

Effect Of Siddha Herbal Formulation Moolaroga Chooranam On Rattha Moolam (Bleeding Piles) – An Open Clinical Study

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ABSTRACT

Background: Siddha system of medicine is one among the AYUSH medicinal system, being practised in India. Haemorrhoids or Piles compared with Moolam in Siddha literature and is classified into 21 types. Rattha Moolam (Bleeding piles) is one amongst them. Aim: The aim of the study is to evaluate the effect of Siddha herbal formulation Moolaroga Chooranam (MC) in the treatment of Rattha Moolam (Bleeding Piles). Materials and Methods: In the present study 40 patients having cordial symptoms of bleeding piles were taken. It was a Non-Randomized open clinical trial conducted between August 2016 and June 2017 at Arignar Anna Government Hospital of Indian Medicine. All the patients were treated with Moolaroga Chooranam for 48 days and the results were observed. In observation, clinical findings were noted on 0th, 7th, 14th, 21st, 28th, 35th, 42nd, and 49th day. Improvement was assessed by Health Assessment Questionnaire (HAQ) Score. Statistical Analysis: The improvement in the Health Assessment Questionnaire Score was statistically analysed at the end of the treatment using Paired ‘t’ test. Results: After the assessment of difference in the HAQ score before and after treatment, P value was 0.0001, which was extremely significant. Conclusions: The Siddha herbal formulation Moolaroga Chooranam is significantly effective in the treatment of Bleeding Haemorrhoids

Keywords: *Rattha Moolam, Moolaroga Chooranam, Clinical trial.*

INTRODUCTION

Plants have been using by humans since the age of primitive man. The primitive man had several opportunities to study the Plants, Minerals, Animal sources in several aspects which they used to overcome diseases and lead a healthy life.[1] Usage of medicinal plants was disappeared in recent past and nowadays it regains its importance among the population. India is blessed with rich flora, which can be harnessed to treat diseases through right knowledge. Herbs are the main source for traditional medicines along with metals and minerals.

Varicosities of the anal canal are known as haemorrhoids. It may be internal or external depending upon the position of the varicosity. If it is above the Hilton’s line it is called ‘internal haemorrhoid’ and if it is below the Hilton’s line it is called ‘external haemorrhoids’. So internal haemorrhoid is covered with mucus membrane and external haemorrhoid is covered with skin.[2] They are common lesions in the elderly and in pregnant women. They commonly result from increased venous pressure. Secondary changes and complications include, thrombosis, haemorrhage, inflammation, scarring and strangulation.[3]

In Rattha Moolam cardinal complaint is bleeding per rectum. Bleeding or Haemorrhage is one such condition, which has to be treated promptly with utmost care, and requires a pragmatic approach. Any failure to treat unbridled bleeding can lead to dangerous and often fatal consequences. The Siddha medicines have immense potential to cure diseases with minimal or no adverse effects. In this way, peoples with Bleeding haemorrhoids can be cured without adverse reactions through Siddha

drug.

Moolaroga Chooranam, is a herbal Siddha formulation, described in Siddha Classical Literature Pulippani vaithiyam 500, was chosen for the trial. According to the literature it cures 9 types of haemorrhoids mentioned in Siddha literature.[4]

MATERIALS AND METHODS

It is a single centered, open Clinical Trial conducted at Arignar Anna Government Hospital of Indian Medicine attached to Govt Siddha Medical College, Chennai during Aug-2016 to Jun-2017 In the present study 40 patients with cardinal symptoms of Rattha Moolam were selected. All the patients were administered 1 gm of Moolaroga Chooranam, twice a day with honey for 48 days.

Ethics

After obtaining approval from Institutional Ethics Committee, Government Siddha Medical College, Chennai (GSMC-CH-ME-4/2015/002), the study was carried out during August 2016 to June 2017. The study was registered retrospectively in Clinical Trial Registry-India (CTRI/2017/05/008568). An informed written consent was from all participants.

Study design

It is a single-center, open label, prospective study.

Sample size

A sample size of 40 patients was considered adequate as this was a proof of concept study.

Eligibility criteria

Participants fulfilling the classical symptoms of *Rattha Moolam* such as Bleeding per rectum, Constipation, itching, and Health Assessment Questionnaire (HAQ) Score >12 were included irrespective of sex, religion, caste and socio-economic status. Subjects under the age group of 20 to 60 years were included in the study.

Participants with external internal haemorrhoids, fissure in ano, fistula, hypertension, diabetes mellitus and carcinoma of rectum were excluded from the study. Pregnant and lactating women were also excluded. Participants currently under the treatment for *Rattha Moolam* in any system of medicine were not included in the study.

Study intervention

Moolaroga Chooranam was selected as the drug of intervention. All the herbal ingredients of the drug were authenticated at Dept of Botany, Govt. Siddha Medical College, Chennai (GSMC/MB-Voucher specimen No. 19/2016).

Table 1: Ingredients

S.No	Vernacular Name	Botanical Name	Family	Part used
1	Tūtuvaḷai	Solanum trilobatum	Solanaceae	Root
2	Maruḷ	Sansevieria roxburghiana	Liliaceae	Root
3	Karunaikkilangu	Amorphophallus paeoniifolius	Araceae	Root
4	Pirandai	Cissus quadrangularis	Vitaceae	Root
5	Nilāvārai	Cassia senna	Caesalpiaceae	Root
6	Kāṭṭukkaruṇai	<i>Amorphophallus sylvaticus</i>	Araceae	Root
7	Arugaṇ	<i>Cynodon dactylon</i>	Poaceae	Root
8	Nīrmuḷḷi	<i>Hygrophila auriculata</i>	Acanthaceae	Root
9	Miḷagaraṇai	<i>Toddalia asiatica</i>	Rutaceae	Root

All the ingredients are purified, dried and powdered. 1gm of *Moolaroga Chooranam* was administered orally twice a day after food with honey, for a duration of 48 days. After 48 days of intervention period, the participants were followed for another 14 days, to assess the rebound bleeding and symptoms. Thus, the total duration of the study was 62 days.

Conduct of the study

Demographic details and baseline characteristics such as age, sex, concomitant disease history and family history were recorded from all participants. Participants were screened for clinical symptoms using self-prepared Health Assessment Questionnaire (HAQ) Score. Participants with HAQ score >12 were recruited in the study. Difference in the HAQ score before and after treatment was used for the assessment of improvement.

The participants were provided with the study drug *Moolaroga Chooranam* and asked to report at study site every 7 days (for period of 7 weeks). The treatment was stopped on 48th day and further the participants were called for follow up

on day 62. HAQ score was assessed on day 0 and day 48. The participants were asked to refrain from any other medications for haemorrhoids during the study period.

Statistical analysis

The parametric data was expressed as mean ± Standard Error of the Mean. The baseline values were compared with values after treatment using Paired t test. p value of <0.05 was considered as level of significance.

RESULTS AND DISCUSSION

Age distribution

Out of 40 patients, 17.5% of patients were in age groups 20-30 years, 42.5% of patients were in age group 31-40 years, 30% of patients were in age group 41-50 years, 10 % of patients were in age group 51-60 years (Fig. 1).

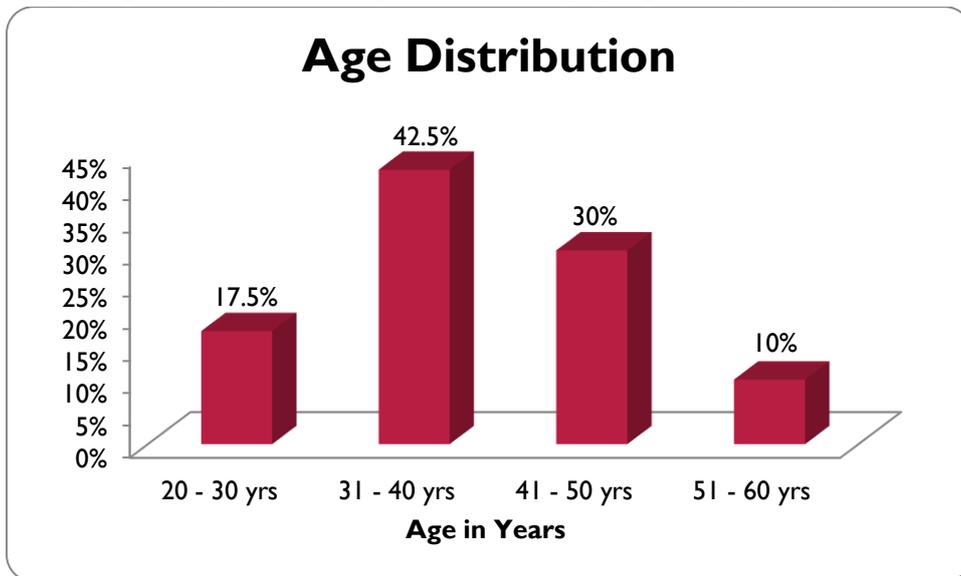


Figure 1. Age distribution

Gender distribution

About 47.5% were males and 52.5% were females (Fig. 2).

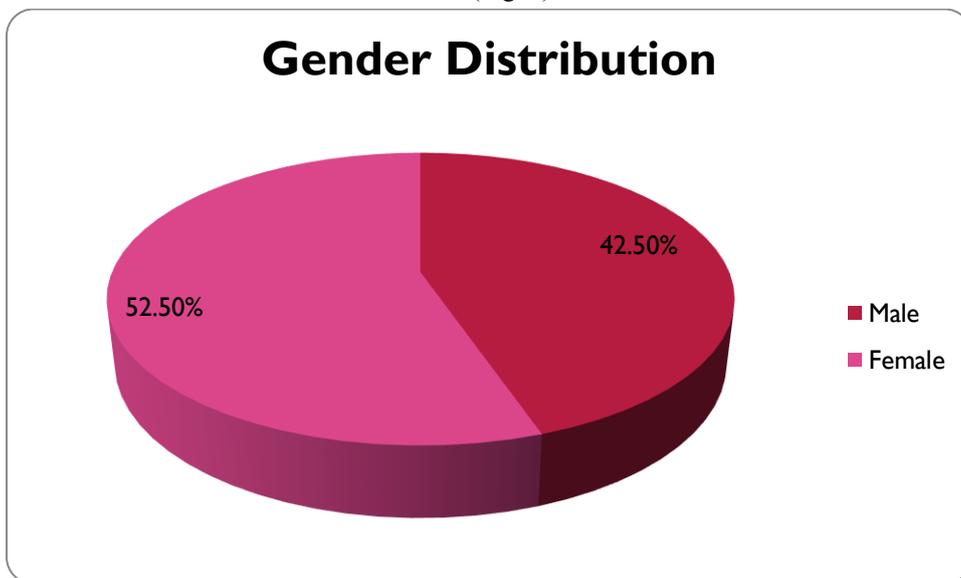


Figure 2. Gender distribution

Occupation distribution

Out of 40 patients, 9 patients (22.5%) were Office workers, 11 patients (27.5%) were House wives. 3 patients (7.5%) were Business persons. 7 patients (17.5%) were Coolie labourers, 2 patients (5%) were Students, 3 patients (7.5%) were Tailors,

1 patient (2.5%) was Nurse, 1 patient (2.5%) was Police and 3 patients (7.5%) were Drivers (Fig. 3).

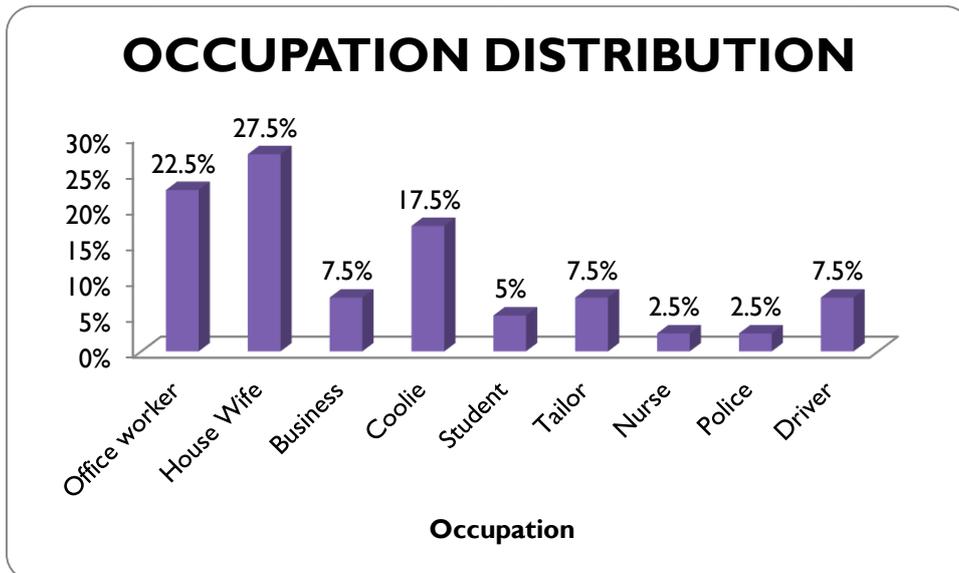


Figure 3. Occupation distribution

Socio-Economic Status

Among 40 cases 72.5% comes under low economic status, 20% of them under moderate status and 7.5% of them under high income status (Fig. 4).

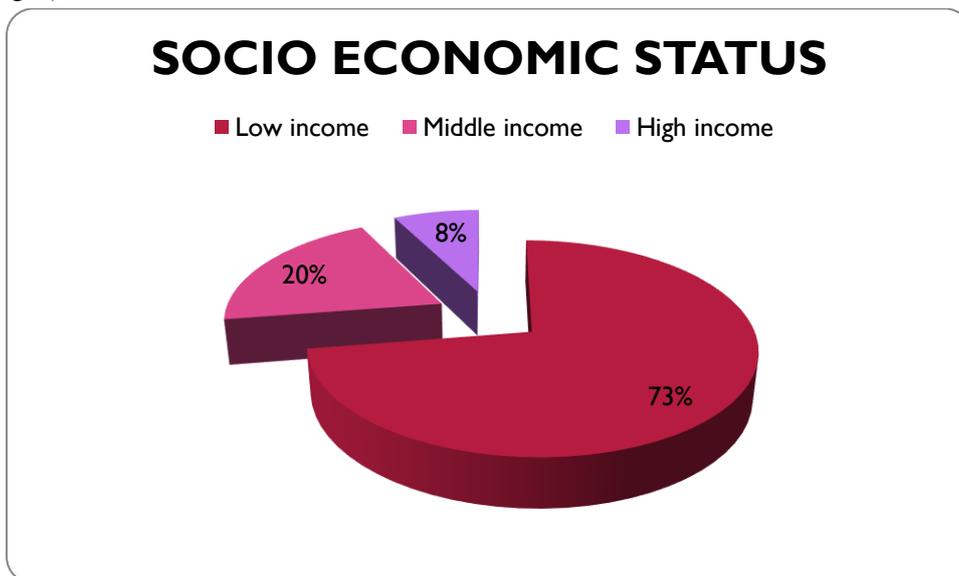


Figure 4. Socio-Economic status

Dietary habits

Among 40 patients, 7 patients (17.5%) were taking vegetarian food and 33 patients (82.5%) were taking mixed diet (Fig. 5).

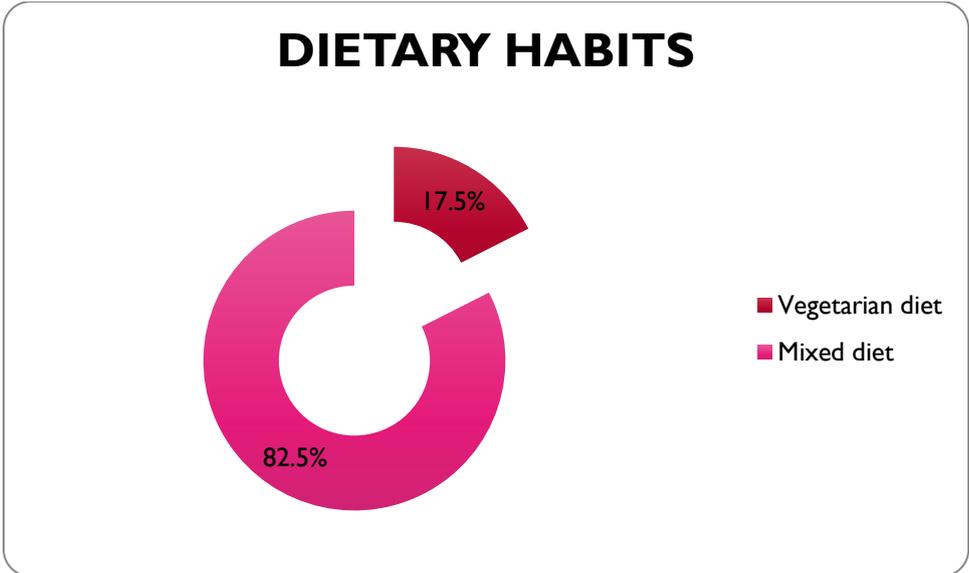


Figure 5. Dietary habits

Distribution of Mukkutram

Vatham

Out of 40 patients Abanan was affected in 40 patients (100%), Pranan was affected in 15 patients (37.5%), Uthanan was affected in 15 patients (37.5%), Kirukaran was affected in 14 patients (35%), Viyanan was affected in 6 patients (15%) and Devadhathan was affected in 6 patients (15%) (Fig. 6).

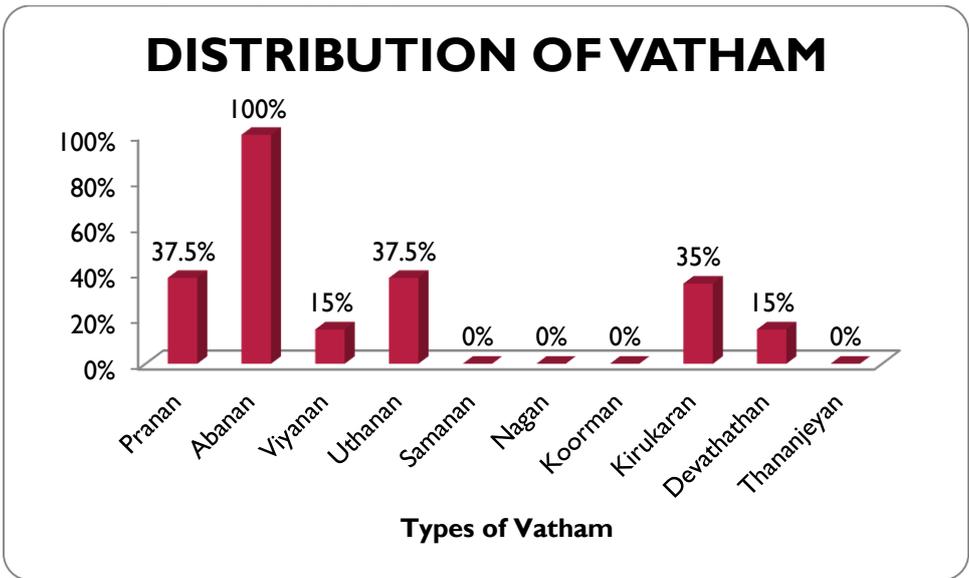


Figure 6. Distribution of types of affected Vatham

Pitham

Among 40 patients, Saathagam was affected in all the 40 patients (100%), Ranjagam was affected in 14 patients (35%), Analaga pitham was affected in 13 patients (32.5%) and Alosagam was affected in 10 patients (25%) (Fig. 7).

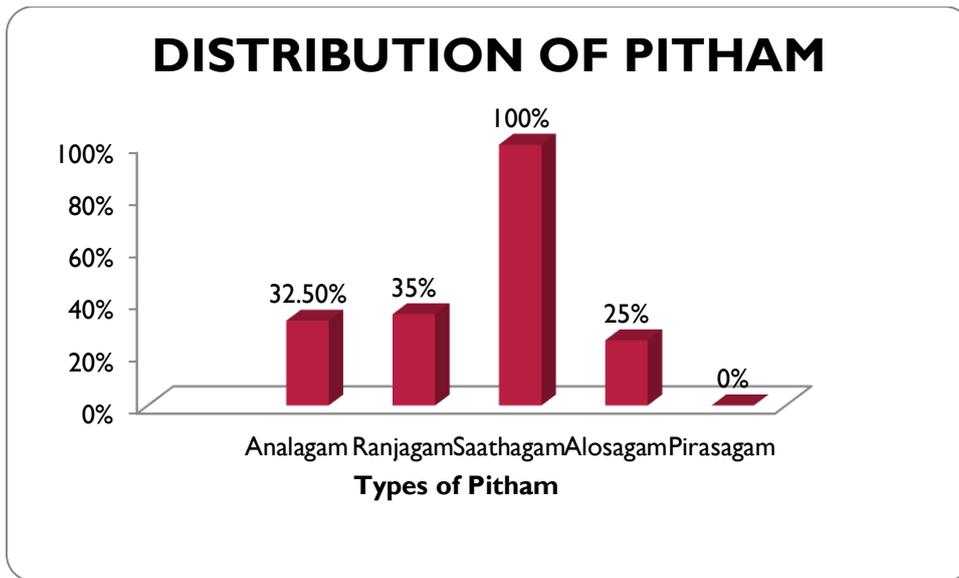


Figure 7. Distribution of types of affected Pitham

Kabam

Among the 40 patients, Kilethagam was affected in 16 patients (40%) and Santhigam was affected in 7 patients (17.5%) (Fig. 8).

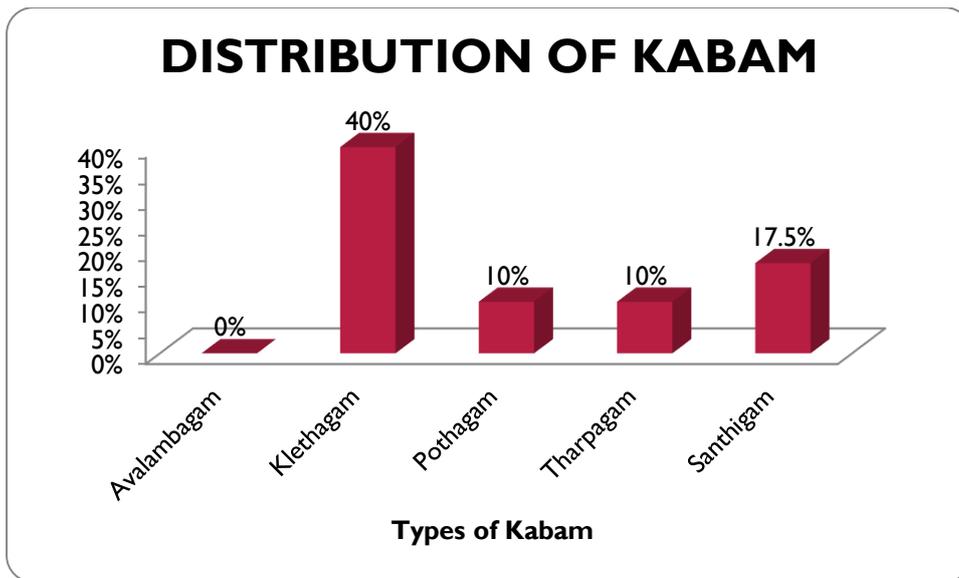


Figure 8. Distribution of types of affected Kabam

Udal Thathukkal

Among the 40 patients, Saaram was affected in all the 40 cases (100%), Senneer was affected in 22 cases (55%) and Enbu was affected in 6 patients (15%) (Fig. 9).

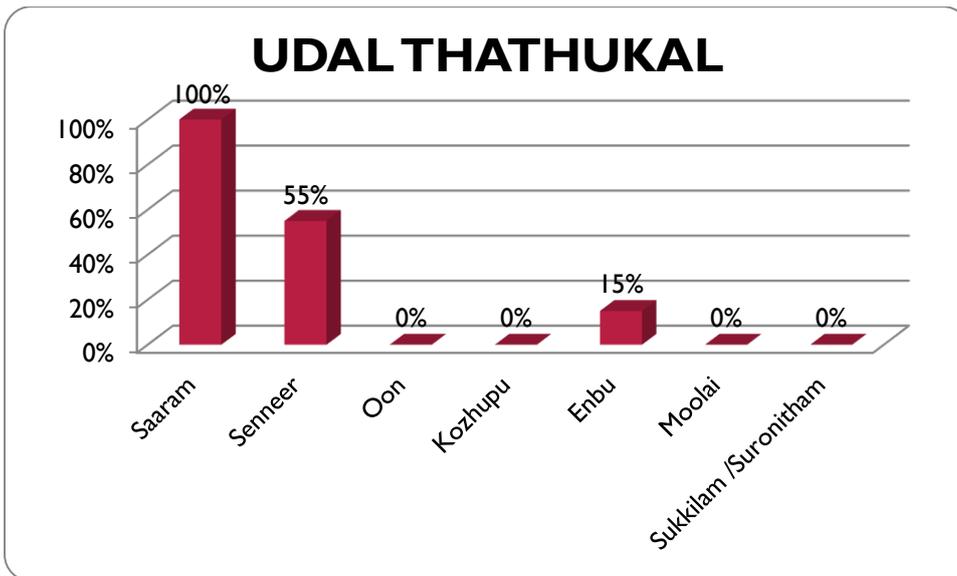


Figure 9. Udal Thathukkal affected

Envagai Thervu

Among 40 patients, Malam was affected in all the 40 cases (100 %). Naa, Niram and Malam were affected in 22 cases (55%) each (Fig. 10).

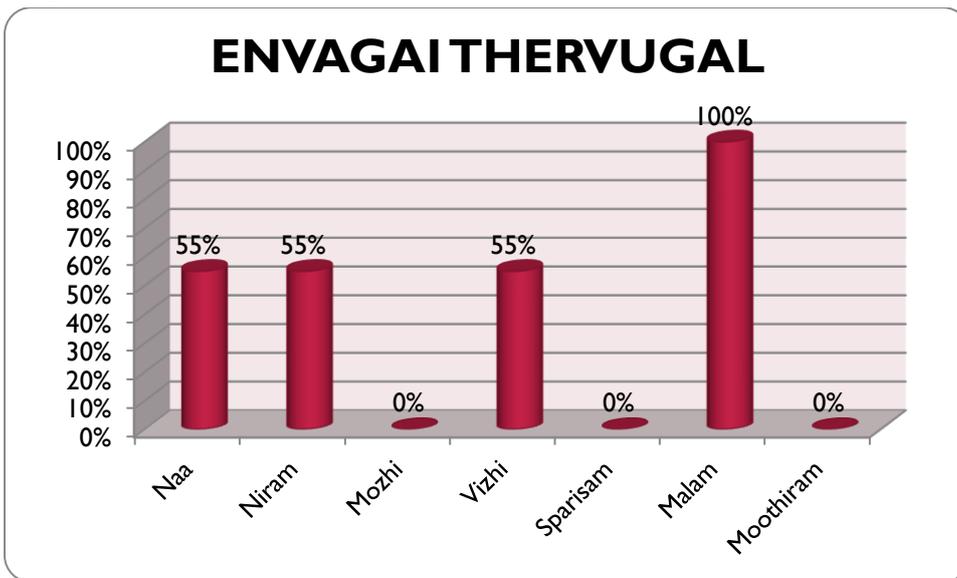


Figure 10. Envagai Thervu

Naadi

Among the 40 patients, 33 Patients (82.5%) had Pitha Vatha Naadi and 7 Patients (17.5%) had Vatha Pitha Naadi (Fig. 11).

NAADI

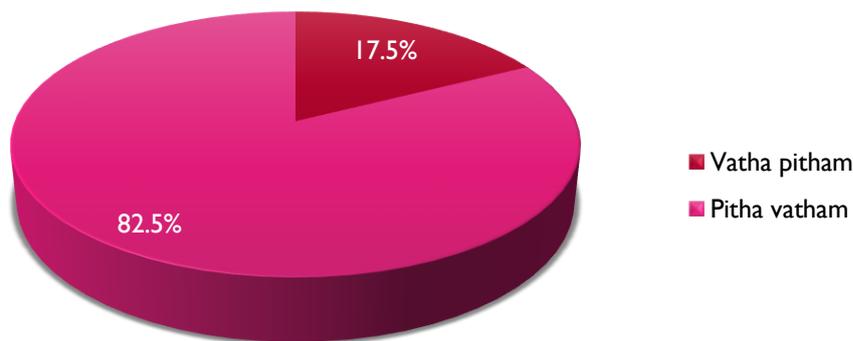


Figure 11. Naadi Distribution

Neikkuri

Among the urine sample of 40 patients, 26 samples (65%) show Pitha neer, 12 samples (30%) show Vatha neer and 4 samples (5%) show Kabha neer (Fig. 12).

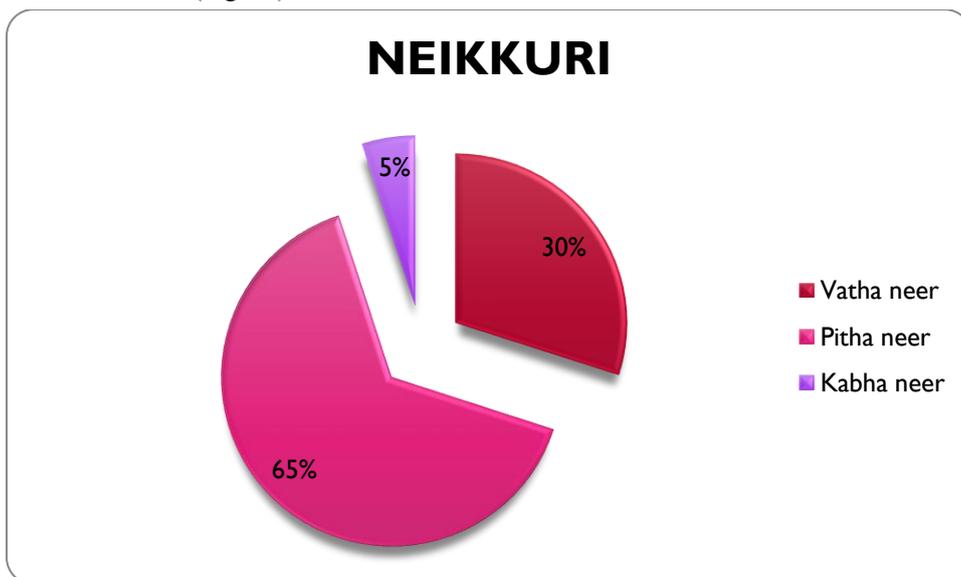


Figure 12. Distribution of Neikkuri pattern

Clinical Prognosis

Before treatment: 65% cases had severe rectal bleeding and 35% cases have moderate rectal bleeding. 17.5%, 70% and 12.5% cases had severe, moderate and mild Anal itching respectively. 60%, 25% and 15% cases had severe, moderate and mild constipation respectively. 50%, 35%, 10% and 5% cases have severe, moderate, mild and nil Headache respectively. 47.5%, 32.5%, 15% and 5% have Severe, moderate, mild and nil Giddiness (Table 2. Fig. 13).

After treatment: 62.5% cases have severe Rectal bleeding and 20% cases have moderate Rectal bleeding, 10% cases have mild and 7.5% cases have no Rectal bleeding. 60%, 22.5%, 10% and 7.5% cases have severe, moderate mild and Nil Anal itching respectively. 62.5%, 20%, 10% and 7.5% cases had severe, moderate, mild and Nil constipation respectively. 65%, 17.5%, 12.5% and 5% cases have severe, moderate, mild and nil Headache respectively. 65%, 20%, 12.5% and 5% cases have severe, moderate, mild and nil Giddiness respectively (Table 2. Fig. 13).

Table 2. Clinical Prognosis

S. No	Symptoms	Before Treatment				After Treatment			
		Nil	Mild	Moderate	Severe	Nil	Mild	Moderate	Severe
1	Rectal bleeding	0%	0%	35%	65%	62.5%	20%	10%	7.5%
2	Anal itching	0%	12.5%	70%	17.5%	60%	22.5%	10%	7.5%
3	Constipation	0%	15%	25%	60%	62.5%	20%	10%	7.5%
4	Headache	5%	10%	35%	50%	65%	17.5%	12.5%	5%
5	Giddiness	5%	15%	32.5%	47.5%	65%	20%	12.5%	5%

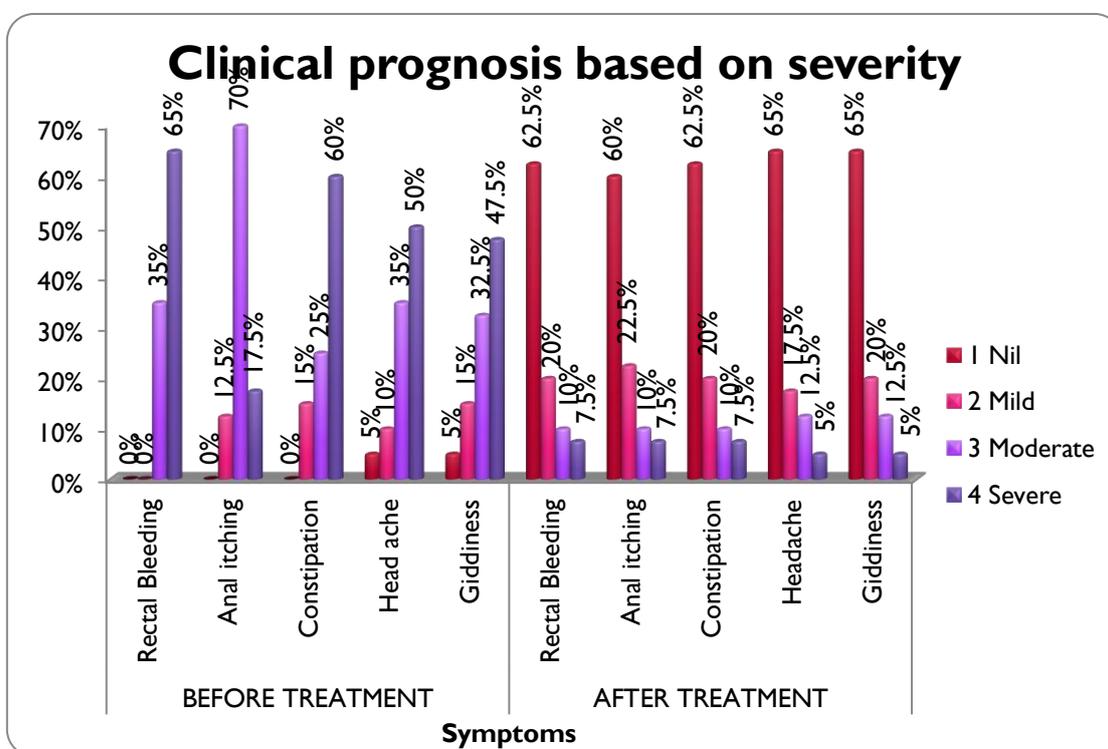


Figure 13. Clinical Prognosis

Gradation of Results

Among 40 cases, 25 cases (62.5%) show Good improvement, 8 cases (20%) show moderate improvement, 4 cases (10%) show Mild improvement and 3 cases (7.5%) show No improvement (Table 3. Fig. 14).

Table 3. Gradation of Results

S. No	Grading of Results	No of cases	Percentage
1	Good Improvement	25	62.5%
2	Moderate Improvement	8	20%
3	Mild Improvement	4	10%

4	No Improvement	3	7.5%
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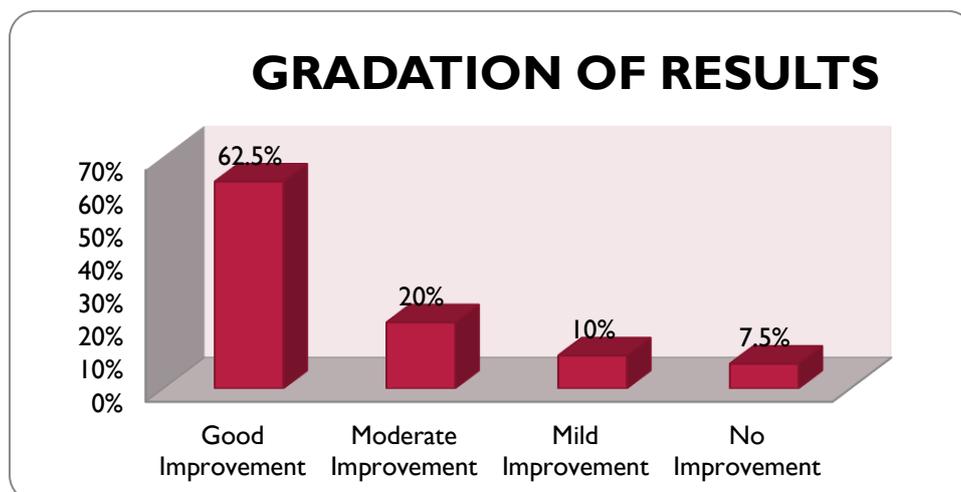


Figure 14. Grading of Results

Statistical analysis revealed that the P value is <0.0001 , indicating a highly significant difference between the pre-treatment and post-treatment Health Assessment Questionnaire (HAQ) scores. This finding suggests that the treatment with *Moolaroga Chooranam* significantly improved the clinical symptoms in patients with *Rattha Moolam*. The therapeutic efficacy of the formulation may be attributed to the pharmacological activities of its constituent ingredients. Previous studies have demonstrated that Methanol extract of *Amorphophallus paeoniifolius* has prominent anti-inflammatory activity while the chloroform extract has milder activity.^[5] *Cynodon dactylon* has good styptic activity which helps to arrest bleeding.^[6] It is observed that *Cissus quadrangularis* possess good vasoconstrictive and anti-inflammatory property and *C. quadrangularis* extract is considered relatively safe and effective in the conservative treatment of Hemorrhoids.^[7] Experimental studies conducted by Dey YN and his teammates on rats indicate that tuber of *Amorphophallus paeoniifolius* exhibited curative action on haemorrhoids through anti-inflammatory and antioxidant properties.^[8] Most of the ingredients of the trial drug has good styptic, laxative and Anti-hemorrhoidal properties which makes the drug effective in the treatment of *Rattha Moolam*.

5. CONCLUSION

The herbal formulation *Moolaroga Chooranam* was found to be effective in the treatment of *Rattha Moolam* (Bleeding piles) in the present clinical study. Further, studies should be done on other types of Moola noi to reveal the therapeutic potential of the formulation.

6. ACKNOWLEDGEMENTS

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7. CONFLICT OF INTEREST: Nil.

REFERENCES

1. Kandaswamy Pillai N: History of Siddha medicine (Tamil), Govt. of Tamilnadu publication, First Edition 1979
2. Somen Das: A manual on Clinical Surgery, 14th Edition 2019.
3. Mohan R C (editor): Pulipaani Vaithiyam 500 Moolamum Uraiyum (Tamil), Thaamarai Noolagam, Third Edition 2016
4. Harsh Mohan: Textbook of Pathology, New Delhi: Jaypee Brothers Medical Publishers; Eighth Edition 2019
5. De S, Dey YN, Ghosh AK: Anti-inflammatory activity of methanolic extract of *Amorphophallus paeoniifolius* and its possible mechanism. *Int J Pharma Biosci.* 2010;1:1–8.
6. K.S Murugesu mudaliyar: Gunapadam Mooligai (Tamil), Department of Indian Medicine and Homoeopathy Publication, Chennai, Second Edition, 2008
7. Ahmadi Pirshahid, P, Thisayakorn, C, Hemthanon, T, Suntornatanasat, T, Banchonglikitkul, C, Eiamwat, J, et al. Anti-hemorrhoid activities from *Cissus quadrangularis* L. *Acta Horti* 2016; 1125:161-172

8. Dey YN, Wanjari MM, Kumar D, Lomash V, Jadhav AD. Curative effect of *Amorphophallus paeoniifolius* tuber on experimental hemorrhoids in rats. *J Ethnopharmacol.* 2016;192:183-191.