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# EFFECT OF SIDDHA HERBAL FORMULATION MOOLAROGA CHOORANAM ON RATTHA MOOLAM (BLEEDING PILES) – AN OPEN CLINICAL STUDY

## Anbarasan B<sup>1</sup>

<sup>1</sup>PG Scholar, Govt Siddha Medical College, Chennai

#### **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 0<sup>th</sup>, 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup>, 28<sup>th</sup>, 35<sup>th</sup>, 42<sup>nd</sup>, and 49<sup>th</sup> 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 Haemorroids.

**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.<sup>[1]</sup> 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]

In Ratthamoolam 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

<sup>1\*</sup> Currently Working as Research Associate I, Traditional Knowledge Digital Library, CSIR-CLRI, Chennai

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.

#### **Materials and Methods**

It was a Non Randomized open Clinical Trial conducted at Arignar Anna 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.

## Selection and authentication of the drug

Moolaroga chooranam was selected as the drug of intervention from Siddha literature Pulipani vaithiyam 500.<sup>[3]</sup> All the ingredients of the drug was authenticated at Dept of Botany, Govt. Siddha Medical College, Chennai.

## **Ethics committee Approval and Clinical Trial Registration**

The study was by Institutional Ethics Committee and registered with Clinical Trials Registry of India (CTRI/2017/05/008568).

Table 1. Details of the trial drug

S.No	Tamil name	Botanical name	Family	Part used
1.	Thoothuvalai	Solanum trilobatum Linn.	Solanaceae	Root
2.	Marul	Sansevieria roxburghiana Schult & Schult	Liliaceae	Root
3.	Karunai	Amorphophallus paeonifolius (Dennst.)	Araceae	Root
4.	Pirandai	Cissus quadrangularis Linn.	Vitaceae	Root
5.	Nilavarai	Cassia senna Linn.	Caesalpinoidea	Root
6.	Kaatu karunai	Amorphophallus sylvaticus (Roxb.)	Araceae	Root
7.	Arugan	Cynodon dactylon Linn.	Poaceae	Root
8.	Neermulli	Hygrophila auriculata (Schumach.)	Acanthaceae	Root
9.	Milagaranai	Toddalia asiatica Linn.	Rutaceae	Root

#### **Selection of Patients**

#### **Inclusion Criteria**

- 1. Subjects fulfilling the classical symptoms of Ratthamoolam i.e Bleeding per rectum, Constipation, itching, irrespective of sex, religion, caste and socio-economic status were selected
- 2. Subjects coming under the age group of 20 to 60 years were selected.
- 3. Subjects willing to participate in the study were selected.

#### **Exclusion criteria**

- 1. Pregnant and lactating women
- 2. External haemorrhoids
- 3. Fissure in ano
- 4. Second degree haemorrhoids
- 5. Fistula
- 6. Hypertension
- 7. Diabetes mellitus
- 8. Carcinoma of Rectum

#### Parameters used for assessment

Subjects were assessed on 0<sup>th</sup> day and 49<sup>th</sup> day and it was done using clinical parameters of Ratthamoolam through a self-prepared Health Assessment Questionnaire Score. In the Questionnaire total score was 24. Subjects, who had HAQ Score greater than 12 were recruited for the study. Difference in the HAQ score before and after treatment was used for the assessment of improvement.

#### Results and Discussion

#### **Incidence of Age**

Among the 40 subjects, 17.5% were in age group of 20-30 years, 42.5% were in age group of 31-40 years, 30% were in age group of 41-50 years, 10% were in age group of 51-60 years.

#### Incidence of Gender

Among the 40 subjects, 47.5% were males and 52.5% were females.

#### **Incidence of Occupation**

Among the 40 patients, 27.5% of patients were Office workers, 22.5% were Housewives, 7.5% were Businesspeople, 12.5% were Coolie labourers, 5% were Students, 7.5% were Tailors, 2.5% was Nurse, 2.5% were Policemen and 12.5% were Drivers.

#### Incidence of socio-economic status

Among the 40 cases, 72.5% belong to low economic status, 20% of them belong to moderate status and 7.5% of them belong to high income status.

#### **Incidence of Diet**

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

#### **Incidence of Vatham**

Among the 40 patients, Pranan was affected in 12.5% of subjects, Abanan was affected in all patients (100%), Koorman was affected in 10% of cases and Kirukaran was affected in 32.5% of cases.

#### **Incidence of Pitham**

Among 40 patients, Analaga pitham was affected in 32.5% of patients, Ranjagam was affected in 35% of patients, Saathigam was affected in all patients and Alosagam was affected in 10% of patients.

#### **Incidence of Kabam**

Among the 40 patients, Kilethagam was affected in 32.5% of patients and Santhigam 15% of patients.

#### Incidence of Udal Thathukkal

Among the 40 patients, Saaram was affected in all cases, Senneer was affected in 35% of cases and Enbu was affected in 15% of cases.

#### Envagai thervu

Among 40 patients, Nadi and Malam were affected in all patients, Naa was affected in 35% of cases and Vizhi was affected in 10% of cases.

#### Distribution of Naadi

Among the 40 patients, 82.5% of patients had Pitha Vatha Naadi and 17.5% of patients had Vatha Pitha Naadi.

#### Neikkuri

Among the urine sample of 40 patients, 65% samples showed Pitha neer, 30% samples showed Vatha neer and 5% samples showed Kabha neer.

#### Results

The P value is <0.0001. Since the P value is highly significant (<0.0001), the null hypothesis is not accepted. So, the treatment was significantly improving the HAQ Score among the patients for the treatment of Ratha Moolam.

#### Discussion

Methanol extract of *Amorphophallus paeoniifolius* has prominent anti-inflammatory activity while the chloroform extract has milder activity. Cynodon dactylon has good styptic activity which helps to arrest bleeding. It is observed that Cissus quadrangularis possess good venoconstrictive and Anti inflammatory property and C. quadrangularis extract is considered relatively safe and effective in the conservative treatment of Hemorrhoids. Results of the study conducted by Dey YN and his teammates on rats indicate that tuber of Amorphophallus paeoniifolius exhibited curative action on hemorrhoids through anti-inflammatory and antioxidant properties. 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.

#### 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 clinical studies should be done on other types of Moola noi to reveal the therapeutic potential of the formulation.

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