Kalkaraichi (Lithontriptic) Mooligaigal - A Literature Review

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Abstract

Herbal medicine is the oldest form of healthcare known to mankind. Herbs are the most important part of our life. Any plant organ such as root, stem, leaf, flower and fruit can be used as medicine. Herbs produce a variety of chemical substances that act upon the human body. The problem of urinary stones or calculi is a very ancient one and many remedies have been employed in Siddha system of medicine. In this article, an attempt has been made to emphasis on herbs which are helpful in treating urinary stones. In Siddha system, Kalkaraichi mooligaigal are in use to treat urinary stones.

Keywords: Siddha, Kalkaraichi, Herbs, Mooligaigal, Urinary stones, Calculi.

Introduction

Siddha system of medicine is the most primitive medical system. This system was formulated and established about more than 25000 years ago. The incidence of Urolithiasis is very common in the world. The problem of urinary stones is a very ancient one and these stones are found in all parts of the urinary tract viz. kidneys, ureters and urinary bladder and may vary considerably in size. Majority of urinary calculi are made up of calcium phosphate, calcium oxalate, uric acid or magnesium ammonium sulphate. In Siddha system of medicine, Kalkaraichi mooligaigal are mainly used as Lithontriptic and Diuretic. These have the properties of breaking and disintegrating the stones in urinary tract and are widely used in Siddha system.

Literature Review

Kalkaraichi Mooligaigal

Chiru Peelai

Botanical name:
Aerva lanata

Family name:
Amaranthaceae

English name:
Common wayside weed
Other names: Karbethi, Paashanabethi, Kanpeelai.
Action: Lithontriptic, Diuretic.
Chemical constituents:
Major: β-sitosterol, α-amyrin, betulin, hentriacontane.
Alkaloids: canthin-6-one, carboline-1-propionic acid, aervolane.
Flavonols: aervitrii, narcissin and a flavone chrysin.
Preparation:
1/8 – ¼ aazhakku of its leaf juice can be used to treat Renal calculi.

Elumichan Tulasi
Elumichai tulasi
Botanical name: *Ocimum gratissimum*
Family name: Lamiaceae
English name: Shrubby basil
Action: Lithontriptic, Deobstruent, Stimulant, Demulcent, Carminative.
Chemical constituents:
Essential oil, thymol, eugenol, methyl chavicol.
Preparation: The decoction of this leaves expels the bladder stones after fragmenting them.
Kamela

Botanical name:

*Mallotus philippensis*

Family name:

Euphorbiaceae

English name:

Monkey face tree, Kamala tree, Kumkum tree.

Other names:

Kabila, Kamala, Kambillam, Manjanai, Kungumam.

Action:

Lithontriptic, Anthelmintic, Aphrodisiac, Cathartic.

Chemical constituents:

The most important active constituent is brownish red or reddish yellow resin composed of a crystalline substance called *rottlerin* whose molecular formula is $C_{33}H_{30}O_9$ and it contains four benzene nuclei. Traces of a volatile oil, starch sugar, tannin, oxalic acid and citric acids also present.
Perungkalarva

Botanical name: 
*Salvadora indica*

Family name: 
Salvadoraceae

English name: 
Toothbrush tree

Other names: 
Kaarkol maram

Action:
Lithontriptic, Diuretic, Alterative, Purgative, Carminative, Deobstruent.

Chemical constituents:
Root bark contains resin, colouring matter and traces of an alkaloid called “salvadorine”, trimethylamine and ash containing a large amount of chlorine. Fruit contains a large amount of sugar, fat, colouring matter and an alkaloid. Seeds contains a white fat and yellow colouring matter. Oil-cake from the seed contains nitrogen 4.8%, potash 2.8% and phosphoric anhydride 1.05%.
Mavilingu

Mavilangu

Botanical name:

*Crataeva magna*

Family name:

Capparaceae

English name:

Three leaved caper

Other names:

Kumaaragam, Varani.

Action:

Lithontriptic, Diuretic, Laxative, Rubefacient.

Chemical constituents:

Bark contains Saponin.

Preparation:

Decoction prepared from its bark cures Urolithiasis.

**Conclusion:**

The mechanism of action of these herbal medicines has great importance in the development of effective and safe anti urolithiatic agent. These plants based therapy can be used as adjunct therapy particularly in urolithiasis as there are no satisfactory drugs in modern medicine which can dissolve the urinary stones. An allopathic physician usually prefer ESWL (EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY) for urinary stones. But it has a complication. To avoid this risk, Kalkaraichi mooligaigal which have the actions of Lithontriptic and Diuretic can be used as the treatment option for urinary stones.

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