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Review Article

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A DRUG REVIEW ON SILETHUMA SURA KIYALAM WITH KANJI – A SIDDHA HERBAL FORMULATION IN THE MANAGEMENT OF KABASURAM (ACUTE BRONCHITIS) IN CHILDREN

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ABSTRACT

Siddha system of medicine is one of the ancient system of medicine which treats various types of diseases. Fever is one of the important symptom for number of diseases from acute febrile illness to malignancy. According to siddha system, fever is one among the 4448 diseases. As per the yugi text " Suram " is elobrated under 64 types. In the balavagadam text there are more than 20 types of fever. In this study " KABA SURAM" which can be correlated with acute bronchitis. Kaba suram is one among the acute infectious disease and it has characterized as chills, fever, malaise, cough with or without expectoration, wheezing, vomiting associated with sputum, chest congestion or pain, arthralgia, in Pillaipini Maruthuvam text book. These symptoms are more or less similar to that acute bronchitis. Acute bronchitis is a short term inflammation of lower respiratory tract affecting bronchi (air tubes) of the lung. Kaba suram was treated with silethuma sura kiyalam with kanji. In siddha system herbal preparation play an important role in treating the diseases especially among the pedataric group. This review article is going to explore the properties of silethuma sura kiyalam with kanji in treating the kaba suram.

KEY WORDS: ***Acute bronchitis, Kabasuram, Silethuma sura kiyalam, Kanji, Siddha, Pillaipini maruthuvam,***

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1. Introduction

A condition of human health is defined by WHO as a state of complete physical, mental and social well-being, rather than merely the absence of disease or infirmity [1]. Primary purpose of health care is to enhance the quality of life enhancing health.Health care must be focused on creating social profit to fulfil its promise to society. WHO revised the definition of the health defined it as " The extent to which an individual or group is able to realize aspirations and satify needs and to change or cope with environment .Health is a resource for everyday life , not the objectiveof living; it is appositive concept , emphasizing social and personal resources as well as physical capacities. (1)

Siddha is one of the ancients medical system in India considered as the mother medicine of ancient Tamils/Dravidians in South India. The word Siddha means established truth [2,3]. Balavagadam or Kuzhanthai Maruthuvam is the branch of medical science of Siddhars which deals with the diseases of children, their essential nature, especially on the functional changes together with planetary influence, morbid diathesis etc. and the treatment. [4] Acute bronchitis is a short-term inflammation of lower respiratory tract affecting air tubes (Bronchi) of the lungs. KABASURAM is one among the acute infectious disease and it has been characterized as chills, fever, malaise, cough with or without expectoration, wheezing, vomiting associated with sputum, chest congestion or pain, arthralgia in Pillaippini Maruthuvam textbook [5]. These symptoms are more or less similar to that of acute bronchitis. Authenticated Satiric Siddha herbal formulation namely "SilethumaSura Kiyalam with Kanji" for the management of Kabasuram, which is mentioned in literature "Agasthiyar Paripooranam 400".

2. Materials and Methods

2.1.METHOD OF PREPARATION

The above mentioned raw drug in each of 2 Kazhanju (10.2 gm) was made into a coarse powder by pounding or milling. About 51 gm of the powder was boiled in 1.3 liters of water till it was reduced to one eighth of the volume (162.5ml) and the decoction was prepared. Finally, little quantity of Thippili powder was added to the decoction and was mixed gently.

Preparation of Kanji

Take 30.6gms of above mentioned drugs in the Kanji preparation and make it into coarse powder. Then add 5.2 liters of water to the powder till it was reduced to 1.3 liter's. To this decoction, 336 gms of rice is added and boiled, till it became Kanji.

Dosage: Twice a day

Duration: 3 days Indication: Kabasuram (7)

Ref; Agasthiyar paripooranam - 400 (page no.118)

Table 1: Ingredients and Purification of SilethumaSura Kiyalam

S. NO	NAME OF THE PLANT	WEIGHT	PURIFICATION[6]
1	CHUKKU *(Zingiber officinale)*	10.2 gm (2 kazhanju*)*	The external skin of chukka is peeled off.
2	SUNDAI VER (Solanum torvum*)*	10.2 gm (2 kazhanju*)*	Cleared by removing the dust with a cloth and dried in the sunlight.
3	THOOTHUVALAI (*Solanum trilobatum)*	10.2 gm (2 kazhanju*)*	Removing the dust with a clean cloth and dried in the sunlight.
4	KANDANKATHARI (*Solanum suratense)*	10.2 gm (2 kazhanju*)*	Removing the dust with a clean cloth and dried in the sunlight.
5	*SEMMULLI (Barleria prionitis)*	10.2 gm (2 kazhanju*)*	Removing the dust with a clean cloth and dried in the sunlight.
6	THIPPLI (*Piper longum)*	10.2 gm (2 kazhanju*)*	By soaking it in the lime juice for 3 hours and then dried in the sunlight.

Table 2: Ingredients and Purification of Kanji

S.NO	NAME OF THE PLANT	WEIGHT	PURIFICATION [6]
1	PAADHIRI (*Sterospermum colais)*	10.2 gm (2 kazhanju*)*	By soaking it in the lime juice for 3 hours and then dried in the sunlight.
2	VILVAM (*Aegle marmelos)*	10.2 gm (2 kazhanju*)*	Removing the dust with clean cloth and dried in the sunlight.
3	PERUNGUMIZH (*Gmelina arborea)*	10.2 gm (2 kazhanju*)*	Removing the dust with clean cloth and dried in the sunlight.

3. Conclusion

This review article comes to conclude that the ingredients present in the SilethumaSura Kiyalam along with kanji has the efficiency to treat kabasuram (acute bronchitis).the drugs which are present in this have antipyretic activity ,anti-inflammatory activity, antibacterial activity, antiviral activity .these pharmacological activity proves that the polyherbal formulation SilethumaSura Kiyalam with kanji can be given as the antipyretic medicine

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Table 3: List of Chemical constituents and their pharmacological activity in the herbal ingredients

SERIAL NO	HERB	PART	ACTIONS	CHEMICAL CONSTITUTIONS	PHARMACOLOGICAL ACTIVITY
1	**THOODHUVALAI** *Solanum trilobatum* Eng - Climbing brinjal Family – Solanaceae **ORGANOLEPTIC CHARACTERS** Taste:Bitter, Pungent Character: Hot Division: Pungent	Leaf Flower Fruit	Stimulant Expectorant Tonic	Alkaloids - Soladunalinidine, tomatidine Sobatum, Beta-solamarine, Solasodine, Solanine, Glycoalkaloid, Diosogenin	**Anti-microbial and Hemolytic Activity** [8] **Anti-inflammatory** [9] **Anti-bacterial Activity** [10] **Immunomodulatory Activity**[11]
2	**KANDANGKATHIRI** *Solanum surattense* Eng : Wild eggs plant Family – Solanaceae **ORGANOLEPTIC CHARACTERS** Taste: Pungent Character: Hot Division: Pungent	Fruits Leaf, Flower, Seed, Root	Expectorant Diuretic Carminative	Beta-carotene ,Carpesterol ,Solanocarpine ,Caffeic ,Chlorogenic acid, Isochlorogenic acid ,Neochlorogenic acid, Esculin, Esculetin,Scopoletin,Cyloartanol, Diosgenin	**Anti-pyretic activity**[12] **Anti-bacterial activity**[13]
3	**CHUKKU** *Zinger officinale* Eng : Dried ginger **Family – Zingiberaceae** **ORGANOLEPTIC CHARACTERS** Taste:Pungent Character: Hot Division: Pungent	Rhizome	Carminative Stomachic Stimulant	Phellandrene, Gingerol,Gingerin,Octyne,Germacrone,decanol,Shogaols,Paradols,Quercetin,Zingerone, Gigerenone-A,Beta-bisabolene,Alpha-curcumene,Alpha-farnesene,Zingiberene,Beta-sesquiphellandrene,	**Antipyretic activity** [14] **Anti microbial activity**[15] **Anti bacterial activity**[16]
4	**SEMMULLI** *Barleria prionitis* **Eng : Yellow nail-dye plant** **Family Acanthaceae**			Balarenone,Pipataline,Lupeol , PrioniseideA,B,C,Barlerinoside, Verbascoside,Barlerin, 7methoxydiderroside,Lupulinoside	**Antipyretic activity** [17]**Anti-bacterial activity** [18] **Anti inflammatory activity** [19] **Antiviral activity** [20] **Immunomodulatory activity** [21]
5	**SUNDAI** *Solanum torvum* **Eng : Turkey berry** Family – Solanaceae **ORGANOLEPTIC CHARACTERS** Taste: Bitter Character: Hot Division: Pungent	Fruit, Root	Germicide Stomachic Expectorant	Neochlorogenin6-*O*-beta-D-quinovopyranoside,Neochlorogenin 6-*O*-beta-D-xylopyranosyl,Solagenin6-*O*-beta-D-quinovopyranoside,Quercetin ,Kaempferol,Rutin,Solagenin 6-*O*-alpha-L-rhamnopyranosyl,Isoquercetin,	**Anti-bacterial activity** [22] **Anti-platelet aggregation activity** [23] **Antifungal activity** [24] **Anti-microbial activity** [25]
6	**THIPPILI** *Piper longum* **Eng : Long pepper** **Family – Piperaceae** **ORGANOLEPTIC CHARACTERS** Taste: Pungent Character: Hot Division: sweet	Fruit	Carminative Expectorant	Neochlorogenin 6-*O*-alpha-L- rhamnopyranosyl Piperine,Chavicine,Piperidine,Piperetine,Coumaperine, N-5(4-hydroxy-3-methoxyphenyl)2E-pentenoylpiperidine, PiperolactumA,1-[1-oxo-5(3,4-methylenedioxyphenyl)-2E,4Epentadienyl]-pirrolidine,Demethoxycurcumin,Bisdemethoxycurcumin, (R) -(-)-turmerone.	**Anti pyretic activity**[26] **Anti analgesic activity**[27] **Anti inflammatory activity**[28]
7	**PAADHIRI** *Stereospermum*	Leaf Flower, Root	Diuretic Febrifuge	**p-coumaric acid,Triacontanol,3- acetyl**	**Anti microbial activity**[29]

	chelonoides **Eng : Trumpet flower** **Family – Bignoniaceae** **ORGANOLEPTIC CHARACTERS** Taste: Astringent Character: Cold Division:Sweet	Bark		**alcohol, Oleic acid, Palmitic acid,Stearic acid, Lapachol61,Dehydroalpha-lapachone, Dehydrotectol, β-sitosterol,n-triacontal,**	
8	**VILVAM** *Aegle marmelos* **Eng : Bael Holy fruit tree** **Family – Rutaceae** **ORGANOLEPTIC CHARACTERS** Taste: Astringent , Bitter Character: Cold Division:Pungent	Fruits Leaf, Flower, Seed Root, Bark	Astringent Stomachic Febrifuge	Marmalosin,Luvangetin,Psoralen,Tannin,Marmin, Aeglemarmelosin, Skimmianine, Imperatorin, Aurapten, Epoxyaurapten,Marmisin	**Antipyretic activity** [30] **Anti inflammatory activity**[31]
9	**PERUNGUMIZH** *Gmelina arborea* **Eng : White teak** Family – Lamiaceae **ORGANOLEPTIC CHARACTERS** Taste:Bitter Character: Hot Division: Pungent	Fruit	Stimulant Febrifuge	2-(4-hydroxyphenyl)ethanol,(+)-balanophonin,8-5″neolignan,Gmelinol,2,6-dimethoxy-*p*-benzoquinone	**Anti-pyretic activity** [32] **Anti-bacterial activity** [33]