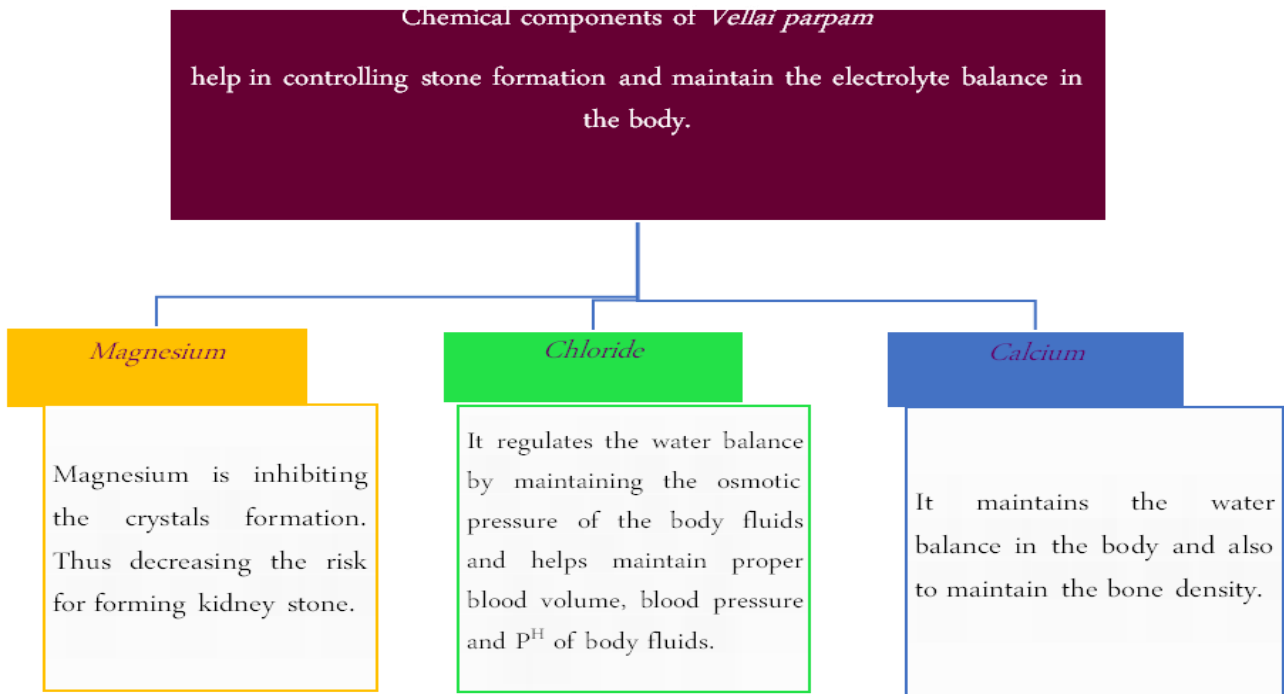
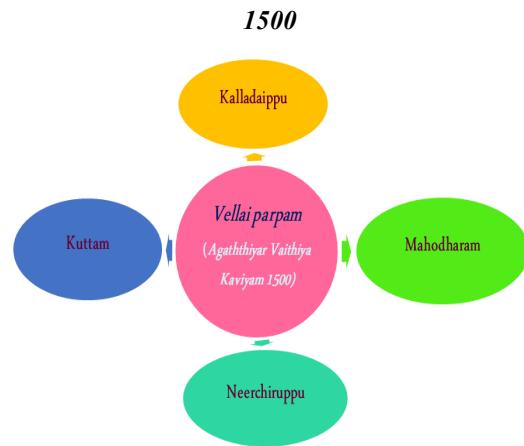


Table 1: Pharmacological actions of Ingredients of *Vellai paspam*.

Ingredients	Pharmacological actions
<i>Karpoorasilasathu (Asphalt)</i>	Diuretic, lithontriptic, alterative, tonic, slightly laxative, respiratory stimulant, expectorant, intestinal stimulant ⁽⁶⁾ .
<i>Vengaram (Borax)</i>	Diuretic, Astringent, Antacid, Local sedative , Anti-septic ⁽⁶⁾ .
<i>Atti(Ficus racemose) – Root</i>	Antidiabetic, antipyretic, anti-inflammatory, antitussive, hepatoprotective, and antimicrobial activities ⁽¹⁵⁾ .
<i>Paruththi (Gossypim herbaceum.Linn) – Root</i>	Cooling, Sweet, Acrid, Anti-dysenteric ⁽⁷⁾ .

Toxicological studies: This study reveals that no significant toxic effect of the drug *Vellai Parpam* up to the higher dose level 2000mg/kg in acute oral toxicity and also sub-acute toxicity and sub chronic toxicity has no toxic effects from the results. Therefore, the *Vellai Parpam* can be classified under the category of drug with non-toxic^{(11), (12)}.

CONCLUSION

From the literature evidence, Physico chemical analysis, Chemical analysis, Toxicological evaluation and Pharmacological studies, the drug *Vellai Parpam* has anti-urolithiatic, diuretic and anti-inflammatory activity. It is concluded that the drug *Vellai Parpam* can be used in the management of Stranguria and the related urinary problems.

SOURCE OF FUNDING : Nil

CONFLICT OF INTEREST : None declared

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