



## **Efficacy of Siddha herbs and medicines in Treating *Vikkal* (Hiccups)**

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### **Abstract**

Everyone had been suffered by hiccup in any part of life. Hiccup is a brief involuntary contraction of the diaphragm muscle that causes closure of the glottis and producing “Hic” sound. It may be normally lost within a minute or if may persist for a long time. It is caused by the irritation of nerves which extends from the neck to the chest which may be the phrenic nerve. If it is associated with other metabolic diseases it can be treated according to the disease. And if it is the brain tumor it can be treated through surgical correction. Hiccup is considered only as a sign in modern aspect but in marvelous Siddha system it is considered as a disease having effective treatment. Etiology, signs, symptoms, and treatment for hiccup are being discussed here which includes internal and external medicines. Use of single and compound drugs in treating hiccup is explained and the preliminary phyto-chemical study results along with their clinical significance of *Mayilirakaadhi chooranam* are briefly explained.

**Keywords:** Hiccups, *Vikkal*, *Mayilirakaadhi chooranam*, Siddha medicine.

## **Introduction**

Siddha system of medicine has its unique formulation to treat various chronic and acute ailments. Medicines from by-products of animals and birds are being widely used for treating some incurable diseases and also this system has a major advantage of curing various diseases including hiccups with different vehicles (*anubanam*). *Mayiliragadhi chooranam* is being prepared from the feathers of the peacock. This paper deals with the different methods of usage of *mayiliragadhi chooranam* both internally and externally. Apart from these, results of the preliminary Phyto-chemical studies carried out on this powder are also being discussed along with their clinical significance.

## **Background**

From the womb to tomb everyone was suffered in any part of life by Hiccup. Fetal and intrauterine hiccups physiologically occurs in 2 -8 weeks of intrauterine life and which had tend to lost within 5-10 minutes, which occurs due to myelination of phrenic nerve. After birth, hiccup occurs due to many causes and may be lost within minute to many years. Prolonged and frequent hiccups affects the day-to- day life by affecting speech, sleep and other activities.

By the involvement of *Thodam* (humors)hiccups had been classified into 5 types such as *ValiVikkal*, *AzhalVikkal*, *Ayyavikkal*, *MukkutraVikkal* and *SerriyaVikkal*. Depending upon the character of Hiccup it is classified as *Anna Vikkal*, *SoothraVikkal*, *YamanVikkal*, *MahaVikkal* and *KambeeraVikkal*.

## **Treatment**

### **Internal and external**

Siddha system has wonderful internal treatments (like *Varmam*, and *Nasiyam*) and External treatment (single herbs, compound drugs) for hiccup and sometimes it can be cured through treating the primary diseases responsible for this condition.

Hiccup can sometime be relieved by eating a spoonful of honey or peanut butter, breathing in a paper bag, smelling salts, surprised or frightened by anyone and tickling the palate with swab. In children it can be managed by giving a weak slap on the back.

## SINGLE HERBS

Tamil Name	Botanical Name	Phyto-chemical analysis	Uses
<i>Arasu</i>	<i>Ficus religiosa</i>	phytosterols, aminoacids, aliphatic, alcohol	Laxative, Used to cure Ulcer and fissurefoot.
<i>Annasipazhlam</i>	<i>Annona squamosa</i>	brometin, citric acid, malic acid.	Germicide, Emmenagogue, which is used to cure Vomiting and Dehydration (increased thirst)
<i>Aavirai</i>	<i>Lepidium Sativum.</i>	ascorbic acid, Linoleic acid, Lepodine, B- carotene	Used in diarrhea, skin disease and indigestion
<i>Rudraksham</i>	<i>Elaeocarpus sphaericus</i>	Havanoids, Elaeocarpidine, quercetin	Anti-Tridosha, Expectorant, Antibilious.
<i>Kadugu</i>	<i>Brassica juncea.</i>	L-Proline, Phenol, sodium chloride.	Rubefacient, Used to treat, asthma and headache.
<i>Puthina</i>	<i>Mentha arvensis</i>	Menthol, limonene, Pulegone	–
<i>Seeraham</i>	<i>Cuminum cyminum</i>	Vitamin A, E, C, Cuminaldehyde	Used to treat: jaundice, cough, Gasterities.

*Adathoda* (*Justicia beddomei*), *Impooral* (*Oldenlandia Unbellata*), *Koththumalli* (*Coriandrum Sativum*), *Sathakuppai* (*Anethum graveolens*) are used to treat hiccup.

## Comparison of Siddha and Modern medicine aspects of Hiccups.

SIDDHA ASPECT	MODERN ASPECT
<p><b>I Signs and Symptoms</b></p> <p>Drying of Oral Cavity and tongue, Bitter sensation in mouth, increased thirst, Reddening of eyes, feeling of something moving in the stomach</p>	<p>Sound of the hiccup is the only sign.</p> <p>Something associated with a symptom of tightness of the chest and abdomen or throat.</p>
<p><b>II. Causes</b></p> <p>Increased intake of spicy, Bitter and Sweet foods causes increased the acidity causes hiccup.</p>	<p>Carbonated by alcohols and spicy foods Hyperglycemia.</p> <p>Peptic Ulcer causes irritation of Vagus nerve producing hiccup.</p>
<p>Increased intake of gas producing foods and Carbohydrate controls the breathing.</p>	<p>Swallowing food and along with air excessively.</p>
<p>Polyurea condition</p>	<p>Associated with metabolic disorder like diabetes.</p>
<p>Increased thirst</p>	<p>Pharyngitis- hypoglossal branch of Vagus nerve irritated.</p>
<p>Suffered by chronic cooling substances</p>	<p>Chronic associated with Kidney diseases.</p>
<p>Vali Vikkal</p> <p>Sudden Excitement</p> <p>Over exposure to sunlight</p> <p>Drinking during increased thirst</p> <p>Spicy foods.</p> <p>Fast running</p>	<p>Emotions like fear, anxiety, excitement, Joy, Stress</p> <p>Sudden Temperature changes.</p> <p>Drinking water.</p> <p>Spicy foods, dry breads</p>
<p><i>AzhalVikkal</i></p> <p>Increased appetite</p> <p>Tuberculosis</p> <p>Worry</p> <p>Heat producing foods.</p>	<p>Too fast eating and metabolic disorders like Diabeties.</p> <p>Infections of lung causes irritation thoracic branch of Vagus nerve.</p>

	Stress & Personality disorders. Use of steroids.
<i>AyyaVikkal</i> Increase intake of <i>AyyaDhoda</i> ( cooling foods) causes sputum in chest.	Infections, tumours in thornicage irritates thoracic branch of vagus nerve.
MukkutraVikkal Chronic Fever.	Fever.
SeriyaVikkal More Spicy foods Dry foods Non Easily digested foods.	Spicy foods. Dry breads.
Other Ulcer. Chronic Diarrhoea increased Diarrhoea	Peptic Ulcer. Infections, Fever Cholecystitis. Inflammatory Bowel disease (IBS).

### Ingredients of Mayilirahathy Chooranam

Sl.No.	Tamil Name	Botanical Name	Phytochemical Analysis	Uses
1.	Thippily	Piper longam	PiperinePiperlongumine	Expectorant used to treat headache, inflammation
2.	Seeraham	CuminumCuminum	Vitamin AEC Cuminaldehyde	Used to treat indigestion gasterities

### **Preliminary Phyto-Chemical results of the trial drug.**

- |                 |                     |
|-----------------|---------------------|
| 1) Alkaloids –  | Atropine (41%)      |
| 2) Flavanoids – | Gallic acid (25%)   |
| 3) Saponin –    | Diosgenin (217)     |
| 4) Steroid –    | cycloastenol (5.5%) |
| 5) Aminoacid –  | Leucine( 56%)       |

### **Clinical significance of the Lab findings:**

#### **Alkaloids – Atropine (41%)**

Atropine is used to treat certain types of nerve agent and pesticide poisoning (organoPhosphorous) and some type of slow heart rate and to decrease saliva production during surgery. Eyedrops are used to treat Uveitis, early amblyopia and also used to treat Bradycardia and SLUDGE syndrome. It is 'an antimuscarinic works by initiating parasympathetic nervous system and used to treat second degree neat block known as wenkeback block.

#### **Flavanoids – Gallic acid (25%)**

Tallic acid inhibit the formation of amyloid fibrils one of the causes of Alzheimer's disease and Parkinsons disease. It is a Carbonic anhydrase inhibitor used to produce polyester and to determine the phenol content of various anilities.

#### **3) Saponin – Diosgenin (217)**

Diosgenin is the precursor for the semi synthesis of progesterone. Which in turn was used in oral contraceptive pills. It reduces the level of serum cholesterol.

#### **4) Steroid – cycloastenol (5.5%)**

Cycloastenol is the first precursor in the biosynthesis of other sterols.

#### **5) Aminoacid – Leucine( 56%)**

Leucine is a major component of the subunits in ferritin, astacin and other buffer proteins and used in the biosynthesis of proteins. It activates the mammation target of

rapamycin kinase that regulates cellgrowth. It is a dietary aminoacidand had the capacity to directly stimulate the muscle protein synthesis.

## **Conclusion**

Ancient Siddhars had the Knowledge and Wisdom to find treatments to the day to day problems through single herbs and poly herbal and herbo-mineral and sometimes Animal by-products. This paper gives a clear view about the different constituents and actions of *mayiliragadhi chooranam* being used for the treatment of *Vikkal* (Hiccup). Further studies are to be done to upgrade this holistic formulation to the next level for wide distribution.