

WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 8, Issue 12, 561-566.

Review Article

ISSN 2277-7105

LITERATURE REVIEW ON SIDDHA MEDICINE FOR THE MANAGEMENT OF KATTU MANTHAM WITH PODUTHALAI **KUDINEER- A DRUG REVIEW**

Dr. R. Rajalakshmi*¹, Dr. R. D. Indumathi², Dr. A. M. Amala Hazel³ and Dr. N. J. Muthu Kumar⁴

^{1,2}PG Scholars, Dept. of Kuzhandhai Maruthuvam, National Institute of Siddha, Chennai-47. ³Associate Professor, Dept. of Kuzhandhai Maruthuvam, National Institute of Siddha, Chennai-47.

Article Received on 13 Sept. 2019, Revised on 04 Oct. 2019, Accepted on 25 Oct. 2019 DOI: 10.20959/wjpr201912-16118

*Corresponding Author Dr. R. Rajalakshmi

PG Scholars, Dept. of Kuzhandhai Maruthuvam, National Institute of Siddha, Chennai-47.

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 healthcare solutions to a number of health issues of the modern era. Constipation is a functional disease in which the gastrointestinal organ, primarily the oesophagus, stomach, small intestine & colon function abnormally. In our Siddha system symptoms of Kattumantham may be correlated with constipation and it can be effectively managed with Poduthalai kudineer. Most of the ingredients of Poduthalai kudineer possess stomachic, carminative, laxative effect. Hence this article gives

an insight on the efficacy of the drug for Kattumantham(Constipation) based on review of various literatures and scientific studies.

KEYWORDS: Constipation, Siddha system, Poduthalai kudineer, Kattu mantham.

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

⁴Director(i/c) Hospital Superintendent, National Institute of Siddha, Chennai-47.

World Journal of Pharmaceutical Research

Rajalakshmi et al.

elements. Alteration of the three vital humours Vali, Azhal and Iyyam which leads to disease

manifestation.

In Siddha Medicine importance has been given to child care. The disease are classified

depending on the age of the children. As per the siddha literature Balavagadam Kattu

mantham is one of the type of Mantham. The symptoms of Kattu mantham may be correlated

with Constipation.

Constipation is a functional disease in which the gastrointestinal organ, primarily the

oesophagus, stomach, small intestine & colon function abnormally. The primary symptom of

constipation are upper abdominal pain, few bowel movements, hard (or) small stools and

vomiting. These symptom are most often provoked by eating. The incidence of constipation

in children above one year is 85% in pediatric population.^[1]

Constipation in children is a common health problem affecting 0.7½ to 29.6½ children across

the world. 20% of children also have at least 1 clinical feature of constipation. [2] Abbott Gut -

Health survey found that 14% people in urban India suffer from chronic constipation. The

incidence of chronic constipation is over 10% worldwide. [3]

In the present era constipation is the most common illness throughout the world not only in

adults but in children too. Nearly 5 - 10% of children^[4] globally are suffering with this

problem, while in India this percentage lies in between 5 - 29%. [5]

The Poduthalai kudineer is a typical medicine indicated for Kattu mantham in the Siddha text

book Balavagadam. More over the ingredients of poduthalai kudineer possess stomachic,

carminative, laxative effect. Poduthalai kudineer is used in the effective for management of

Kattu mantham (Constipation).

DRUG DETAILS

Trial drug: Poduthalai kudineer^[6]

PREPARATION OF THE DRUG

Ingredients

Poduthalai eerkku (*Phyla nodiflora*) -10grams

Vembu eerkku (*Azadirachta indica*) -10grams

Ma eerkku (Mangifera indica) -10grams

Puli eerkku (Tamarindus indica) -10grams Nunna eerkku (*Morinda tinctoria*) -10grams Nochi eerkku (Vitex negundo) -10grams Veliparruthi eerkku (Pergularia daemia) -10grams Omam (Carum copticum) -5grams Ulli (Allium sativum) -5grams Thippilli (Piper longum) -5grams

Purification of the ingredients

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

Method of preparation

The above given drugs were taken in given ratio. Poduthalai eerkku, vembu eerkku, ma eerkku, puli eerkku, nunna eerkku, nochi eerkku, veliparruthi eerkku were cut into small pieces. The outer covering of ulli was removed and fried, omam was fried and thipplli was cut into pieces and all the ingredients are grinded into coarse powder.

Dosage: 15-20ml twice a day

Indication: Kattu mantham (Constipation)

Duration: 3 days

Pharmacological action of the ingredients of Poduthalai kudineer formulation used for treatment of Kattu mantham

S.no	Plants	Botanical Name	Parts Used	Action
1	Poduthalai	Phyla	Petioles	Demulcent, Deobstruent, Diuretics,
		nodiflora		Astringent, Expectorant, Tonic
2	Vembu	Azadirachta indica	Petioles	Stomachic, Stimulant, Anthelmintic, Discutient,
				Tonic, Antiperiodic, Antiseptic
				Insecticide, Astringent, Alterative
3	Ma	Mangifera indica	Petioles	Stomachic, Laxative, Stimulant, Demulcent,
				Astringent, Diuretic, Tonic, Nutritive
4	Puli	Tamarindus indica	Petioles	Stimulant, Laxative, Carminative, Tonic,
				Refrigerant, Antibilios
5	Nunna	Morinda tinctoria	Petioles	Stimulant, Febrifuge, Tonic, Emmenagogue
6	Nochi	Vitex negundo	Petioles	Vermifuge, Alterative, Febrifuge, Expectorant,
U				Diuretic, Astringent, Refrigerant
7	Veliparruthi	Pergularia daemia	Petioles	Expectorant, Anthelmintic, Emetic
8	Omam	Carum copticum	Seed	Stomachic, Antispasmodic, Carminative,
				Antiseptic, Stimulant, Tonic, Sialogogue
9	Ulli	Allium sativum	Bulb	Carminative, Stomachic, Tonic, Alterative,
9				Stimulant, Expectorant, Diuretic, Anthelmintic
10	Thippilli	Piper longum	Dried spikes	Stimulant, Carminative

Scientific Validation

	Pharmacological activity	Phytochemicals
Poduthalai (phyla nodiflora)	Laxative activity ^[7]	Leaves contain tannin, fat, lactose, maltose, glucose, fructose, xylose, rutin, a waxy ester, β-sitosterol, a bitter substance and two glucosidic colouring matters, nodiflorin A and B. Nodifloridin A and B, nodifloretin, two new flavone glycoside - lippiflorin A and B ^[7]
Vembu (<i>Azadirachta indica</i>)	Gastroprotective effect ^[8]	Azadirachtins A,B,D, Nimbin Nimbidin, Nimbolide ^[9]
Ma (Mangifera indica)	Laxative ^[10] , Bronchodilatory ^[11]	Mangiferine, Catechin, Alanine Glycine ^[12]
Puli (Tamarindus indica)	Laxative ^[13] , Spasmolytic effect ^[14] , Antihistaminic, Adaptogenic, Mast cell stabilizing effects ^[15]	Tartaric acid, Malic acid, Potassium bitartrate, Mucilage, Pectin ^[12]
Nunna (Morinda tinctoria)	Anti-secretory and prokinetic activities ^[16]	Morindin, Morindone, Alanine Tryptophan, Arginine, Glutamic acid ^[12]
Nochi (Vitex negundo)	Laxative, Anti-histaminic activity, CNS depressant activity ^[17]	Casticin, Iso orientin, Luteolin Nishidine, Negundoside, Linalool Sabinene ^[12]
Veliparruthi (Pergularia daemia)	Gastric secretory stimulation activity ^[18]	Pergularin, Cardenolides, Betaine Calotropin, Daucosterol Lupeol -3-beta trans crotonate ^[12]
Omam (Carum copticum)	Increase gastric acid secretion time ^[19] , Increase the activities of digestive enzymes and bile secretion ^[20]	Thymol, ρ – Cymene, α – terpinolene ^[12]
Ulli (Allium sativum)	Stimulates peristaltis and secretion of the digestive juices ^[21]	Allicin, Allisatin, Diallyl sulphide Vitamins-Ascorbic acid, Vitamin A, Thiamine, Folic acid. Minerals-Copper, Phosphorus, Potassium, Selinium, Zinc, Iron. [12]
Thippilli (Piper longum)	Antiamoebic activity against Entamoeba histolytica, Anti-giardial, Immune-stimulatory activity. ^[22]	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. [23]

CONCLUSION

The above mentioned medicine is effectively used for the management of Kattu mantham(Constipation). Besides all, the ingiredients of the plants have Stomachic, Carminative, Stimulant, Laxative and Tonic. Poduthalai kudineer can be effectively used for the management of Kattu mantham.

REFERENCES

- Hammer HF, Santa Ana CA, Schiller LR, Fordtran JS. Studies of osmotic diarrhea induced in normal subjects by ingestion of polyethylene glycol and lactulose. J Clin Invest, 1989; 84: 1056-62.
- Van den Berg MM, Benninga MA, Di Lorenzo C. Epidemiology of childhood constipation: a systematic review. Am J Gastroenterol, 2006; 101: 2401-2409. [PubMed] [Google Scholar]
- 3. Smeltzer C.Suzanne. Bare G. Brenda. Brunner and Suddarths text book of medical and surgical nursing. 10th edition. Lippincott publication. Philadelphia, 2004.
- Vikrant Khanna, Ujjal Poddar and Surender Kumar Yachha. Research work done on Etiology and Clinical Spectrum of Constipation in Indian children, Department of Pediatric gastroenterology, SGPGIMS, LUCKNOW – 226014.
- 5. Srilanka Journal of Child Health, Article on Constipation in Children: Diagnosis and Management, 2009; 38: 127–135.
- 6. Dr. Pon. Kurusiromani & Murugesa Mudhaliyar Text Book of Balavagadam Published By Indian System of Medicine And Homeopathy, 2010; 91: 92.
- 7. Md. Firoz Hossen, Pharmacological study of Phyla Nodiflora, Department of Pharmacy, East West University.
- 8. Medicinal uses of neem (*Azadirachta indica*) in human life: A Review. Int. J. of Life Sciences, Special Issue A10; January, 208. *www.ijlsci.in*.
- 9. R.N. Chopra, S.L. Nayar, I.C. Chopra, Glossary of Indian medicinal plants, Drug Research Laboratory, Jammu-Kashmir, Srinagar, 30th June, 1956.
- 10. Morais TC, Lopes SC, Karine-Carvalho MMB, Arruda BR, Souza FTC, Trevisan MTS *et al.* Mangiferin a natural xanthone, accelerates gastrointestinal transit in mice involving cholinergic mechanism. World Journal of Gastroenterology, 2012; 18(25): 3207-3214.
- 11. Gbeassor M, Agbonon A, Aklikokou K. *Mangifera indica* Stem Bark effect on the rat trachea contracted by acetylcholine and histamine. Pharmaceutical Biology, 2005; 43: 475-479.
- 12. R.N. Chopra, S.L. Nayar, I.C. Chopra, Glossary of Indian medicinal plants, Drug Research Laboratory, Jammu-Kashmir, Srinagar, 30th June 1956.
- Havinga RM, Hartl A, Putscher J, Prehsler S, Buchmann C, Vogl CR. Tamarindus indica
 L. (Fabaceae): patterns of use in traditional African medicine. J Ethnopharmacol, 2010;
 127(3): 573-588.

- 14. Ali N, Shah S. Spasmolytic activity of fruits of Tamarindus indicaL. J Young Pharm., 2010; 2(3): 261-264.
- 15. Bhadoriya SS, Ganeshpurkar A, Narwaria J, Rai G, Jain AP. Tamarindus indica: extent of explored potential. Pharmacogn Rev., 2011; 5(9): 73-81.
- 16. Mahattanadul S, Ridtitid W, Nima S, Phdoongsombut N, Ratanasuwon P, Kasiwong S. Effects of *Morinda citrifolia* aqueous fruit extract and its biomarker scopoletin on reflux esophagitis and gastric ulcer in rats. Journal of Ethnophar macology, 2011; 134(2): 243-50.
- 17. Fauziya Basri, H.P. Sharma, Sazya Firdaus, Paras Jain and Alok Ranjan Laboratrory of Plant Physilogy and Biotechnology University Department of Botany, Ranchi University, Ranchi-834008, India. Journal homepage: http://www.journalijar.com
- 18. Gupta JC, Roy PK, Ray GK. Pharmacological action of an active constituent isolated from Daemia extensa(Pergularia extensa). Part II.. Further Comparative study with pituitrin. Indian J Med Res., 1950; 38: 75-82.
- 19. K. Platel and K. Srinivasan, "Studies on the influence of dietary spices on food transit time in experimental rats," *Nutrition Research*, 2001; 21(9): 1309–1314.
- 20. S. Hejazian, M. Morowatisharifabad, and S. Mahdavi, "Relaxant effect of *Carum copticum* on intestinal motility in ileum of rat," *World Journal of Zooogyl*, 2007; 2: 15–18.
- 21. prescription for Nutritional Healing, Third Edition. James F., 2000.
- 22. P.Manoj, E.V. Soniya, N.S. Banerjee and P. Ravichandran. Recent studies on well-known spice, Piper longum Linn. E-mail:manojp99in@yahoo.com
- 23. Chem. Pharm. Bull., 1983; 31: 3562.