

**A STUDY ON
RATHTHA MOOLAM**

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INTRODUCTION

Greatest religions, Peerless culture, glorious history celebrated sages, reputed philosophers, immense natural wealth. The list goes on endless. But everything become absolute what is the current scenario? Is our spirit still alive?

So many years ago, some people with enormous and supernatural power in themselves lived. They are named as siddhars. Siddhars act as scientist, social physician, chemist etc. The great scientist of the past provided an indigenous system called 'Siddha system of Medicine'

Siddha system, has curative, preventive Rehabilitation and rejuvenation aspects of its own kind which were absent in other systems.

Siddha or Tamil system of medicine evolved not from the laboratories but from the medical experiences of man right from the first homosapien to the present.

The concepts of this system is exactly co-incidental with the present man needs. For e.g WHO defines health as 'health is a state of complete physical, mental & social well being and not merely an absence of disease'.

According to Thirumoolar,

*"ÁÛôÀÐ Ñçšç;ö ÁÕó|¼ÉÄ;Ïö
ÁÛôÀÐ Ñçšç;ö ÁÕó|¼ÉÏ°;Öö
ÁÛôÀÐ þÉçšç;ö Å;Ã; ¼çÕÏ,
ÁÛôÀÐ °; "Á ÁÕó|¼ÉÄ;šÁ"*

- ¼çÕÁó¼çÃö

Siddha system has identified 4448 disease. These diseases can be diagnosed by envagai thervu.

They are,

"*z i Ê Æ Æ º ð z i z ç È ð | Á ; Æ ç Á ç Æ ç*
Á Ä ä ð ç Ä Ä ç " Á Á ð ð Ä Ä ; Ô ç S Á ""

Among these Naddi is very specific and unique feature as it gives a total indication of internal health of an individual.

In this fast changing congested, mechanical world the faulty life style of man causing him various diseases one such is piles. Piles is common in both men & women. Those exposed to improper dietary habits, sedentary life style etc., have a greater incidence of piles.

Yugi muni classified the moola noigal into 21 types. "Raththa moolam" comes under the 21 types of moola noigal. It brings unbearable sufferings to the victims as the day-to-day activities become painful. So the author Select raththa moolam for his dissertation work.

The author gave the extract of elaborate collections on Raththa moolam in both siddha & Modern Aspects.

The author hope that work is unique in it's way to tackle this chronic ailment. Also I assure this hard work done with dedication would pave new ideas & approach for the further research on Raththa moolam.

AIM AND OBJECTIVES

Raththa moolam or *Bleeding piles* is a vascular disorder that cause mainly bleeding per rectum during defaecation. It affects people in their active period of life and cause severe embarrassment both physically and mentally. It is the tale of woe, the patients narrate and the direct observations of their sufferings have prompted the present study on this disease.

The prime objective of the present study is to alleviate the sufferings of Raththa moolam patients by administering the most efficacious, easily available with affordable cost effective drugs in the Siddha system of medicine. The study would involve trial and observation of the action on Raththa Moola Nei (Agathiyar Vaidhya Vallathi - 600) for the disease. This drug would be given internally.

The objective of the present study is to explore the udal thathuvam and udal koorugal aspects of anal canal found in Siddha texts. Other motivation the study is to explore the various ideas present in different Siddha texts and to bring about, an integrated definition, aetiology, classification, pathology, symptomatology, prognosis, prophylaxis, dietetics, etc., of the disease.

The present study also aims at clinical observation and the incidence of the disease in relation to age, sex, occupation, food and other habits, paruvakaalam and nilam.

Making a comparative study of the Siddha and the modern aspects of the disease is also an other important objective of the present study.

Bio Chemical analysis of trial drugs to findout the various constituents of each drug.

Pharmacological analysis to study the action of trial drug.

ABSTRACT

Since the most common disease in the modern society is Raththa Moolam, number of sufferers may be increasing day by day. So the author had selected this disease for this dissertation work.

20 patients of either sex were selected as both In-patients and out-patients and they were administered with the trial drug Raththa Moola Nei- 4gm twice daily during the whole study period.

The trial drugs were subjected to biochemical and pharmacological studies.

At the end of the trial study, majority of the cases showed good results.

SIDDHA ASPECT

Introduction

Vatham, Pitham and kabam are the three vital humours of the human body.

The human body is governed by these three important factors called 'Trithathu' or 'Uyir thathu' or three humours.

In Siddha system of medicine, diseases are due to the vitiation of the vital humours.

According to Yugi vaidhya sinthamani, Raththa moolam is one among the twenty-one types of moola noigal.

In siddha, "moolam" means the area moolathaaram or the root.

Moolaathara area has been given maximum importance in Siddha systems as it is the energy center of the body, the Kundalini. Although there are other moolaathaara areas in the body this area is foremost energy center. This is explained as follows:

*பாங்கான குண்டலிக்குள் மூலமொன்று
பாரப்பா கண்டத்தில் மூலமொன்று
"போங்கான புருவமைய மூலமொன்று
புகழான விந்துவிலே மூலமொன்று
வாங்கான சத்தியிலே மூலமொன்று
மருவி நின்ற பராபரத்தில் மூலமொன்று
தேங்காம லிதையாறுங் கண்டஞானி
சேர்ந்து நின்ற மும்மூல யோகியாமே"*

- சட்ட முனி ஞானம்

These verses tell about the moolaathaara importance among the six aathaarams.

THATHUVAM ASPECTS:

Moolaathaara area is situated in the akkini mandalam and vatha area that is below the navel. So predominating boothams out of the Pancha boothams are vayu, aahaayam and theyu. Theyu is for akkini mandalam and the rest for the vatha area. This structure makes this area having more kinetic (due to vayu) and thermal energies (due to theyu) to facilitate the normal acts of micturition, defaecation and parturition. To control defaecation and to carry-out, kanmaavidayam, visarkkam, the bootham involved is neer. The kanmenthiriyam involved here in Eruvai.

Vayu and aahayam together constitute vatham. Vatham in the body manifests as ten types. The types directly concerned with moolaathaara area are abanan, pranan and dhevathathan. Abanan is a vayu having theyu predominance in its structure. In relation to malaasayam it effectively expels faeces since it has both kinetic (due to being a vayu) and metabolic thermal energies (due to theyu). Prana Vayu takes its course via Moolaathaara area and it takes saaram from here and disperses to all the tissues of the body in addition to its main function of respiration. Dhevathathan relates the mental state of a human being with the lower gastrointestinal tract. It normally resides in the rectum and is responsible for anxiety, anger, quarelling and laziness.

Theyu in malaasayam manifests as moolakkini. Moolakkini, a kind of akkini in the body gives the required metabolic thermal energy to malaasayam to facilitate the normal act of visarkkam.

Neer bootham carries out, the act of visarkkam in the Kanmenthiriyam Eruvai. The action of neer bootham is very essential since uncontrolled action by vayu, aahayam and theyu may result in pathology.

In the ten naadis the malaasaya naadi is Guhu. Suzhumunai naadi also has its base in the moolathaaram. These naadis carry out coherent action of other systems in normal acts of digestion, absorption and defaecation. This is given in Siddha text as,

“தேறவென்றால் குகுவென்ற நரம்பு தானும்
செயலாக முன்சொன்ன முக்கோணில்நின்று
கோணாகும் அங்குநின்று நார்போலே
கொடுமையடா அந்நரம்பு மேல்போட்டாக
அபானத்தில் முன்னாளவாய் அங்கே நிர்க்கும்
காருதிகம் உளப்பை நரம்பிதாமே
தானென்ற நரம்பெல்லாம் இசைவாக
துண்டு போல் தேகத்துள்ளே
அன்மது உண்பதற்கும் தெகிப்பதற்கும்”

- தேரையர் நரம்பு சூத்திரம் - 150

UDAL KOORUGAL ASPECT:

The udal koorugal aspect of the gastrointestinal tract and particularly that of rectum described in Siddha are as follows. The total length of the gastrointestinal tract is thirty two muzham. The continuous peristalsis is mentioned as “அடைவாடி நிற்குமடா குடலில் தானும்” and the spindle like shape of the intestine occurring during peristalsis and the taeniae in the large intestine are known as “Arai”. These are 1008 in number. They look like kumizhi i.e. bubble like masses in a long tunnel. These structures are controlled by the six chakras and the Guru naadi. In the pelvic region the adjacent related organ is the urinary bladder which lies by left, whereas large intestine lies to the right. In the moolaathaara area the large intestine is to function normally in association with other systems in the region particularly related to vayus vairavan and sangini. In the large

intestine in addition to digested food there are irai, kirumi and puzhukkal corresponding to micro organisms and parasites.

In the lowermost region, i.e. the anal canal there is a special apparatus to open and close the canal whenever necessary. This is mentioned as “Thaazhpaazh”. This relates to the anal sphincters at the end of the anal canal. These things are mentioned in the verse as follows:

“கூறவே முப்பத்திரண்டு முழம் குடல்தானும்
முறையாக ஆயிரத்து எட்டு அறையுமாகும்
அறையென்றால் நுரையதுபோல் குமிழியாக
அடைவாடி நிர்க்குமடா குடலில் தானும்
கம்பத்தி லறையிட்டாப் போலேயந்த
கருங்குடலில் இதனளவும் ஆயிரத்தி எட்டு
ஆதாரம் ஆறுக்கும் குருநாடிக்கும்
அறைஅறையாய் குடலணை போல்நின்று
அறையாக இடப்பக்கம் சலப்பைக்குள்ளே
வலப்பாகம் குடல்நாளம் சங்கினோடே
வைரவனும் சங்கினியும் அங்கே நின்று
வளர்க்குமடா சங்கதையும் உறவாடி சுழியில்வந்து
அங்குநிர்க்கும் மூலத்தில் குழல்தானென்றே
ஒளியான அக்குழல்தா னறையும்பூட்டி
கதவில் தாப்பாளிட்டாப்போ லடைப்பட்டாப்போல்
அடவாக அதன் வழியாய் மலம்தான் போகும்
அங்கவர்கள் துண்டுகடல் நாளத்தோடே
சோடான் அக்குழலில் அறைகள் தோன்றும்
சொகுசான கிருமியிரை புழுக்களெல்லாம்
ஈக்கள் மொய்த்தாப்போலே யந்த நரம்பில் சுற்றி
இருக்குமடா எந்திரத்தின் கருவி பாசம்”

- தேரையர் நரம்பு சூத்திரம் - 150

CONTROL BY NARAMBU:

In Therayar narambu soothiram, nine narambugal are held responsible for deglutition, digestion, absorption and defaecation. Out of these one narambu is held responsible solely for the purpose of visarkkam. This narambu divides into four branches in the moolaathaaram and supplies large intestine, urinary bladder, sukkilaasayam, kaariral and suvaasapai. This narambu in association with other thathuvams such as ten vayus carry out the act of visarkkam. The verse is,

“காணும் முப்பத்திரண்டு முழம் தானும்
முலாதாரத்தில் இதழொன்றாய் நாலும் சென்று
சோறான ஓரிதழ்தான் சுக்கிலத்தில் சென்று
சென்று மலசலாதிகளை தள்ளிப் போடும்
பொறியான மூன்றி தழும் பவளப் பையில்
சேர்ந்து முதுக்கிணையது போல் இரைகள் சூழ்ந்து
கொண்டாடி அங்கிருக்கும் இதழ்மூன்றாலே
ஒன்றான குடல் நரம்புதிரளாய் நின்று
ஊக்கமுள்ள காரீரல் தன்னில் தாமரை
நூல் வளையம் போல் மோதிநிர்க்கும்
நிர்க்குமந்த நரம்பதுவும் சுவாசப்பையில்
தண்டதுக்கும் உறவாச்சு மலத்தைப்போக்கும்
பேரான தசவாயுவின் பெலத்தாலே
இழுத்துத் தள்ளுமடா மலத்தைத் தானே”

- தேரையர் நரம்பு சூத்திரம் - 150

MOOLA NOIGAL

Moola noigal are diseases that occur in and around Moolaathaaram. They include a wide variety of ano rectal diseases. They are also called Adimulai noi, Arippu noi and Mulai noigal.

Yugi munivar in **YUGI VAIDHYA SINTHAMANI** describes twenty one types of Moola noigal, of which Raththa Moolam is one among them.

“சனிப்பான மூலத்தின் பெயரே தென்னில்
சமரசமாம் நீர் மூலஞ் செண்டு மூலம்
முனிப்பான முளை மூலம் சிற்று மூலம்
மூர்க்கமாம் வறண்மூலம் ரத்தமூலம்
தினிப்பான சீ மூலம் ஆழி மூலம்
திணியான தமரகமா மூலத்தோடு
வனிப்பான வாதமொரு பித்த மூலம்
வகையான சிலேட்டுமத்தின் மூலமாமே.
வகையாருந் தொந்தமா மூலத்தோடு
வளர்கின்ற வினைமூல மேகமூலம்
பகையாகும் கும்பவுத்திரமா மூலத்தோடு
படர்கிரந்தி மூலத்தோடு குதமா மூலம்
பகையாகும் புறமூலஞ்சருக்கு மூலம்
பொருகின்ற சவ்வாகு மூலத்தோடு
தகையாக மூலமது இருபத் தொன்று
தண்மையாய்ச் சுற்றியதின சுருபந்தானே

- யுகி வைத்திய சிந்தாமணி

These are,

1. Neer Moolam
2. Chendu Moolam

3. *Mulai Moolam*
4. *Siru Moolam*
5. *Varal Moolam*
- 6. *Raththa Moolam***
7. *Seezh Moolam*
8. *Aazhi Moolam*
9. *Thamaraga Moolam*
10. *Vali Moolam*
11. *Azhal Moolam*
12. *Aiya Moolam*
13. *Thontha Moolam*
14. *Vinai Moolam*
15. *Mega Moolam*
16. *Pavuththira Moolam*
17. *Granthi Moolam*
18. *Kutha Moolam*
19. *Pura Moolam*
20. *Churukku Moolam*
21. *Chavvu Moolam*

Of this, nine are Asaathiyam and twelve are Saathiyam. Raththa Moolam is included one among the twelve saathiya moola noigal.

THERAYAR describes ten types of moola Noigal, of which Raththa Moolam is not included. The types are

- | | |
|-----------------|-----------------------|
| 1. Seezh Moolam | 6. Sathai Moolam |
| 2. Pun Moolam | 7. KaduppuMoolam |
| 3. Thee Moolam | 8. Veluppu Moolam |
| 4. Neer Moolam | 9. Kaatru Moolam |
| 5. Mulai Moolam | 10. Peru Mulai Moolam |

ANUBAVA VAIDHYA DEVA RAGASIYAM classifies Moolam into six types. It includes Raththa Moolam one among the six types. The six types:

1. Vatha Moolam
2. Pitha Moolam
3. Kaba Moolam
4. Thontha Moolam
5. Thiri dosha Moolam
- 6. Raththa Moolam**

JEEVA RATCHAMIRTHAM classifies Moolam into four types. It does not classify on the basis of Mukkutra theory, rather it classifies on the basis of heredity etc. The four types are

1.Sagasa Moolam

Here the tendency to have haemorrhoids lie in the genetic code itself. It is the only text in which the author has quoted of direct evidence for a hereditary role in Moola noigal.

2. Uththarasa Moolam (Uththarasam – usual natural)

3. Shutka Moolam (Shutka – shrinking)

4. Aarthira Moolam (Aarthiram – discharge)

Agathiar in **AGATHIYAR PARIPOORANAM** describes nine types of Moolam. He includes Raththa Moolam one among them. The types are (NAVA Moolam)

- | | |
|--------------------------|-----------------|
| 1. Ul Moolam | 6. Moola Paandu |
| 2. Pura Moolam | 7. Vali Moolam |
| 3. Raththa Moolam | 8. Azhal Moolam |
| 4. Seezh Moolam | 9. Aiya Moolam |
| 5. Mulai Moolam | |

VAIDHYA SARA SANGIRAGAM and **AAVIYALIKKUM AMUTHA MURAI CHURUKKAM** also accept Agathiar's classification.

CEGA RAASA SEKARAM classifies Moolam into twenty types. It includes Raththa Moolam one among the twenty types. The types are.

1. *Vatha Moolam*
2. *Pitha Moolam*
3. *Kaba Moolam*
4. *Vatha Pitha Moolam*
5. *Pitha Vatha Moolam*
6. *Pitha Kaba Moolam*
7. *Seda Vatha Moolam*
8. *Sada Vatha Moolam*
9. *Kaba Sala Moolam*
10. *Ul Moolam*
11. *Ulaththu Moolam*
12. *Athisaara Sura Moolam*
13. *Thosha Thontha Moolam*
14. *Vatha Raththa Moolam*
15. *Vatha Kerppa Moolam*
16. *PithaVatha Thontha Moolam*
17. *PithaKaba Thontha Moolam*
18. *Kanda Moolam*
- 19. *Raththa Moolam***
20. *Serpa Moolam*

RATHTHA MOOLAM

Many siddhars have dealt about Raththa Moolam. Among them the author has taken Raththa Moolam for dissertation study from **Yugi Vaidhya Sinthamani**. As the name indicates the main symptom of the disease is bleeding per rectum.

EYAL (DEFINITION) :

Literally Raththa means blood and Moolam means the anorectal region. To say it correctly Raththa Moolam is a disease characterized by bleeding per rectum while defaecation, weakness, giddiness, headache, palpitation and constipation.

NOI VARUM VAZHI (AETIOLOGY)

The various causes for all Moola Noigal are elaborately described by Yugi Munivar. Although the text does not mention causes separately for each type, collectively within two verses it deals psychological, karmic, intrinsic and extrinsic factors of aetiology for all Moola noigal. With this and other Siddha texts we can say the causes of the disease as,

- I. Karmic and psychological causes
- II. Due to wrong diets and acts
- III. Due to maintaining wrong postures in Yogasanas
- IV. Due to deranged Varma nilai

The Karmic and Psychological causes include,

- * Chiding the elders
- * Doing harm to others
- * Indulging in rape
- * Thinking of doing harm in the mind but saying sweet words in front

* *Living a luxurious life when neighbours and relatives are in hunger.*

* *Always quarrelling with others.*

*These basically vitiates the pitham and later, causes derangement of vatham and eventually lead to Raththa moolam. This is explained in **Yugi Vaidhya Sinthamani** as follows,*

“முனையாக மூத்தோரை வைதலாலும்

மோசங்கள் பண்ணியே கற்பழித்தும்

நினைவாக நினைவிலொன்றும் வாக்கிலொன்றும்

நேர்ந்தபடி சொல்லுகின்ற நீட்டுநற்கும்

பனையாக பரதேசி பந்துவானோர்

பசித்திருக்க உண்டதோர் பாதகர்க்கும்

தனையாகச் சமாதானந் தவிர்க்கின்றோர்க்கும்

சண்டாள மூலம் வந்து சனிக்குந் தானே”

- யுகி வைத்திய சிந்தாமணி.

*The other intrinsic causes of **wrong Diets** and **Acts** include,*

* *Exposure to excessive cold*

* *Exposure to excessive heat*

* *Excessive heat in the body itself due to Sexually Transmitted Diseases.*

* *Indulging excessively in sexual act*

* *Consuming food with pungent, sour and salty tastes.*

Here Yugi munivar suggest two more **psychological** causes. They include,

- * Always having an angry mood
- * Anxiety and depression due to heavy loss in business etc.

This is given in **Yugi Munivar Vaidhya Sinthamani** as,

“தத்தையா மதிகமாங் குளிரினாலும்
தரியாத வழற்சியால் கிரந்தியாலும்
புத்தையாம் பொருந்தாத உஷ்ணத்தாலும்
புணர்ச்சியாற் கோபத்தார் சலிப்பினாலும்
கத்தையாம் வெகுகாரம் வேண்டலாலும்
கடினமா முப்பாலும் காரத்தாலும்
மொத்தையாம் வெகுதனங்கள் போனதாலும்
மூலம் வந்துற் பத்தி முனையுந் தானே”

- யூகி வைத்திய சிந்தாமணி.

Maintaining Wrong Yogic Postures:

During Practice of Yogasanas maintaining sitting and pelvi straining postures predispose to vitiated vatham, pitham and moolakkini leading to Moola noigal.

Aetiology due to Deranged Varma Nilai:

Injury to the Utchi varmam if serious causes immediate collapse. If the trauma is mild them the patient develops difficulty in passing urine and constipation. Constipation in the long run causes Moola noi. This is explained as,

உச்சிவர்மம் (கொண்டைக் கொல்லி):

நேரானநெற்றி நடுவதிலிருந்து

அவரவர் கையதினால் எட்டுவிரல் மேலே

அளந்து பார்த்தால் தலமுனக்கு தெரியவரும்

அத்தலத்தில் முறிந்திடிலோ குணத்தைக் கேளே

மேல்மலர்ந்து வலிக்குமப்பா வயர் பொருமும்

பொருமியே சிறுநீரொடு பேதி கட்டும்

கழட்டமப்பா சன்னியோடு சீதமுண்டாம்

தப்பாது நாழிகைதான் அறுவதுக்குள்.....

If Saathiyam,

பேசுமே தொண்ணூறுநாள் கழிந்த உடன் தலைகிறுக்கம்

பனி குளிரும் வயிறதிலே பேதிகட்டும்

முக்கியமாய் மூல நோய் பதனமாகும்..

-சுப்பிரமணியர் வர்ம அவதிநிதானம் - 500.

SIDDHA PATHOLOGY:

The human body is made of ninety six thathuvams. Alterations in any thathuvam result in pathological states. Raththa moolam results basically from derangements of Vatham and Pitham. This is best illustrated in the verse,

“அனில பித்த தொந்தமலாது மூலம்வராது”.

-நோய்நாடல் நோய் முதனாடல் திரட்டு - I

Initially in any pathologic state the affected thathuvams are the Panchabootham. The various aetiological factors of Raththa Moolam annihilate the normal structure of vayu, aahayam and thee boothams in moolaathaaram. If this state is allowed to persist then the bootham responsible to carryout the kanmaavidayam visarkkam, neer gets deranged in the very long run.

Since vayu and aahaayam constitute vatham and thee constitutes pitham, immediately these two humours derange.

Vatham in the body manifests as ten vayus. Among them those having connections with the anal canal is abanan, pranana and dhevathathan gets derangements. Simultaneously with the vayus, naadis having connections with the moolaathaaram i.e. Guhu and Suzhumunai along with other thathuvams produce systemic manifestations.

Pitham in the body manifests as five type viz Anal, Ranjagam, Prasagam, Aalosagam and Saathagam. All these are affected in Raththa Moolam.

Kabam deranges very lately if the patient is left untreated for days together to produce kaba disease such as sobai etc.

Humoral or Tridosha Pathology

Panchaboothams are manifested in the body as three vital forces,

- * Vatham*
- * Pitham*
- * Kabam*

Vatham:

Structurally it is the combination of vayu and Aahaaya boothams. So it is affected in Raththa moolam. Normally it carries out respiration, circulation of blood, locomotion, carrying sensory signals and motor signals to and from the brain, micturition, defaecation, parturition, sensation of hearing, sight, taste etc.

It is located in idakalai, abanan, faeces, spermatic cord, pelvic bones. Skin, hairs, nerves and muscles. It has ten types.

1. Pranana(Ujirkaal)

This controls knowledge, mind and the five sense organs, which are useful for breathing and digestion.

2. Abanan (Keezh Nokku Kaal)

This is responsible for all downward movements such as passing of urine, stools, semen, menstrual flow etc.

3. Samanan (Nadukkaal)

This aids in proper digestion.

4. Vyanaan (Paravukaal)

This is responsible for all movements of all parts of the body.

5. Uthanan (Mel Nokku kaal)

Responsible of all upward visceral movements such as vomiting, eructation and nausea.

6. Nagan

Responsible for opening and closing the eyes.

7. Koorman

Responsible for vision and yawning.

8. Kirukaran

Responsible for salivation, nasal secretion and appetite.

9. Dhevathathan

Responsible for laziness, sleeping and anger.

10. Thananjeyan

Produces bloating of the body after death. It escapes on the third day after death bursting out of the cranium.

In Raththa moolam primarily affected vayus are

- 1. Abanan*
- 2. Pranan*
- 3. Dhevathathan*

These deranged vayus affect seven thathus and malams. Due to this, the symptoms produced in Raththa moolam are,

- * Pain in the umbilicus*
- * Splashing of blood during defaecation*
- * Feeling of weakness in the limbs*
- * Head ache*

Pain in the umbilicus and splashing of blood during defaecation are symptoms of affected abanan. Feeling of weakness in the limbs, headache is the characteristic feature of pranan involvement. Dhevathathan produces anxiety out of loss of blood every day. In Raththa moolam vatham and pitham also gets deranged simultaneously.

Pitham:

It is the life manifestation of thee bootham in the body. It is the metabolic thermal life force of the body. It carries out digestion, absorption, metabolism, colouration of blood etc.

Pitham is located in Prana vayu, bladder, Moolakini, Heart, Umbilical region, abdomen, Stomach, Sweet saliva, blood eyes and skin.

1. Analpitham

It promotes appetite and helps in digestion

2. Ranjagam

It gives colour to the blood.

3. Prasagam

It gives complexion to the skin

4. Aalosagam

It brightens the eyes.

5. Saathagam

It controls the whole body. It has the property of fulfillment.

As moolathaaram is in the akkini mandalam any pathological condition here can harm moolakkini and eventually pitham. In Raththa moolam all the pithams are affected except anal pitham initially. Later when veluppu noi ensues, it gets also affected leading to reduced appetite.

The primarily deranged pithams are:

- 1. Ranjaga pitham*
- 2. Prasaga pitham*
- 3. Aalosaga pitham*
- 4. Saathaga pitham*

Symptoms are produced when these deranged pithams affect the seven thathus and malams. These symptoms include

- i. Skin becoming pale in colour*
- ii. Veluppu noi*
- iii. Eye becoming yellow in colour*
- iv. Giddiness and emaciation*

Veluppu is due to the derangement of Ranjagam. Paleness of the skin due to the derangement of Prasagam Yellow colouration of the eyes is due to derangement of Aalosagam. Giddiness and emaciation are due to the derangement of saathagam.

Kabam:

Kabam has neer and prithivi boothams. It is responsible for coordination and defence mechanisms of the body.

Kabam is located in samana vayu, semen, suzhumunai, blood, phlegm, bone marrow, nose, chest, nerve, bone, brain, eyes and joints.

1. Avalambagam

Lies in the lungs, controls the heart and other kabam.

2. Kilethagam

Lies in the stomach, makes the food moist, soft and helps in digestion.

3. Pothagam

Responsible for identifying taste.

4. Tharpagam

Present in the head and responsible for the coolness of both eyes.

5. Santhigam

Responsible for the lubrication and free movements of the joints, it is situated in the joints.

Initially in Raththa moolam, kabam is not deranged but in untreated cases all the five types of kabam are affected. This causes pathologic changes in the thathus leading to Sobai noi.

When thathuvams including vatham, pitham, kabam and deranged they affect seven udal thathus viz Saaram, Senneer, Oon, Kozhuppu, Enbu, Moolai, Sukkilam (or) Suronitham and udalthees. They affect three malams and inturn produce various symptoms according to the severity and site of ailment.

In Raththa moolam the primarily affected thathus are Saram, Senneer and Oon. The symptoms of Raththa moolam are typically due to the vitiation of these thathus. In udal thee, moolakkini is affected. Moolakkini along with abaanan causes bleeding per rectum which is the main symptom. Due to the malam derangement constipation, irritation around anus results.

Thirumoolar Karukkidai vaidhyam - 600 describes the pathology of Raththa moolam. Suppression of appetite and defaecation leads to derangement of vayu. This vayu enters kundalini area. Here the vayu combines with theyu and causes formation of moola mulaigal. When excess vayu exerts pressure on them, they bleed on straining ie., while defaecation. This is given as

“காயத்தில் மூலங் கண்ட விதங்கேளு
பாயொத்த தீபனம் பரிந்தே யடக்கினும்
மாயை மயக்க மலத்தை யடக்கினும்
ஓயற்ற குண்டலிக்குள் புகும் வாயுவே
வாயு புகுந்து மலத்தோட பானத்தை
தேயுவைக் கூட்டித் திரட்டி சுருக்கிடும்
தேயும் மலம் வரின் சுருக்கி முன்னே
நின்றேயு முளைபோ லபான னிருக்குமே
இருக்குஞ் சிலமூல மெழு மண்டலம் போல
மறுக்கரணம் கொண்டு வருஞ்சில மூலம்
உறுக்கிய வாயுவா லுதிரம் தான் கூடித்
தறுக்கி விழுக்காட்டும் தான் ரெத்த மூலமே.”

-திருமூலர் கருக்கிடை வைத்தியம் - 600

Agasthiyar Gunavagada Thirattu, Pathinen Siddhar Aruli Chaitha Naadi, Aathma Ratchamirtham, Agasthiyar - 12000 and various other Siddha texts have the same verses for the pathology of Raththa moolam.

The Raththa moolam due to utchi varmam also has a pathology implicating vayu and theyu in Therayar Narambu Soothiram.

So whatever may be the aetiological factor in Raththa moolam, the basically affected boothams are vayu and theyu. This causes pathological changes in other thathuvams such as seven thathus, udal thee, and in malam to give rise to the symptoms of Raththa moolam.

Murkurigal (Preliminary Symptoms and Signs)

Vitiated vayu gives consistency and dark colour to the faeces. This leads to constipation. In addition to this there is increased moolaakkini, derangement of spermatogenesis, borborygmus and diarrhoea. These symptoms occurs before the actual disease symptoms sets in. These are mentioned in the verse given below,

“காணப்பா வாயுவாலுங் கனத்த வபானன் றன்னைப்
பூணப்பா மலத்தைக் கட்டிப் புகையெனக் கறுக்கி நாளும்
தோணப்பா முளையைப் போலச் சுருக்கிமுன் மலந்தான் வீழல்
ஆணப்பா வபானந் தன்னை அழுத்தவே இருக்கும் பாரே”.

- சித்த மருத்துவம்

மூலமே யெழுந்தபோது மூலத்தில் கனல்தான் மீறும்
மூலமே யெழுந்தபோது முனைவிந்து நாசமாகும்
மூலமே யெழுந்தபோது முழங்கவே யிரைச்சலாகும்
மூலமே யெழுந்தபோது முகிலில்லாக் கழிச்சல் தானே”.

- திருமூலர் கருக்கிடை வைத்தியம் - 600

Pothu Kuri Gunangal (General Symptoms and Signs)

Faeces get a hard consistency which become white in colour and their passage in the anus gets blocked as if there is a bud of lotus. Then the pile mass protrudes like a lotus flower with the active play of vayu. Bleeding per rectum occurs like honey drops from the lotus flower. General malaise, physical and mental fatigue also develop. The disease is an irritating cruel disorder of human being and the affected persons looks like an afraid serpent due to heavy thunder. In brief symptoms include.

- * *Hard consistency and white coloured faeces*
- * *Constipation*
- * *Protruding pile mass*
- * *Bleeding per rectum*
- * *Malaise*
- * *Physical and Mental fatigue*
- * *Anxiety and fear*

This is given in the verse as..

“மலமிறுகித் தழையுமேயுஞ் சுவேத மையின்
வகைமை யெனக் குழல்கடைத் தாமரை போல்
பலமிதமா யொருவேளை யபானஞ் சுற்றிப்
பதும முகிழ் விரியமைதிப் பிரசம் போலச்
சலசலெனப் பொசி குருதித் தில்லை பொங்கத்
தள்ளாடி வசமழியத் தளர்வுண்டாக்கி
நிலவரமற் றிடவஞரை யுஞற்று மையா
நீசத்துவ மூலகுண நிலைமை தானே.
கொடிய பொல்லாத மூல குணத்தை
யென் சொல்வேன் பாந்த
ளிடியினி லொடுங்கு மாறே

யெவரையுங் கசங்கச் செய்து
குடிகெடு மாறு செய்யுங்
கொண்டவ நாயும் கெய்து
முடிவதனாலே பெயன்று
மொழிந்தனர் தழைந்த நூலோர்”.

-தேரையர் சேகரப்பா

Kuri Gunangal (Signs and Symptoms)

According to **Yugi Vaidhya Sinthamani**, the clinical features are

“சேதியாய் தொப்புள் தனில் வலித்து நொந்து
சிறுகதிர்போற் பீறிட்டு ரத்தம் வீழும்
மேதியாய் மேனிவற்றி வெளுத்துப் போகும்
மிகக்கை காலசந்துமே சோகை யாகும்
மாதியாய் மார்பிளக்குந் தலைநோயுண்டா
மயக்குந்தான் மிகுதியாய் தள்ளிப் போகும்
நாதியாய் கண்ணிரண்டும் மஞ்சள் போலாம்
நலியும் ரத்தமூலத்தினன்பு தானே”.

- யுகி வைத்திய சிந்தாமணி

- * *Pain in the umbilicus*
- * *Spurting out of blood during defaecation*
- * *Emaciation*
- * *Pallor*
- * *Feeling of weakness in the limbs*
- * *Sobai*
- * *Head ache*
- * *Giddiness and*
- * *Yellowish colouration of eyes.*

According to **Gunavagadam**. The verse is

“தொப்புளும் வலிந்து நொந்து துளங்கிடா யிரத்தம்” வீழ்ந்து
அப்பொழுதுள்ள மூலமறியவே வெளியில் தள்ளும்
தப்பிடா மேனிவற்றித் தறுகிடா தூடே சென்று
இப்படி ரத்தமூல மொன்றுதா னியம்பலாமே”.

- குணவாகடம்

- * *Pain in the umbilicus*
- * *Bleeding per rectum*
- * *Protrusion of the pile mass*
- * *Emaciation*

According to **Aaviyalikkum Amutha Murai Churukkam**, the symptoms are

- * *Loss of appetite*
- * *Lower abdominal discomfort*
- * *Constipation*
- * *Pain around umbilicus*
- * *Bleeding per rectum*
- * *Drowsiness*
- * *Anaemia and*
- * *Breathlessness*

According to **Cega Rasa Sekaram** the symptoms are,

“இருக்கும் சிலமூல மெழு மண்டலம் போல
மறுக் கரணங்கொண்டு வளருஞ் சிலமூலம்
முறுக்கிய வாயுவால் உதிரந்தான் கூட்டித்
தறுக்கி விழக் காட்டுந்தான் ரத்த மூலமே”.

- செகராச சேகரம்

- * *Presence of pile mass*

- * Swelling of pile mass
- * Bleeding per rectum

According to **Athma Retchamirtham** *Entra Vaidhya saara sangiragam* the symptoms are,

- * Consuming foodstuffs with bitter and sour tastes
- * Body becoming warm
- * Loss of appetite
- * Lower abdominal discomfort
- * Constipation
- * Pain around the umbilicus
- * Bleeding per rectum
- * Protrusion of the pile mass
- * Irritation and burning sensation in the anus
- * Anaemia

According to **Veerama munivar** *aruli cheitha Nasakanda Venba,*

- * Pain in the umbilicus
- * Spurting out of blood during defaecation
- * Emaciation
- * Pallor
- * Weakness in limbs
- * Sobai
- * Chest pain
- * Head ache
- * Giddiness

According to **Thirumoolar Karukkida Vaidhyam - 600** the symptoms are,

- * Pile mass

* *Bleeding per rectum*

Piniyarai Muraimai (Diagnosis)

Diagnosis is arrived at by porial Arithal, Pulanal Arithal, Vinathal and confirmed by En-Vagai thervugal viz.

- ▲ *Naa (Tongue examination)*
- ▲ *Niram (Colour of the body)*
- ▲ *Mozhi (Speech)*
- ▲ *Vizhi (Eye examination)*
- ▲ *Sparisam (Palpation)*
- ▲ *Malam (Motion examination)*
- ▲ *Moothiram (Urine examination)*
- ▲ *Naadi (Pulse)*

In porial Arithal, Pulanal Arithal and vinathal, Patient's name, Age, Sex, Occupation, Income, His thinai (environment), Complaints, its duration, Past history, Habits are recorded. The patients are mostly from sedantary works, they live mostly in a hot environment. The diagnosis is confirmed by the following envagi thervugal.

1. Naa

If the disease process takes a long course then the Naa becomes coated and pale. Except this all other qualities of Naa are usually normal.

Niram

Because vatham and pitham are affected the colour of the body is as in vathapitha thontham i.e. Slight dark yellowish in colour. The colour change is due to veluppu noi which ensures after a long course of Raththa moolam.

2. Mozhi

Due to the affection of vatham and pitham patients look anxious and the person's speech reflects his anxiety.

3. Sparisam

Body is said to stay in ushnam or hyperthermic state. This is due to the combined attraction of vatham and pitham. Other features of sparisam are usually normal.

4. Vizhi

Vizhi has a pale or yellow colouration due to loss of blood every episodes of defaecation. This is attributed to vatha pitha thontham. Othere features of vizhi are normal.

5. Malam

The amount of faeces is reduced. The consistency becomes hard. There is no froth or mucus. The colour is usually reddish yellow or dark constipation is usually encountered.

6. Moothiram

- i. **Neerkuri :** *The amount is usually normal. But when veluppu and Sobai develop, the amount is reduced. There is no-froth. The colour is usually light reddish yellow.*
- ii. **Neikuri :** *Due to the vatha pitha thontham involvement the neikuri is paumbil mothiram.*

7. Naadi

Naadi pareetchai or pulse reading reflects humour involved and inturn the disease out of ten areas of naadi pareetchai, radial pulse reading is convenient to detect the accurate humour involvement.

In Raththa moolam, the normal 1:1/2:1/4 mathirai pettern or gait pattern of hen, turtle and frog of vatha, pitha and kabam respectively are affected giving rise to elevated mathirai of vatham and pitham than normal. This is often said in vallathi naadi as gait patterns of animals having speedy and force full gait patterns such as cock for pitham. This is given in the verse as follows,

“தானென்ற வாதமது கோழிபோல

சாவலைப் போல் பித்தமது தாண்டுமாகில்

கோனென்ற வாதபித்த தொந்திப்பாகும்.”

- வல்லாதி நாடி

In Sathaga Naadi, Vatha naadi having twice its normal phenomena is referred as the pathological naadi for moola noigal. This is given in the verse as follows.

“வாதமெனும் நாடியது தோன்றில்

சீதமந்தமொடு வயிறு பொருமல் திரட்சி வாயு

சீதமுறுங் கிராணி மகோதரம் நீரமை

திரள் வாய்வு சூலைவலி கடுப்பு தீரை

நீதமுறுங்கி ருமிகுன்மம் அண்டவாதம்

நிலையும் நீர்க்கிரி சரங்கள் தந்துமேகம்

பேதகமா முதரபிணி மூலரோகம்

பேசுவெகு பிணிகளுமே பொருள தாமே.”

- சதக நாடி

According to **Gunavagada Noin Saaram**, vatha pitham and kabam are reduced from their normal status in moola noigal. This is given in the verse as

“மூவரு மந்தமானால் முளைத்திடு மூலமெல்லாம்”

- குணவாகட நோயின் சாரம்

Also in **Vallathi Naadi**, it is said that pithathil vatham is the diagnostic naadi for moola noigal.

“வண்ணமுடன் பித்தத்தில் வாதம் வந்தால்

வருமாறு பீனிசங்கள் மண்டைக் குத்து

கண்ணுமடா பவுத்திரங்க ளரையாப்புண்டாந்

தப்பாது நவமூலஞ் சாருந் தானே.”

- வல்லாதி நாடி

According to **Rathna Churukkam 500**, when pitham's mathirai increases to one and vatham's mathirai decreases to quarter, moola noi is one of various diseases that occur in this naadi. This is explained in the verse as follows.

“காந்தலுண்டாம் பித்தமொன்று வாதங் காலாம்
கதித்தெழுந்த நாடியடா அம்மை போல குண்ணும்
வாந்தியுண்டாம் மந்திக்கு வயிற்றெரிப்பு
வளமாக சுரங்காணும் கண்ணும் காந்தும்
ஊர்ந்துவிடும் பாண்டாகு மாசனத்தில்
ஊற்றதோர் மூலமாம் புண்ணுமாகும்.”

-ரத்ன சுருக்க நாடி

From all these, the conclusion is that most of the siddhars says vathapitha naadi is the charecteristic pathological naadi for moola noigal which include Raththa moolam.

Prognosis

If there is definite cure for any disease, the following conditions should be fulfilled.

1. *Vatha naadi should not be reduce to a very low extent*
2. *Pitham and kabam should not get mixed.*
3. *Normal Udal anal should not be reduced*
4. *Vatham and kabam should not go hard in hand*

- Soothamuni Naadi

In most of the cases of Raththa moolam these conditions are met and hence the prognosis is good.

Since the naadi in moola noigal is vatha pitha combination, this naadi can become uncertain when the mathirai exceeds to a highest level or when the vatha pitha naadi feels like the jumping of a frog. This is explained in Sattamuni naadi as follows.

“சேருவாதஞ் சிறந்ததோர் பித்தமும்
கூறும்நாவங் குதிக்கும் மண்டுகம்போல
விருந்தாலு விளங்கப் பதைத்திடில்
சேருமெம புரஞ்சேர்வது முண்மையே.
உண்மைவாத முரைக்கும் பித்தமுடன்
உண்மைமாத் திரையொன்றுமே மீறிடில்
உண்மையாமு லொடங்கி யடங்கிடும்
உண்மையாங் காலன்வுடல் கொண்டு போவதே.

-சட்டமுனி நாடி

Above all, according to yugi vaidhya sinthamani it is a curable disease. So if early treatment is started to pacify the deranged vatham and pitham, it can be cured. Complication in this disease occur when kabam gets involved. So arresting the involvement of kabam makes the prognosis better.

Noi kanippu Vivatham (Differential Diagnosis)

Raththa moolam should not be confused with othere types of moola noigal and other diseases such as soolai which also have symptoms like bleeding per rectum. These include

1. Mulai moolam

Mulai moolam has protrusion of pile mass in the anus resembling germinating turmeric. In mulai moolam, the lower abdomen has a hard consistency which is not present in Raththa moolam. Both have bleeding per rectum, constipation and pain aount anus

-Yugi Vaidhya sinthamani

2. Chendu moolam

Permanent irreducible pile mass is present in the anus resembling karunai tuber and this is not present in Raththa moolam. Besides this, there is no splashing of blood as in Raththa moolam, hence, there is only discharge of blood and mucus. Mucus discharge is not present in Raththa moolam although both the condition have constipation.

-Yugi vaidhya sinthamani

3. Aazhi moolam

Here there is an external solitary pile mass which looks like dioscorial tuber. Besides this, there is discharge of blood mucus and pus, these are not present in Raththa moolam.

-Yugi vaidhya sinthamani

4. Varal moolam

In varal moolam the bleeding is not like a splash but like drops of blood while defaecation. Both diseases have constipation, emaciation, anxiety, anger and malaise.

-Yugi vaidhya sinthamani

5. Azhal moolam

Here no splash of blood is present, but only discharge of blood and pus. There are tiny pile masses like seeds or rice are in abdomen and anus. These are not present in Raththa moolam.

-Yugi vaidhya sinthamani

6. Thamaraga moolam

Although it has bleeding per rectum there is external pile mass, diarrhoea which are not present in Raththa moolam.

7. Churukku moolam

There is an abscess like mass in the anus which is not present in Raththa moolam. Besides this, there is discharge of blood and mucus. Both diseases have veluppu noi.

8. Raththa Soolai

There is constipation, loss of appetite, belching, distension of stomach and severe stabbing pain in the chest which are not present in Raththa moolam, Raththa Soolai patients notices blood with faeces.

-Thanwanthiri Vaidhyam – Soolai Nithanam

9. Vali Raththaazhal noi

There is body pain, haemorrhage in dark colour occasionally with froth, hard stools like faecal pellets of goat which are not present in Raththa moolam but both conditions have bleeding per rectum.

Complications

When moolaakkini is vitiated to a hyper level it will cause many worst complications according to Thiruvallua Naayanaar Navarathna sinthamani – 800. The main complications are veluppu noi due to deranged pitham and sobai due to the kabam involvement latter. These are mentioned in the Raththa moolam descriptions in Yugi Vaidhya Sinthamani.

MODERN ASPECTS

THE RECTUM

The rectum is a slightly dilated part of the large gut. It leads from the pelvic colon and terminates in the anal canal. It extends from the recto-sigmoid junction in front of the third piece of sacrum to the ano-rectal junction 3.75 cms in front and slightly below the tip of the coccyx. In the upper part, it has the same diameter (4cm) as that of the sigmoid colon, but in the lower part it is dilated to form the rectal ampulla.

Mucosal folds

The mucous membrane of an empty rectum shows two types of folds, longitudinal and transverse.

Functional parts of Rectum

The rectum has two functional parts. The upper part (related to the peritoneum) develops from the Lindgut and lies above the middle fold of the rectum. It acts as a faecal reservoir which can freely distend anteriorly.

The lower part (devoid of peritoneum) develops from the cloaca and lies below the middle fold. It is empty in normal individuals, but may contain faeces in cases of chronic constipation, or after death.

Arterial Supply

- 1. The superior rectal artery is the continuation of the inferior mesenteric artery, supplies the entire internal aspect of the rectum and upper half of the external aspect.*
- 2. A pair of middle rectal arteries arise from internal iliac arteries supply the external aspect of lower half of rectum.*

3. *Inferior rectal arteries, branches of pudental arteries supply the posterior part of rectum and anal canal.*

Venous Drainage:

1. *Superior rectal vein*
2. *Middle rectal veins.*

Lymphatic drainage

1. *Lymphatic from more than the upper half of the rectum pass along the superior rectal vessels to the inferior mesenteric nodes after passing through the pararectal and sigmoid nodes.*
2. *Lymphatics from the lower half of the rectum pass along with the middle rectal vessels to the internal iliac nodes.*

Nerve Supply

The rectum is supplied by both sympathetic (L_{1,2}) and parasympathetic (S_{2,3,4}) nerves through the superior rectal (inferior mesenteric) and inferior hypogastric plexus.

THE ANAL CANAL

The anal canal is the terminal part of the large intestine and is approximately 38mm long and 12.5mm to 19mm in diameter. It starts at the anorectal junction and descends postero-inferiorly between the ano coccygeal ligament and the central perineal tendon in the median plane and it ends at the anus. In the upper part of the anal canal the mucous membrane is arranged in 6 to 10 vertical folds, the anal columns.

Commencement:

Anal canal commence as the downward continuation of rectum at perineal flexure.

Direction:

Downwards and backwards

Termination:

It terminates by opening to the exterior of anal triangle of perineum. The terminal opening has got subcutaneous musculature called corrugator cutis ani.

Relations:**Anteriorly**

In the case of male:

- 1. Perineal body*
- 2. Bulb of the penis*

In the case of female

- 1. Back of the vagina*
- 2. Perineal body.*

Posteriorly:

- 1. Tip of the coccyx*
- 2. Ano coccygeal ligament*

Laterally:

- 1. Ischio-rectal fossa*
- 2. Levator ani and fascia covering it.*

Ischio rectal fossa helps in the dilatation of the anal canal during defaecation.

Interior:**Pectinate line:**

A line connecting the papillae of all the anal valves.

Hilton's line:

It is also referred to as the inter-sphincteric groove as it is the dividing line between the external and internal sphincters. Internal haemorrhoids occur above this line. Whereas external haemorrhoids occur below it.

Ano rectal ring:

The anorectal ring marks the junctions between the rectum and the anal canal. It is formed by the joining of puborectalis muscle, the deep external sphincter, conjoint longitudinal muscle and the highest part of the internal sphincter.

Muscles:

- 1. Internal sphincter (Consisting of smooth muscle fibres)*
- 2. External sphincter (Formed by striated muscle)*
 - a) Subcutaneous part*
 - b) Superficial part*
 - c) Deep part*

Arterial supply:

It is supplied by inferior rectal branches of the internal pudental arteries. It anastomoses with its fellow and with the superior, middle rectal and perineal arteries.

Venous drainage:**1. Submucosal plexus of veins:**

Above the Hilton's line, it pierces the muscular wall and ends in the superior rectal vein and thus reaches the portal system.

Below the Hilton's line, it drains into the inferior rectal veins and thus into the caval system.

2. Perimuscular plexus of veins:

Its efferents drain into the superior rectal vein above and the middle rectal veins at the sides.

Lymphatic drainage :

1. *Lymphatics below the level of the Hilton's line wind around the root of thigh both medially and laterally and reach the superficial inguinal nodes. They never follow blood vessels.*

Lymphatics above the level of the Hilton's line of the anal canal and rectum ends in sacral and internal iliac nodes.

Nerve supply :

Below the Hilton's line, the anal canal is supplied by the inferior rectal nerve and is pain sensitive. Above the Hilton's line, the anal canal and rectum are supplied by the autonomic nerves.

They reach the gut as plexus along the superior rectal artery and middle rectal arteries. They consist of both sympathetic from lumbar 1 and 2 and parasympathetic (S₃ and S₄ segments) fibres. Both afferent and efferent fibres for the defaecation reflex pass through the parasympathetic nerves.

PHYSIOLOGY OF DEFAECATION

Normally the faecal content do not pass beyond the sigmoid colon, and the rectum remains empty. The desire for defaecation is felt only when the rectum is loaded with faecal matter. Usually a pressure of 20 – 25cm H₂O in the rectum is sufficient to elicit the desire to defaecate. There are two anal sphincters, and internal sphincters, and an external sphincter, both of which act in concert. The internal anal sphincter is innervated by both sympathetic and parasympathetic nerves. The external anal sphincter has somatic innervation derived from the pudental nerve and is under voluntary as well as reflex control.

Though both anal sphincters exhibit basal tone and contractions, the internal sphincter is stronger than external one. Distension of the sigmoid colon and the rectum produces reciprocal effects on these sphincters (eg) relaxation of the internal sphincter and contraction of the external sphincter.

Distension of the rectum contracts the external sphincter (simultaneously relaxing the internal sphincter) probably by a reflex, which is initiated by stretch receptors in the rectum.

Defaecation act and reflex

When faeces enter the rectum following a colonic movement, the rectal distension activates the receptor mechanism, provoking the sensation of evacuation. This stimulation initiates a reflex relaxation of the internal sphincter, but contraction of external sphincter. If the situation is not favorable to defaecation, voluntary contraction of the external sphincter further aids this reflex contraction and the urge to defaecate is thus differed.

If however, the desire to defaecate is not opposed the defaecation reflex is activated by voluntary action of the abdominal

and other muscles. Mass contraction of the distal bowel occurs together with increase in the intra abdominal pressure. Further the rectosigmoid muscle descends and pulls apart the pelvic floor, which causes the anal canal to assume a funnel shape while relaxing both the sphincters. The increased intra-rectal pressure now expel the faeces forcefully from the bowel. After evacuation, the pelvic floor is elevated with concomitant contractions of the sphincters which helps to eliminate the remaining faecal matter in the anal canal.

The neural pathways involved in the defaecation reflex are not entirely known and the known pathways are outlined in stimulation of stretch receptors by distention of the rectum which initiate afferent impulses which are carried by the pelvic and hypogastric nerves to the sacral spinal cord, and from here the impulses travel through the spinothalamic tract to the cortex resulting in conscious perception of the urge of defaecate. Efferent impulses finally acting through the sacral centers causing strong contraction of the distal colon and relaxation of the sphincters. Defaecation takes place aided by voluntary contraction of the abdominal muscles. The act of defaecation is another example of an involuntary reflex process which is also under voluntary control.

HAEMORRHOIDS

Synonyms :

Piles

Definition :

These are dilated veins within the anal canal in subepithelial region formed by radicles of superior and middle and inferior rectal veins.

Classification :

i. Internal haemorrhoids :

It is above the Hilton's line. It is covered by mucous membrane. It is bright red or purple in colour.

ii. External haemorrhoids:

It is below the Hilton's line, and is covered by the skin.

iii. Intero – external haemorrhoids:

The two varieties may co-exist and the condition is called intero -external haemorrhoids.

INTERNAL HAEMORRHOIDS

Internal haemorrhoids are the varicosities of the internal haemorrhoidal plexus. These are

a) Vascular haemorrhoids :

In this type of internal haemorrhoids there is extensive dilatation of the terminal superior haemorrhoidal venous plexus. It is commonly found in younger individuals particularly men.

b) Mucosal haemorrhoids:-

In this type there is sliding down of the thickened mucous membrane which conceals the underlying veins.

For practical purposes internal haemorrhoids can be divided into three degrees.

First Degree

Haemorrhoids are those in which hypertrophy of the internal haemorrhoidal plexus remains entirely within the anal canal as the muscosal suspensory ligaments remain intact. Patients in this stage usually present with rectal bleeding and discomfort or irritation. Bleeding is bright red and occurs during defaecation as splash in the pan. It may continue for months or years.

Second Degree

Piles will descend so that they prolapse during defaecation but spontaneous reduction takes place afterwards. They may be small skin tag, some mucous discharge, soreness and irritation.

Third Degree

In third degree haemorrhoids, they remain prolapsed after defaecation and require manual replacement. The mucosa underlying such haemorrhoids undergoes squamous metaplasia. Mucous discharge and pruritus-ani becomes obvious.

Secondary haemorrhoids occur between the three primary one's, the most common being the mid – posterior position. There may be a large skin tag.

Aetiology

1. Hereditary

This condition is so frequently seen in members of the same family that there must be a predisposing factor, such as congenital weakness of the vein walls or an abnormally large arterial supply to the haemorrhoidal plexus. Varicose veins of the legs and haemorrhoids often occur concurrently.

2. Morphological

In quadrupeds gravity does not retard return of venous blood from the rectum. Consequently venous valves are not required. In man, the weight of the column of blood unassisted by valves produces a high venous pressure in the lower rectum, unparalleled in the body.

3. Anatomical

1. The collecting radicles of the superior haemorrhoidal vein lie unsupported in the very loose submucous connective tissue of the anorectum.

2. These veins pass through muscular tissue and are unable to be constricted by its contraction during defaecation.

3. The superior rectal veins being tributaries of the portal vein, have no valves.

4. Chronic Constipation

This causes straining while passing stools. When contraction of the rectum occurs, the veins are obstructed.

5. Frequent purgation

Frequent occurrence of dysentery and diarrhoea all cause congestion and favour the development of piles.

6. Straining at micturition

May occur in enlarged prostate or stricture urethra.

7. Presence of tumours

Eg. Gravid uterus, uterine fibroids, ovarian cysts.

8. Loss of Sphincter

Tonus as may occur with advancing age.

9. Occupational

Heavy manual labours as porters, prolonged standing and sitting as in train drivers, traffic policemen etc.

10. Habitual over eating

With resultant obesity and portal congestion.

Pathology

Internal haemorrhoids are frequently seen in three positions at 3, 7 and 11 o' clock with the patient in the Lithotomy position. This distribution has been ascribed to the arterial supply of anus where there are two subdivisions of the right branch of superior rectal artery, the left branch remains single, but this is now known to be atypical. In between these three primary haemorrhoids, there may be smaller secondary haemorrhoids. Each principal haemorrhoid can be divided into three parts.

- 1. The pedicle is situated at the ano-rectal ring. As seen through a proctoscope, it is with pale pink mucosa occasionally a pulsating artery can be felt in this portion.*
- 2. The internal haemorrhoid, which commences just below the ano rectal ring is bright or purple, and covered by mucous membrane, it is of variable size.*
- 3. As externally associated haemorrhoid lies between the dentate line and the anal margin it is covered by skin, through which blue veins can be seen, unless fibrosis has occurred. This associated haemorrhoid is present in well established cases.*

Clinical features

Constipation

Longstanding constipation leads to the development of piles states and hence it is the commonest and prominent in the clinical history.

Pain and Tenesmus

This is marked feature is most of the piles cases. But in bleeding piles is less prominent. This occurs during the defaecation process in longstanding cases it becomes troublesome while maintaining day-to-day activities.

Discharge

Mucous discharge is present in selected cases during the bowel movements than that of fistula cases were the watery discharge is a prominent feature through out the day, but this is not a phenomenon in bleeding piles.

Bleeding

Bleeding is a remarkable prominent symptom, which brings the patient to the physician's table. Notable amount of fresh blood is present during defaecation process, which is often referred as "Splashing of the pan".

Protrusion of pile mass

In the longstanding cases of internal haemorrhoids protrusion becomes a common aspect which sometimes need manual correction.

Anaemia

Anaemia can be caused very rarely by persistent profuse bleeding from haemorrhoids.

Examination

Position of the patient :

- i. *Left lateral position (simi's position) is the most popular position for ano rectal examination.*
- ii. *Knee – elbow position is particularly suitable for palpating the prostate and seminal vesicle.*
- iii. *The dorsal position, with the patient lying semi-recumbent and his knees flexed, is the preferable when it is desired to make examination of the interior of the pelvis in an ill patient. When alteration of posture is contraindicated.*
- iv. *The Lithotomy position is suitable for bimanual examination and to view the position of the pilemass.*

Inspection :

There may be no evidence of internal haemorrhoids. In more advanced cases, redundant folds or tags of skin can be seen in the positions of one or more of the three primary haemorrhoids. When the patient strains, internal haemorrhoid may come into view transiently or if they are of the third degree, they remain prolapsed.

Palpation:

No evidence of internal haemorrhoids can be reported in Palpation. In protruded and complicated cases, pain can be felt while palpation.

Digital examination:

By introducing the gloved finger into the anal canal and rectum the following structures can be palpated.

Posteriorly : *Sacrum, coccyx and anococcygeal body.*

Laterally : *Ischio-rectal tissues and ischialspines.*

Anteriorly :

Male	Female
<i>Rectovesical pouch</i>	<i>Pouch of Douglas</i>
<i>Base of Bladder</i>	<i>Vagina</i>
<i>Seminal Vesicles</i>	<i>Cervix</i>
<i>Vas deferens</i>	<i>Urogenital diaphragm</i>
<i>Prostate</i>	<i>Perineal body</i>
<i>Bulb of penis</i>	

Bimanual examination :

The examination of the contents of the pelvis can be conveniently examined during rectal examination by placing another hand on the abdomen. This gives a better idea of the size, shape and nature of any pelvic mass.

Abdominal examination :

In case of annular carcinoma at the upper part of the rectum an indistinct lump may be felt at the left side of the abdomen. Descending colon loaded with hard faeces. Palpable Liver is the associated pathological condition, any swelling if there is any jaundice, and hard subcutaneous nodules within the abdomen can be examined.

Barium enema & Barium meal

It is carried out in selected cases to rule out carcinomatous status.

Blood for Bleeding time and clotting time

To rule out bleeding diathesis.

Motion for occult blood.

To rule out upper gastro – intestinal disorders and carcinoma of colon and rectum .

Proctoscopy

With the patient in the left lateral or ‘Knee – elbow’ position, the lubricated and warm proctoscope is gently inserted into the rectum. The instrument is introduced at first in the direction of the axis of the anal canal (ie) upwards and forwards toward the patient’s umbilicus, upto the upper end of the anal canal, then the instrument is directed posteriorly to enter into the rectum proper. Now the obturator is withdrawn and the interior of rectum and anal canal is seen with the help of a good light. The internal piles can be seen if present. The piles will prolapse into the proctoscope as this instrument is being withdrawn. Note the position of the piles as determined by the disposition of the branches of the superior haemorrhoidal artery. There is one branch on the left side and two, on the right side. Thus, there are three primary piles, viz., left lateral, right posterior and right anterior situated at 3,7 and 11 o’ clock positions respectively, the patient being in the lithotomy position.

Sigmoidoscopy :

The length of sigmoidoscope is about 35cm. By this instrument rectum and a large part of the sigmoid colon can be examined. The conventional position for introduction of this instrument is the knee-elbow position. The instrument is well lubricated and passed through the anus all along the direction of the anal canal, i.e. upwards and forwards towards the umbilicus of the patient. Where the obturator is withdrawn the rectum and lower sigmoid colon is seen through the eye piece. It is mainly used to detect presence of any growth, ulcer, diverticulum etc., in the rectum and lower part of the sigmoid colon.

The growth can be taken for biopsy and smear may be taken from ulcer for bacteriological examination through this instrument.

Bleeding per anus

Bleeding per anus can be classified into two groups. Of which one is painful and other is painless condition.

Bleeding per Anum with pain:

- 1. Fissure in ano*
- 2. Fistula in ano*
- 3. Carcinoma of the anal canal*
- 4. Ruptured perianal haematoma*
- 5. Ruptured anorectal abscess*
- 6. Complicated Portal Hypertension*
- 7. Injury etc.*

Bleeding per anus without pain

- 1. Blood alone - Polyp, Villous adenoma and diverticular disease.*
- 2. Blood during defecation – Haemorrhoids*
- 3. Blood with mucous – Ulcerative colitis, crohn’s disease, Intussusception, ischemic colon etc.*
- 4. Blood mixed with stool - Carcinoma of the colon.*
- 5. Blood streaked on stool – Carcinoma of the rectum, fissure in ano.*

Bleeding per anum other than Haemorrhoids

Classification:

1. Defects of Blood vessels
 - a. The vascular purpuras
 - b. . Hereditary haemorrhagic telangiectasis
2. Disorders of Blood platelets
3. Defects of the clotting mechanism
 - a. Hereditary
 - b. Acquired.

The above mentioned conditions are less common

Haemorrhagic disorders due to defects in the clotting mechanism

Haemophilia

Haemophilia A is the most common of this group of disease; it has an incidence of 1 in 10,000 of the population and occurs in all ethnic groups. Transmission is by and X linked recessive pattern and thus haemophilia A is a disorder of males. All the daughters of a haemophilic will be carriers but all the sons will be normal and will not transmit the disease. Fifty percent of the daughters of carrier mother will be carriers, and 50% of their sons will be haemophiles.

When haemophilic patient have piles, it will promote prolonged bleeding.

Cirrhosis of Liver

Cirrhosis means widespread death of liver cells. Portal hypertension results from destruction and distortion of the hepatic vasculature leading to obstructions of blood flow. Cirrhosis is the commonest cause of portal hypertension.

Collateral circulation occurs in the distal rectum and can cause bleeding. Haemorrhagic tendencies are found in advanced liver failure and are largely due to insufficiency of coagulation factors.

Portal hypertension raises the venous pressure in the portal vessels. The connection between the portal veins and caval systems in the haemorrhoidal plexus of the rectum dilate, causing haemorrhoids.

Differential Diagnosis

Fissure - in - ano

An enlarged ulcer in the long axis of the lower anal canal. Acute anal fissure is a deep tear through the skin of the anal margin extending into the anal canal. There is inflammatory induration or oedema of its edges. There is accompanying spasm of the anal sphincter muscle.

Chronic anal fissure is characterised by inflamed indurated margins and a base consisting of either scar tissue or the lower border of the internal sphincter muscle. Sharp, agonising pain starting during defaecation, often overwhelming in intensity and lasting an hour or more. Bleeding is usually slight and consists of bright streaks on the stools. A slight discharge may present in fully established cases.

Ano-rectal abscess

These are three types:

- a. Perianal*
- b. Ischio-rectal and*
- c. Pelvi rectal abscess.*

Perianal abscess an acutely tender rounded cystic lump will be seen by the side of the anal verge below the Hilton's line, palpated by the index finger and the abscess is less painful.

Ischio-rectal patient will complain of excruciating throbbing pain by the side of the anal canal. On inspection brownish oedematous swelling is felt on one side of the rectum.

Pelvi-rectal abscess – it mimics pelvic abscess. This abscess lies above the levator ani but below the pelvic peritoneum.

External Haemorrhoids : (perianal haematoma)

It is covered by the skin, very painful and on examination a tense, tender swelling which resembles a semi-ripe black currant is seen. These episodes result in a tender blue swelling at the anal verge due to thrombosis of a vein in the external plexus and need not be associated with enlargement of the internal veins.

Prolapse of rectum:

The main complaints are something comes out per rectum during defaecation. It may come out spontaneously on standing, walking or coughing. The prolapse may reduce spontaneously or require digital reduction. Other symptoms are anorectal bleeding, mucous discharge, anal pain, irregular bowel habits etc. partial and complete prolapse can be differentiated. Mucosal (partial) prolapse, consist only two layers of mucosa, while complete prolapse consist of two full thickness of rectal wall.

Fistula – in – ano

A fistula in ano is a tract lined by granulation tissue which connects, deeply in the anal canal or rectum and superficially on the skin around the anus. It usually results from anorectal abscess which burst spontaneously. The fistula continues to discharge because of reinfection and no pain is felt on proctoscopic

examination, an inner opening can be seen. If it is above the anorectal ring, the fistula is said to be a “high fistula” and if the inner opening is below the ano-rectal ring, the fistula is said to be “low fistula”

Portal Hypertension

The human body there are three sites where the systemic and portal veins communicate with each other. Of which haemorrhoidal veins present in the rectum is the commonest site for bleeding tendency in the case of complicated portal hypertension.

Carcinoma of the rectum:

The symptoms are bleeding during defaecation proliferative growth in the ampulla, sense of incomplete defaecation and the patient may get up in the morning with an urgent urge for defaecation. In case of annular carcinoma affecting the upper part of rectum, the patient complains of increasing constipation. Liver should always be palpated for metastasis. Peritoneum may be studded with secondary deposits. Ascites may be the result and enlarged iliac group of nodes can be felt.

Complications:

Profuse haemorrhage:

It is not so common. Most often it occurs in the early stages of the second degree. The bleeding occurs mainly externally, but it may continue internally after the bleeding haemorrhoid has retracted. In these circumstances, the rectum is found to contain blood.

Strangulation:

One or more of the internal haemorrhoids prolapse and become gripped by the external sphincter. Further, congestion follows and the venous return is impeded. Second degree haemorrhoids are most often complicated in this way. Strangulation is accompanied by considerable pain and is often spoken of by the patient as an acute

attack of piles. Unless the internal haemorrhoids can be reduced within an hour or two, strangulation is followed by thrombosis.

Thrombosis:

The affected haemorrhoid becomes dark purple or black and consistency is felt. Considerable oedema of the anal margin accompanies thrombosis. Once thrombosis has occurred, the pain of strangulation largely passes off, but tenderness persists.

Ulceration:

Superficial ulceration of the exposed mucous membrane often accompanies strangulation with thrombosis.

Gangrene:

This occurs when strangulation is sufficiently tight to constrict the arterial supply of the haemorrhoid. The resulting sloughing is usually superficial and localised. Occasionally, massive gangrene extends to the mucous membrane within the anal canal and rectum and can be the cause of spreading anaerobic infection and portal pyaemia.

Fibrosis:

After thrombosis, internal haemorrhoids sometimes become converted into fibrous tissue. The fibrosed haemorrhoid is at first sessile, but by repeated traction during prolapse during defaecation, it becomes pedunculated and constitutes a fibrous polypus that is readily distinguished by its white colour from an adenoma, which is bright red. Fibrosis following transient strangulation commonly occurs in the subcutaneous part of the primary haemorrhoid. Fibrosis in the external haemorrhoid favours prolapse of an associated internal haemorrhoid.

Suppuration:

This is common, it occurs as a result of infection of a thrombosed haemorrhoid. Throbbing pain is followed by perianal swelling and a perianal or submucous abscess.

Pylephlebitis: (portal pyaemia)

Theoretically, infected haemorrhoids should be a potent cause of portal pyaemia and liver abscesses. Although cases to occur from time to time, this complication is surprisingly infrequent, it can occur in patients with strangulated haemorrhoids.

Treatment:

- 1. Haemorrhoid treatment must be preceded by sigmoidoscopy and barium enema.*
- 2. Bowel regulation : many haemorrhoids symptoms can be relieved by avoiding excessive defaecation straining. This can be done by advising high residuous diet and mild laxatives.*
- 3. Topical ointment application*
- 4. Manual dilation of the anus.*

Defenite treatment:

- 1. Injection therapy*
- 2. Rubber band Ligation*
- 3. Cryo surgery*
- 4. Maximal anal dilatation (Lord's Procedure)*
- 5. Ligature and excision method*
- 6. Haemorrhoidectomy*
- 7. Closed haemorrhoidectomy*
- 8. Submucous Haemorrhoidectomy (Park's)*

MATERIALS AND METHODS

The clinical study on Raththa moolam was done in Post – Graduate department of Maruthuvam in Govt. Siddha Medical College, Hospital at palayamkottai. Selection of cases for the clinical study was on the basis of, unique symptoms of Raththa moolam enumerated in the Siddha Literature.

- 1. Bleeding like splash from rectum during defaecation,*
- 2. Constipation*
- 3. Pain around umbilicus*
- 4. Headache and malaise*
- 5. Gnawing Pain in the limbs.*

According to the severity either they are treated as out-patients or as In-patients . Equal number of out-patients and In-patients were selected for clinical study separately.

A clinical history of bleeding per rectum like a splash, mode of onset, colour, duration, time of bleeding, constipation, diet, other habits, psychological stress if any, precipitating factor, aggravating factor, past relevant history, family history and seasonal variations were obtained. History related to their socio – economic status and occupation were also obtained.

The Siddha methods of diagnosis such as Poriyal Arithal, Pulanal Arithal, Vinathal and Envagai thervugal were carried out. Special attention was given to Naadi, Neerkuri, Neikkuri and malakkuri to establish the diagnosis.

In all the cases, the following routine laboratory investigations available at Govt. Siddha Medical College & Hospital, Palayamkottai, were carried out.

Blood:-

Total W.B.C Count.
Differential Count
Erythrocyte Sedimentation Rate.
Haemoglobin Estimation
Blood Sugar
Blood urea
Serum Cholesterol
Bleeding Time and Clotting Time.

Urine:-

Albumin
Sugar
Deposit

Motion:-

Ova
Cyst
Occult Blood

Bio-Chemical analysis of the trial drugs were carried out in the Department of Bio-Chemistry. Govt.Siddha Medical College, Hospital, Palayamkottai.

Pharmacological analysis of the trial drugs were carried out in the P.G. Department of Phamacology, Govt. Siddha Medical College, Palayamkotai.

The patients were treated with Raththa Moola Nei 4gm twice a day after meals.

At the time of discharge all the twenty patients were advised to attend the out patient ward for follow up study.

LINE OF TREATMENT

LINE OF TREATMENT for Raththa moolam consists of:

1. Administration of internal medicines to stop bleeding to reduce inflammation and to relieve constipation.
2. Pathiam, i.e. diet restrictions to normalize the vitiated vathapitha thontham and to maintain a longer drug action.
3. Yoga therapy to normalise bowel habits and to normalise the vitiated vathapitha thontham
4. Pranayama therapy to normalise the thathuvams.

Administration of Medicines

All the twenty In patients and twenty out-patients were given the test drug daily and regularly and the prognosis noted. The internal medicines were:

- i. Raththa Moola Nei 4gm twice a day after food.

Admitted patients were treated in the inpatient ward for four to twenty six days according to the severity of the disease and prognosis. out-patients were treated for a period from seven days to thirty five days.

The prognosis was noted on the basis of complete arrest of bleeding, relief from constipation, relief from irritation and soreness, relief from giddiness and headache.

In about fourteen cases the bleeding was arrested on the second day, in about four cases and in the remaining two cases the bleeding was arrested on the third and fifth day respectively.

In about eleven cases constipation was relieved on the second day. In six cases constipation was relieved on the third day and in the remaining three it was relieved on the fifth day.

Out of 20 In-patients fifteen patients had a very good relief, three patients had good relief and two long standing cases registered fair relief.

In the 20 out-patients 16 patients showed very good relief. 2 patients showed good relief and of the 2 patients showed fair relief.

In all the 40 cases occult blood test was found to be negative. Bleeding time and clotting time were noted for all patients which showed normal values. So no patient had bleeding disorder.

Pathiyam or Diet for Moolam

Diet for Raththa moolam should be one that reduces the deranged vathapitha thontham

***Anubava Vaidhya Deva Ragasiyam** prescribes the following diet regime for Raththa moolam*

- *Cow's butter milk*
- *Cow's butter*
- *Cow's ghee*
- *Fresh greens*
- *Arai Keerai (Amaranthus tristis)*
- *Siru Keerai (Amaranthus gangeticus)*
- *Thuththi Keerai (Abutilon indicum)*
- *Venthaya Keerai (Trigonalla foenum graecum)*
- *Manathakkali Keerai (Solanum nigrum)*
- *Pepper*
- *Asafoetida*
- *Rock salt*
- *Mullang Katthari (Solanum Xanthocarpum)*

- *Tender mango*
- *Castor Oil.*

According to ***Pathartha Guna Sinthamani*** mentions

- *Vajravalli (Vitis quadrangularis)*
- *Karunai (Amorphophallus Campanuultus)*

Should be included in the diet. These reduce the vitiated moolakkini and vayus, vathapitha thontham and bring them to normal level.

Apathiyam or Diet Restriction

Since Raththa Moolam is due to the derangement of vatha and pitha humour, aggravating food with taste such as sour, acrid and activities that promote derangement of vatham and pitha humour should be avoided.

Diet containing

- *Fish*
- *Meat*
- *Black gram*
- *Ragi*
- *Rye*
- *Bitter gourd*
- *Indian Corn (or) Maize*
- *Oil cake of Iluppai (Madhuka indices)*
- *Hot Foods and drinks*
- *Motchai (Dolichos tetraspermus)*
- *Brinjal (Solanam melangena) and*

Straining activities such as

- *Strenuous labour*
- *Sitting for a long time*
- *Swimming*
- *Excessive sexual intercourse*
- *Frequent Riding on horses, camels, elephants*

After getting relief from Raththa moolam, patients are advised to follow pranayama, yoga and some procedures that relief mental stress (Kanma neekam)

Pranayama therapy

Patients are advised to follow kapalabhati. The technique is as follows.

The posture is padmasana. First the abdominal muscles are relaxed and anus is contracted. Then suddenly the lower abdomen below navel is contracted. This is held for twenty seconds and then abdomen is relaxed.

This process is repeated upto the level that one feels comfortable. There should be half a minute rest between each round. Three rounds are enough at a time in the beginning.

This pranayama corrects the whole system and normalizes the affected vayus. This helps in avoiding congestion and varices of lower rectal veins and promotes better circulation.

Yoga Therapy

The following four asanas are prescribed to prevent the recurrence of Raththa moolam.

1. Vibaritakarani :

It promotes better venous circulation and thereby prevents the recurrence of Raththa moolam.

2. Sarvaangaasana :

It vitalizes all internal organs. It promotes better venous circulation and reduces rectal venous congestion.

3. Sirasaasanam :

It vitalizes brain, reduces anxious states, promotes better venous circulation, thereby prevents recurrence of Raththa moolam.

4. Mayuraasanam :

This relieves constipation, regularizes bowel habits and thereby prevents recurrence of Raththa moolam.

Kanma Neekam

These are procedure that relieve mental agony and relaxes the mind and body. In Agathiyar Kanma Kaandam, patients are advised to go for temples, donate articles of value to the poor and planting and maintaining new saplings.

OBSERVATION AND RESULTS

In the in-patient department, 20 cases were admitted and the observations are tabulated below.

Tabulations made with reference to Age, Sex, Occupation, Socio-economic status, Family history, Nilam, Kalangal, Yakkai, Gunam, Mukkutrangal, Ezhu udal thaathugal and Envagai thervugal.

The modern aspect tabulations are made for Clinical features, Investigations, Positions of pile mass, Duration of illness, Precipitating factors and Duration of treatment.

Table - I
Incidence of Age

Age in Year	No. of Cases out of 20	Percentage
1 – 10	-	-
11 – 20	-	-
21 – 30	1	5
31 – 40	1	5
41 – 50	10	50
51 – 60	5	20
61 – 70	1	5
71 – 80	2	10
81 – 90	-	-
91 - 100	-	-

Most of the cases were between the age group of 41-50 i.e. 50% in this group 25% of cases were 51-60; 10% of cases were 71-80; 5% of cases were 21-30; 5% of cases were 31-40; 5% of cases were 61-79; from this it is clear that most of the cases were from 70% Pitha kaalam (33-66 age group)

Table – II
Incidence of sex

Sex	No. of Cases out of 20	Percentage
<i>Male</i>	10	50
<i>Female</i>	10	50

Observation :

Both are same in the 20 admitted patients.

Table III
Occupation

Sl.No.	Occupation	No. of Cases out of 20	Percentage
1	<i>Beedi Labour</i>	5	25
2	<i>Tailor</i>	2	10
3	<i>Farmer</i>	3	15
4	<i>Driver</i>	4	20
5	<i>Cook</i>	3	15
6	<i>Shop owner</i>	1	5
7	<i>Coolie</i>	2	10

Observation :

Most of the patients admitted were found to be sedentary workers.

Table IV

Economic Status

Economic Status	No.of Cases out of 20	Percentage
<i>Poor</i>	14	70
<i>Middle Class</i>	6	30
<i>Rich</i>	-	-

Observation :

Out of 20 admitted cases 14 were from poor and 6 from middle class which shows higher incidence of the poor socio-economic status people among the 20 admissions.

Table V

Family history

Family history	No.of Cases out of 20	Percentage
<i>Positive</i>	5	25
<i>Negative</i>	15	75

Observation :

Family history showed 25% case were having strong family history.

Table VI
Food habits

Food habits	No.of Cases out of 20	Percentage
<i>Vegetarians</i>	4	20
<i>Non -vegetarians</i>	16	80

Observations:

16 cases were found to be non-vegetarians out of the 20 admitted cases

Table VII
Other habits

Other habits	No.of Cases out of 20	Percentage
<i>Smoker</i>	8	40
<i>Alcoholic</i>	5	25
<i>Betal nut and tobacco chewing</i>	5	25
<i>Using snuff</i>	1	5
<i>Drug addiction</i>	-	-

Observation :

Higher incidence of Raththa moolam was found among the smokers and alcoholics

Table VIII

Religion

Religion	No.of Cases out of 20	Percentage
<i>Hindu</i>	17	85
<i>Christian</i>	2	10
<i>Muslim</i>	1	5

Observation:

17 cases belongs to Hindu religion, 2 case belongs to Christianity and 1 belongs to Muslim.

Table IX

Distribution among thinai

Sl. No.	Thinai	No.of Cases out of 20	Percentage
1	<i>Kurinji</i>	-	-
2	<i>Mullai</i>	-	-
3	<i>Marutham</i>	17	85
4	<i>Neithal</i>	3	15
5	<i>Palai</i>	-	-

Observation :

Most of the patients are from in and around Tirunelveli. So they belongs to marutha nilam.

Table X
Paruva kaalangal

Sl. No.	Paruva kaalam	Months	No.of Cases out of 20	%
1	<i>Kaar kaalam</i>	<i>Avani, Purattasi</i>	3	15
2	<i>Koothir kaalam</i>	<i>Aippasi, Karthigai</i>	1	5
3	<i>Munpani kaalam</i>	<i>Margazhi, Thai</i>	-	-
4	<i>Pinpani kaalam</i>	<i>Maasi, Panguni</i>	-	-
5	<i>Elavenil kaalam</i>	<i>Chithirai, Vaigasi</i>	6	30
6	<i>Muthuvenil kaalam</i>	<i>Aani, Aadi</i>	10	50

Observation:

50% of the patients were affected in Muthuvenil kaalam. It is due to seasonal variations. 30% were affected in Elavenil kaalam. 15% were affected in Kaar kaalam and another 5% were affected in Koothir kaalam

Table XI
Yakkai

Sl. No.	Yakkai	No. of Cases out of 20	Percentage
1	Vatham	3	15
2	Vatha Pitham	3	15
3	Vatha Kabam	-	-
4	Pitham	2	10
5	Pitha Vatham	12	60
6	Pitha Kabam	-	-
7	Kabam	-	-
8	Kaba Vatham	-	-
9	Kaba Pitham	-	-

Observation :

Affected patients were seen to in the order of pitha vatham, vatha pitham, vatham and pitha udalinar.

Table XII

Incidence according to Gunam

Sl.No.	Gunam	No. of Cases out of 20	Percentage
1	Sathuvam	Nil	-
2	Rasatham	20	100
3	Thamasam	Nil	-

Observation :

All the patients possessed Rasatha gunam.

Table XIII

Incidence according to Mukkutrangal

(I) Vatham

Sl.No.	Vatham	No. of Cases out of 20	Percentage
1	<i>Pranan</i>	-	-
2	<i>Abanan</i>	20	100
3	<i>Uthanan</i>	-	-
4	<i>Vyanan</i>	17	85
5	<i>Samanan</i>	20	100
6	<i>Naagan</i>	-	-
7	<i>Koorman</i>	6	30
8	<i>Kirukaran</i>	3	15
9	<i>Dhevathathan</i>	3	15
10	<i>Thananjeyan</i>	-	-

Observation :

Abanan and samanan were affected in all cases. Vyanan was affected in 85% of cases. Koorman was affected in 30% of cases. Kirukaran and Dhevathathan were affected in 15% of cases.

(II) Pitham

Sl.No.	Pitham	No. of Cases out of 20	Percentage
1	<i>Anal</i>	10	50
2	<i>Ranjagam</i>	3	15
3	<i>Prasagam</i>	3	15
4	<i>Saathagam</i>	18	90
5	<i>Aalosagam</i>	4	20

Observation :

Saathaga pitham was affected in 90% of cases. Anal pitham was affected in 50% of cases. Ranjagam and prasagam were affected in 15% of cases and Aalosagam was affected in 20% of cases only.

(III) Kabam

Sl.No	Kabam	No. of Cases out of 20	Percentage
1	<i>Avalambagam</i>	-	-
2	<i>Kilethagam</i>	10	50
3	<i>Pothagam</i>	-	-
4	<i>Tharpagam</i>	4	20
5	<i>Santhigam</i>	6	30

Observation :

Kabam was not affected as much as vatham and pitham. Santhigam was affected in 30% of cases. Kilethagam was affected in 50% of cases and Tharpagam in 20%.

Table XIV
Ezhu Udal Thathugal

Sl.No.	Udal thathugal	No.of Cases out of 20	Percentage
1	Saaram	20	100
2	Senneer	2	10
3	Oon	-	-
4	Kozhuppu	-	-
5	Enbu	-	-
6	Moolai	-	-
7	Sukkilam/Suronitham	-	-

Observation :

Examining ezhu udal thathugal, in all cases saaram was affected. In 10% of the cases senneer was affected.

Table XV
Envagai Thervugal

Sl.No.	Envagai Thervugal	No.of Cases out of 20	Percentage
1	Naa	14	70
2	Niram	8	40
3	Mozhi	15	75
4	Vizhi	6	30
5	Sparisam	-	-
6	Malam	20	100
7	Moothiram	20	100
8	Naadi	20	100

Observation :

In envagai thervugal, Naadi, Moothiram and Malam were affected in all the cases. Mozhi was anxious, rapid and high pitched in 75% of cases. Niram and Vizhi were pale in 30% of cases and Naa

was pale in 70% of cases. Naadi was vatha pitham in 11 cases and pitha vatham in 9 cases.

Udal Vanmai

Udal vanmai was found to be reduce in all the cases in two aspects. Iyarkai and kaalam as evidenced by ageing, illness and seasonal changes. But the udal vanmai can be improved in respect of seyarkai vanmai by the intake of nutritious diet and medicines.

Table XVI
Showing the Clinical Features

Sl.No.	Envagai Thervugal	No.of Cases out of 20	%
1	Constipation	20	100
2	Bleeding per rectum on defaecation	20	100
3	Pruritus ani	6	30
4	Pile mass in the anus	-	-
5	Pain around anus	-	-
6	Soreness around anus	7	35
7	Discharge of pus and mucus	-	-
8	Anaemia	2	10
9	Loss of appetite	12	60
10	Head ache	15	75

Observation:

All the 20 patients complained of constipation and bleeding per rectum. On defaecation 35% of patients complained of soreness. 30% complained of pruritus ani. 75% of patients complained of head ache and 60% of patients complained of loss of appetite. 10% of patients had Anaemia.

Table XVII
Report on bleeding per rectum

Sl.No.	Improvement in the bleeding tendency	No.of Cases out of 20	Percentage
1	First day	-	-
2	Second day	14	70
3	Third day	4	20
4	Fourth day	-	-
5	Fifth day	2	10

Observation :

In 70% of patients bleeding was arrested on the second day. In 20% of patients bleeding was arrested on the third day. In 10% of the patients bleeding was arrested on the fifth day of drug administration.

Table XVIII
Duration of Illness

Sl.No	Duration of illness	No.of Cases out of 20	Percentage
1	With in 7 days	3	15
2	With in 15 days	5	25
3	Below 1 month	3	15
4	Between 1-6months	8	40
5	Between 6-12 months	1	5
6	Between 1-5 years	-	-

Observation :

One patient had the history of having disease for 1 year. 55% were having this complaints for one month only.

Table XIX
Duration of treatment

Sl.No	No. of days treated	No. of Cases out of 20	Percentage
1	1-10	5	25
2	11-20	15	75
3	21-30	0	0
4	31-40	-	-
5	41-50	-	-

Observation:

75% of case were treated upto 20 days. 25% of cases were treated upto 10 days.

Table XX
Precipitating Factors

Sl.No.	Precipitating factors	No. of Cases out of 20	Percentage
1	Occupation	11	55
2	Faulty food habits	7	35
3	Constipation	20	100
4	Mental stress	4	20
5	Sleeplessness	2	10

Observation:

Constipation was the precipitating factor in all cases. In 55% of cases occupation, in 35% of cases faulty food habits, in 20% of cases mental stress and 10% of cases sleeplessness were the precipitating factors.

Observations of clinical laboratory examinations

At the time of admission, in all the 20 In-patients routine blood investigations, such as total WBC count, Differential count, Erythrocyte

sedimentation rate and Haemoglobin estimation were done. Also random blood sugar, blood urea and serum cholestrol levels were estimated. Urine and Motion examination are tabulated here

Table XXI
Observation of Haemoglobin percentage

Sl.No	Haemoglobin percentage	No.of Cases/ 20		Percentage	
		BT	AT	BT	AT
1	<i>Below 50</i>	-	-	-	-
2	<i>51-60</i>	1	-	5	-
3	<i>61-70</i>	7	2	35	10
4	<i>71-80</i>	12	18	60	90

Observation:

In 60% of patients, haemoglobin level ranged from 71 – 80% and 35% of patients haemoglobin level ranged from 61-70% and 5% of patients haemoglobin level ranged between 51-60%. All patients after discharge from I.P. were treated as out-patients .

Leucocyte count

Total WBC count were found within physiological limits in all the cases

Table XXII
Erythrocyte sedimentation rate

Sl.No	ESR mm / 1hour	No. of cases out of 20	Percentage
1	<i>Below 4mm</i>	-	-
2	<i>4 – 8 mm</i>	5	25
3	<i>9 – 15 mm</i>	5	25
4	<i>16 – 30 mm</i>	10	50
5	<i>31 mm and above</i>	-	-

Observation :

In almost all the cases ESR was with in normal range.

Table XXIII
Urine Analysis

Sl.No	Urine analysis	No.of Cases/ 20		Percentage	
		BT	AT	BT	AT
1	<i>Albuminuria</i>	-	-	-	-
2	<i>Glycosuria</i>	-	-	-	-
3	<i>Deposits (Amorphous phosphate crystals)</i>	2	2	10	10

Observation :

Two patients had amorphous phosphate crystals before and after treatment. So the trial drug did not have any action to aggravate or reduce these conditions.

Motion Test

No ova and cyst were found in all cases. In all the 20 cases occult blood was found to be negative.

Table XXIV

Position of pile mass on proctoscopy

Sl.No.	Position of pile mass	No.of Cases/ 20	Percentage
1	3 o'clock	14	70
2	7 o'clock	4	20
3	11 o'clock	2	10
4	Without pile mass	-	-

Observation :

70% of cases had pile mass in 3 o'clock, 20% in 7 o'clock, 10% in 11 o'clock.

Results :

Fifteen cases i.e. 75% of cases very good relief, three cases i.e. 15% of cases showed good result and two cases i.e. 10% of cases showed fair response. None of the 20 cases reported to O.P for recurrence during the clinical study.

DISCUSSION

Raththa moolam is one of the twenty one types of moola noigal resembling in its clinical features with that of first degree haemorrhoids in modern medicine. In Siddha literatures bleeding per rectum during defaecation, soreness and pruritus around anus and habitual or chronic constipation are described the main clinical features. Severe pain is not mentioned. These coincided with first degree haemorrhoids. According to modern aspects, the bleeding occurs above the Hilton's line, pain is not felt.

Anatomy and clinical features are described in many siddha texts. The author collected these from Yugi vaidhya sinthamani, Gunavagada thirattu, Aavi alikkum amutha murai chrukkam and Thirumoolar karukkidai vaidhyam – 600 and Agasthiyar Paripooranam – 400.

20 cases were selected for admission according to the clinical features mentioned in Yugi vaidhya sinthamani. Siddha method of diagnosis was carried out, for all the patients and also modern investigations and proctoscopy were done.

Aetiology:

Generally from the history given by the patients the dietic factors, occupation, constipation, mental stress and sleeplessness were found to be causative factors, these factors vitiates vatham and pitham. the same thing is denoted in the following quotation,

‘அனில பித்த தொந்தமலாது மூலம் வராது’

Vitiation of the above two induces constipation and straining during defaecation ultimately results in haemorrhoids.

Sex Distribution :

20 patients of both sexes were selected for the dissertation study. Among the 10 cases 50% were male and 10 cases 50% were female. The sex incidence was higher in female than males.

Age Distribution :

Most of the cases were between the age group of 41 – 50 i.e. 50% in this group 25% of cases were 51- 60; 10% of cases were 71-80; 5% of cases were 21-30; 5% of cases were 31-40, 5% of cases were 61 – 70.

Religion Distribution :

85% of cases were Hindus 10% of cases were Christians and 5% of cases were Muslim.. Raththa moolam affects the people irrespective of their religion and race.

Socio – Economic Status:

Most of the patients were belonged to poor socio-economic condition.

Out of 20 cases acute and longstanding patients were considered and selected for study 25% had positive family history. Only 20% of patients treated were vegetarians and the rest were found to be taking mixed diet. 40% were smokers, 25% were alcoholics, 25% were betel nut and tobacco chewing. There were no drug addicts.

Kaalam:

Most of the cases, 70% were from pitha kaalam. (33-66 age group). From the study it was observed that most of the people belong to the pitha kaalam were affected.

Paruva kaalam:

50% of the patients were affected in Muthuvenil kaalam. 30% were affected in Elavenil kaalam. 15% were affected in Kaar kaalam. The siddhars concept that pitha is provoked from its normal state in kaarkaalam. But it is due to seasonal variation. 5% were affected in Koothir kaalam.

Thinai:

Most of the patients, 85% were belonging to marutha nialm. In siddha literatures reveals that marutha nilam is a place that can be regarded as "Disease free zone" and cures all the diseases. But the findings of the present study seem to prove contrary. Though Palayamkottai is a genuine marutham land and most of the selected cases taken for clinical study belongs to these region it seems that the faulty lifestyles of the victim would enhance the contributing factors.

Envagai thevugal:

In Envagai thevugal malam and naadi were affected in all the cases, Naa was pale in considerable number of cases.

In udal thathugal saaram was affected in all cases.

Except for haemoglobin level all other routine examinations were found to be normal in all cases because the selected cases were found to be moderately nourished.

The position of pile mass as viewed through protoscope was found in 3 O'clock position in 70% of cases 7 O'clock position in 20% and in 11 O'clock position in 10% cases.

The drug selected for clinical study are:-

1. Raththa Moola Nei 4 gm BD after food.

The procedure for the preparation of these drugs taken from Noikalukku Siddha Parigaram Part I and Siddha Maruthuvam respectively, These drugs were given orally.

All the patients were advised to follow some restrictions and they were advised to avoid sour, acrid, spicy foods, non-vegetarian diets, tubers, unripe banana. They were advised to add greens like abutilon in their daily diet.

Bleeding was completely arrested within two to five days of treatment. All other symptoms were found to be subsided depending upon the severity of illness. Raththa Moola Neiland nathai legiyam possess significant astringent, laxative and styptic action and this accounts for the arrest of bleeding. Due to the presence of and constipation was relieved, as they are known laxatives.

After discharge, patients were advised to follow, yogasanas like viparitakarani, sarvagaasanam, sirasaasanam, and kapalaphati type of pranayama. These prevented relapses and patients felt better in doing these asanas.

According to the severity in the clinical presentation the cases were divided into mild, moderate and severe cases. It was observed that out of 20 cases, 10 mild cases of Raththa moolam proved very good results, out of 6 moderate cases, very good results were found in 5 cases and marked good relief in 1 cases. In 4 severe cases, good relief were found in 2 and fair relief in two cases.

Twenty cases were also treated as out-patients in post graduate o.p ward. Among the 20 cases 12 were males 60% and 8 were females 40%. Most of them belonged to poor economic group. They belonged to different age group ranging from 18-65 years. Most

of them were in the pitha kalam. 60% of cases had pile mass in 3 O'clock position.

11 mild cases showed very good response, of the 7 moderate cases very good relief was found in 5 and good relief in 2 cases. In two severe cases fair relief was found.

Pharmacological studies were carried out in the P.G.Department of pharmacology. Govt. Siddha Medical College, Palayamkottai. Raththa moola Nei possess significant styptic action.

Test for anti inflammatory action was also carried out which showed Raththa moola nei having significant anti inflammatory action.

Chemical analysis of the drugs were also done in the P.G.Department of Bio-chemistry Govt. Siddha Medical College, Palayamkottai.

Toxicological studies could not be carried out due to lack of facilities in the college. All the raw drugs were put to therapeutic use only after careful purification processes laid down for them individually.

The clinical studies in both in patients and the out-patients were encouraging. This is only a preliminary study and elaborate study with more number of cases must be under taken to assess the further impact of the drug on Raththa moolam.

SUMMARY

The clinical study on Raththa moolam with reference to its aetiology, symptomatology, treatment and prognosis were carried out of out patient and in patient wards of post graduate department of maruthuvam. Twenty cases were selected from out patient department and treated in the inpatient ward. Another twenty patients were treated as out-patients .

All the patients were treated with Raththa moola Nei 4 gm BD

The results were found to be very good in almost every cases. There was marked improvement within two days of treatment. There was good relief with in three to five days in mild cases. In moderate cases good relief was found within 10 – 15 days of treatment. In longstanding cases fair results were found within 20-30 days of treatment. All the In-patients cases were followed in the o.p after discharge. None of the cases reported for recurrence during the clinical study. No side effects were observed clinically in any of these cases during the course of treatment.

All the drugs were put to use after careful purification process laid down for them individually. Ethical war of purification for every raw drug were followed as mention in the Siddha Literatures before the process of preparation.

The trial drugs were found to correct the deranged three humours thereby correcting abana, prana vayus, pithams such as anal,ranjaga, prasaga, sathaga, alosaga pithams and the vitiated kabam were relieved from constipation, irritation and anxiety. After the treatment appetite become normal.

Phamacological studies showed that the trial drugs Raththa Moola Neiand Pathai legiyam had Syptic and anti-inflammatory actions.

CONCLUSION

☆ *The clinical study confirms the efficacy of the trial drugs, in controlling the bleeding and relief from the ailment.*

The trial drug, Raththa Moola Nei has got the taste of Inippu.

Suvai : Inippu

Thanmai : Thatpam

Pirivu : Inippu

Our great siddha, Theraiyar depicted, "«ÉçÄ Äçð¾ | ¾i ó¾ÄÄ;Ð äÄð ÄÄ;Ð"which implies the role of pitham in the causation of disease, Moolam.

Taste inippu has antagonise the effect of pitham. Thus Raththa Moola Nei which has got the taste of Inippu in itself acts as Anti-pitha drug.

Raththa Moola Nei has its thanmai as thatpam. Thatpam natured drugs acts by eliminating the excessive pitham. Thus the trial drug has got the Anti-pitha action in Raththa Moolam patients.

After the intake of drug, the drug attains the pirivu – Inippu in gastro intestinal tract. This again acts on excess pitham to eliminate it.

Thus the drug with its taste Inippu, Thanmai – Thatpam, Pirivu – Inippu has got the Anti-pitha action on the basis of Ethir - Urai Maruthuvam.

- ☆ *The drug, Raththa Moola Nei which has got Anti-pitha action, shows good prognosis on Ratha Moolam patients.*
- ☆ *Treatment improved the functions of abanavayu which regularizes the bowel habits and vyana vayu which is responsible for all movements in the body.*
- ☆ *No untoward effects were reported during the treatment period.*
- ☆ *Siddha, way of approach is certainly the best treatment of Raththa moolam in all aspects, as it could avoid surgical procedure.*
- ☆ *Because of the encouraging results clinically, it is concluded that Raththa moolam is controllable with Raththa Moola Nei.*

PREPARATION AND PROPERTIES OF TRIAL DRUGS

Name of the drug:

Raththa moola Nei : Agathiyar Vaidhya Vallathi – 600 ⁽³¹⁵⁾

Raththa moola Nei :

Ingredients:

1. *Glycyrrhiza glabra*
2. *Allium cepa*
3. Milk
4. Ghee

1. Glycyrrhiza glabra:

Family : Fabaceae

Parts used : Root

Suvai : Inippu

Thanmai : Seetham

Pirivu : Inippu

Action : Tonic, Cooling and gently laxative

Constituents of Root :

Glycyrrhizin, Aspanragin, Sulphuric and malic acids.

“கத்தியரி முப்பிணியால் வருபுண் தாகங்

கண்ணாய்உன் மாதம்விக்கல் வலிவெண் குட்டம்

பித்தமெலும் புருக்கி கிரிச்சரம் ஆவர்த்த

பித்தமத மூர்ச்சை விடபாகம் வெப்பந்”

(தேரையர் குணவாகடம்)

2. Allium Cepa:

Family : Liliaceae

Parts Used : Bulb

Suvai : Kaippu

Thanmai : Veppam

Pirivu : Karppu

Actions : It has an antiseptic value throughout the entire alimentary canal.

Constituents of Bulb:

It has an acid volatile oil which contains sulphur, essential oil and organic sulphides

“வெப்பமூ லங்கிரந்தி வீறூரத்த பித்தமுடன்
செப்பநா அக்கரந்தீ ராத்தாகம் - வெப்புக்
கடுப்பறுமந் தஞ்சந்தி காசம்வயிற் றுப்பல்
தடிப்பேறும் வெங்காயத்தால்”

(அகத்தியர் குணவாகடம்)

3. Milk:

“பாலர் கிழவர் பழஞ்சுரத்தோர் புண்ணுளி
சூலையர் மேகத்தோர் தூர்பலத்தோர் ஏலுமிவர்
எல்லார்க்கும் மாகும் இளைத்தவர்க்குஞ் சாதகமாய்
நல்லாய் பசுவின்பால் நாட்டு”

(குணபாடம் தாது சீவ வகுப்பு)

4. Ghee:

“தாகமுழ லைசுட்கம் வாந்தி பித்தம் வாயுபிர
மேகம் வயிற்றெரிவு விக்கல்பல் - மாகாசங்
குன்மம் வறட்சி குடற்புரட்ட லஸ்திசுட்கஞ்
கொன்மூலம் போக்குநிறைத் துப்பு”

- குணபாடம் தாது சீவ வகுப்பு.

According to Gunapadam Jeeva Vaguppu, Ghee cures moola noigal.

PREPARATION OF RATHTHA MOOLA NEI

“தேக்கிடவே இரத்தமூல லத்துக்கப்பா
செபுகிறேன் நெய்யொன்று ஆவின்நெய்தான்
நோக்கிடவே படியொன்று ஈருளிச்சாறு
நுவலவே நான்குபடி கூடவாரு
வாக்கிடவே பசுவின்பால் குறுணிவாரு
மதுரமது பலமொன்று அரைத்துப்போடே
அரைத்திட்டு மெழுகுபதந் தன்னில் வாங்கி
அந்திசந்தி இருபதுநாள் தொண்டாயானால்
கரைத்திட்ட சீழ்மூலம் இரத்தமூலம்
கண்காணா தோடுமடா கண்டுபாரு”

- அகத்தியர் வைத்திய வல்லாதி 600 (315)

Athimadhuram	-	1Palam(35gm)
Allium cepa's Juice	-	4 Padi (8Litres)
Milk	-	1 Kurini (5.3 litres)
Ghee	-	1 Padi (2 Litres)

Athimadhuram is powdered and made into a paste by adding cow's milk. Then all other drugs along with paste and remaining milk are taken in a vessel and heated to reach a Melugu Patham (Waxy state) and then cooled.

Dosage : 1. Thekkarandi : (4ml)

BD for 20 days.

Indication: *Raththa moolam & Seezhl moolam*

- *Thamarai Pathipagam*

- *First edition – April 2001*

Publishers: *Thamarai pathipagam,*

7, NGO Colony,

Vadapalani,

Chennai – 26.

BIO-CHEMICAL ANALYSIS OF RATHTHA MOOLA NEI

Preparation of the extract:

5 gram of chooranam was weighed accurately and placed in a 50ml clean beaker. Then 50 ml distilled water was added and dissolved well. Then it is boiled well for about 10 minutes. It was cooled and filtered in a 100 ml volumetric flask and then it was made up to 100 ml with distilled water. This fluid was taken for analysis.

NO	EXPERIMENT	OBSERVATION	INFERENCE
1.	TEST FOR CALCIUM: 2 ml of the above prepared extract is taken in a clean test tube. To this add 2 ml of 4% Ammonium oxalate solution is added.	No white precipitate is formed	Absence of Calcium
2.	TEST FOR SULPHATE: 2 ml of the extract is added to 5 % Barium chloride solution.	A white precipitate is formed	Indicates the presence of Sulphate
3.	TEST FOR CHLORIDE: The extract is treated with Silver nitrate solution.	A white precipitate is formed	Indicates the presence of Chloride
4.	TEST FOR CARBONATE: The substance is treated with concentrated HCL.	No brisk effervescence is formed	Absence of Carbonate
5.	TEST FOR ZINC: The extract is added with potassium Ferro cyanide Solution.	No white precipitate is formed	Absence of Zinc
6.	TEST FOR IRON: FERRIC: The extract is treated with Glacial acetic acid and Potassium ferro cyanide.	No blue colour is formed.	Absence of ferric Iron

7.	TEST FOR IRON: FERROUS: <i>The extract is treated with concentrated Nitric acid and Ammonium thio cynate.</i>	<i>Blood red colour is formed</i>	<i>Indicates the presence of Ferrous Iron.</i>
8.	TEST FOR PHOSPHATE: <i>The extract is treated with Ammonium molybdate and concentrated Nitric acid.</i>	<i>yellow precipitate is formed</i>	<i>Indicates the presence of Phosphate</i>
9.	TEST FOR ALBUMIN: <i>The extract is treated with Esbach's reagent</i>	<i>No yellow precipitate is formed</i>	<i>Absence of Albumin</i>
10.	TEST FOR TANNICACID: <i>The extract is treated with Ferric chloride.</i>	<i>No blue black precipitate is formed</i>	<i>Absence of Tannic acid</i>
11.	TEST FOR UNSATURATION: <i>Potassium permanganate solution is added to the extract</i>	<i>It gets decolourised</i>	<i>Indicates the presence of Unsaturated compound</i>
12.	TEST FOR REDUCING SUGAR: <i>5 ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.</i>	<i>No colour change occurs</i>	<i>Absence of Reducing sugar</i>
13.	TEST FOR AMINO ACID: <i>One or two drops of the extract is placed on a filter paper and dried it well. After drying 1% Ninhydrin is sprayed over the same and dried it well.</i>	<i>No violet colour develops</i>	<i>Absence of Amino acid</i>

STUDY OF STYPTIC ACTION ON RATS

Drugs

i. Raththa Moola Nei

Procedure

six albino rats were selected and divided into 2 groups each consisting of male and female rats. they were anaesthetised with ether. the first group was treated with saline and kept as control. the abdomen was opened and the liver was located.. A small portion from any lobe of the liver was cut off. Pieces of blotting paper were used to remove the blood. Time taken for the bleeding to stop was noted.

For the second group Raththa Moola Nei was applied to the cut wound until bleeding stopped. The time taken for the bleeding to stop was noted in each case.

The results were tabulated.

Group	Bleeding time (mts)
<i>Control (saline)</i>	4.55
<i>Raththa Moola Nei</i>	3.30

Results

Raththa Moola Nei which arrested the bleeding in 3.30 minutes has good styptic action pharmacologically.

**ACUTE ANTI INFLAMMATORY STUDY OF MEDICATED
RATHTHA MOOLA NEI
(EXTERNALLY)**

AIM

To study the anti inflammatory (acute) activity of **RATHTHA MOOLA NEI**

PROCEDURE

Acute anti-inflammatory activity of Medicated Nei was studied in healthy albino rats, weighing between 100-150 gms. For studying acute-inflammation rat hind-paw technique was used.

Six albino rats were selected and divided into two groups. Each containing three rats. To the first group distilled water was given and kept as control. Before the application of the drug, the hind-paw volumes of all rats were measured. This was done by dipping the hind-paw up to the tibio-tarsal junction in mercury plethysmography.

Subcutaneous injection of 0.1 ml of 1% carragenin (w/v) in water was made into plantar surface of both the hind-paw of each rat. To the test group Medicated Nei was topically applied frequently over the inflamed surface in a thin layer. To the control group, no drug was applied over the inflamed surface. One-and-half the injection the hind-paw volume was measured once again. The difference between the initial and final volumes would show the amount of inflammation.

Taking the volume in the control group as 100% of inflammation or anti-inflammatory effect of the group is calculated. Tabulation of the results where observed.

<i>Serial NO.</i>	<i>Name of Drug/ Groups</i>	<i>Dose /100gm body weight</i>	<i>Initial reading average</i>	<i>Final reading average</i>	<i>Mean difference</i>	<i>Percentage inflammation</i>	<i>Percentage inhibition</i>	<i>Remarks</i>
1.	<i>MEDICATED NEI</i>	External	0.80	1.35	0.55	68.75	31.25	<i>Moderate</i>
2.	<i>Ibuprofen</i>	20mg/ 1ml	0.85	0.85	0.05	6.25	93.75	
3.	<i>Water</i>	1ml	0.65	1.5	0.85	100.0	-	

NOTE

The test drug has got Moderate anti-inflammatory activity.

Govt. Siddha Medical College & Hospital
Palayamkottai
Department of Post Graduate Maruthuvam
Branch – I
IP Case Sheet

Ward : *Nationality* :
I.p.no. : *Religion* :
Bed no. : *Date of Admission* :
Name : *Date of Discharge* :
Age /sex : *Diagnosis* :
Occupation : *Medical officer* :
Income :
Permanent address :
Local address :

Complaints & Duration :

History of present illness :

History of Past illness :

Family History :

Personal History :

Habits :

Veg / Non-veg/ smoker / Alcoholic / Tobacco chewer

History of exposure to extra marital contacts

General Examination

1) <i>General Attitude</i>	10)	<i>Venous</i>
2) <i>Decubitus position</i>	11)	<i>Pedal Oedema</i>
3) <i>Built</i>	12)	<i>Nerve thickening</i>
4) <i>Temperature</i>	13)	<i>Jaundice</i>
5) <i>Pulse rate</i>	14)	<i>Anaemia</i>
6) <i>Heart rate</i>	15)	<i>Cyanosis</i>
7) <i>Blood Pressure</i>	16)	<i>Clubbing</i>
8) <i>J.V.P.</i>	17)	<i>Engorged veins</i>
9) <i>Lymph adenopathy</i>		

SIDDHA SYSTEM EXAMINATIONS

I. NILAM

Kurinji

Mullai

Marutham

Neithal

Palai

II. PARUVA KALAM

Kaar (Aavani – Puratasi)

Koothir (Iyppasi – Karthigai)

Munpani (Markazhi – Thai)

Pinpani (Masi – Panguni)

Elavenil (Chithirai – Vaikasi)

Muthuvenil (Aani – Aadi)

III. GNANAINTHIRIAM

Mei – Sensation :

Vai – Taste :

Kan – Vision :

Mukku – Smell :

Sevi – Hearing :

IV. KANMAINTHIRAM

Kai – Dhaanam :

Kal – Kamanam:

Vai – Vasanam :

Eruvai – Visarkam:

Karuvai – Anantham:

V. Yakkai (Udal)

Vatham :

Pitham :

Kabam :

Kalappu :

VI. Gunam

Sathuvam :

Rajotham :

Thamasam:

VII. Utkaya Athakayam

Puyam (Forearm):

Sayam (Arm) :

Kaal (Leg) :

Paatham (Feet) :

VIII. Mummalam

Malam :

Moothiram :

Viyarvai :

IX. KOSAM

Annamayakosam :

Pranamayakosam :

Manomayakosam :

Vignanamayakosam :

Anandhamayakosam :

X. Pira Uruppukalin Nilai

Iruthayam :

Puppusam :

Eraippai :

Kalleeral :

Manneeral :

Sirukudal :

Perunkudal :

Siruneeragam :

Siruneerpai :

Moolai :

Karuppai :

XI. Uyir Thathukkal

A. Vatham

Pranan :

Abanan :

Vyanan :

Udhanan :

Samanan :

Naagan :

Koorman :

Kirukkaran :

Dhevathathan :

Thananjeyan :

B. PITHAM

Anar pitham :

Ranjaga pitham :

Sathaga pitham :

Aalosaga pitham :

Prasaga pitham :

C. KABAM

Avalambagam :

Kilethagam :

Bothagam :

Tharpagam :

Santhigam :

XII. UDALTHATHUKKAL

Saaram :

Senneer :

Oon :

Kozhuppu :

Enbu :

Moolai :

Sukkilam / Suronitham :

XIII. ENVAGAI THERVUGAL

Naadi :

Sparisam :

Naa :

Niram :

Mozhi :

Vizhi:

Malam :

Niram:

Edai:

Erugal:

Elagal:

Moothiram:

a. Neerkuri:

Niram:

Manam:

Edai:

Nurai:

Enjal:

b. Neikuri:

MODERN ASPECTS

Systemic Examination (Gastro Intestinal Tract)

Inspection :

Palpation :

Percussion :

Auscultation :

Bimanual examination :

Examination of Other system

1. *Respiratory system* :

2. *Cardio vascular system* :

3. *Central nervous system* :

4. *Excretory system* :

LABORATORY INVESTIGATIONS

1. BLOOD :

TC : *Cells/cu mm*

DC : *P: %; L: % E: %; M: %*

ESR :

½ hour : *mm*

1 hour : *mm*

Hb% :

Bleeding time :

Clotting time :

Blood Sugar :

Blood Urea :

Serum Cholesterol :

VDRL :

2. Urine

Albumin :

Sugar :

Deposits :

3. Motion

Ova :

Cyst :

Rbs :

Pus cells :

Occult blood:

4. Sputum for AFB :

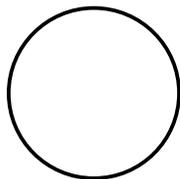
5. Radiological test :

a. *X-ray Barium meal series.*

b. *X-ray Barium Enema Series.*

6. Digital Examination

7. Proctoscopy



Case Summary

PROGRESS NOTE		
Date	Progress of the patient	Drug

Differential diagnosis :

Diagnosis :

Theerum Theera Nilai :

Line of Treatment :

**GOVERNMENT SIDDHA MEDICAL COLLEGE & HOSPITAL
POST GRADUATE RESEARCH CENTRE
PALAYAMKOTTAI, TIRUNELVELI – 627 002.**

BRANCH I – MARUTHUVAM

ADMISSION – DISCHARGE SHEET FOR ‘RATHTHA MOOLAM’

<i>I.P.No.:</i>	<i>Occupation:</i>
<i>Bed No:</i>	<i>Income:</i>
<i>Ward:</i>	<i>Nationality:</i>
<i>Name:</i>	<i>Religion:</i>
<i>Age:</i>	<i>Date of Admission:</i>
<i>Sex:</i>	<i>Date of Discharge:</i>
<i>Permanent Address:</i>	<i>Diagnosis:</i>
<i>Temporary Address:</i>	<i>Result:</i>
	<i>Medical Officer:</i>

Sl. No	Clinical feature	During admission	During discharge
1	<i>Constipation</i>		
2	<i>Rectal bleeding</i>		
3	<i>Bleeding occurring during defaecation and splash all around the pan</i>		
4	<i>Pruritis ani</i>		
5	<i>Irritation & Soreness after defaecation</i>		
6	<i>Discharge of pus & mucous</i>		
7	<i>Loss of appetite</i>		
8	<i>Pain in all limbs</i>		
9	<i>Tiredness</i>		
10	<i>Anaemia</i>		
11	<i>Giddiness</i>		

Place :

Date :

Signature of the Medical Officer

Govt. Siddha Medical College & Hospital
Palayamkottai
Department of Post Graduate Maruthuvam
Branch – I

OP Case Sheet

OP No	:	Treatment starting date	:
Name	:	End of Treatment date	:
Age / Sex	:	No. Of day treated	:
Occupation	:	Results	:
Income	:	Diagnosis	:
Address	:	Medical Officer	:

Complaints and Duration:

General Examination

Temperature	:	Anaemia	:
Blood Pressure	:	Jaundice	:
Heart rate	:	Cyanosis	:
Pulse rate	:	Clubbing	:
Respiratory rate	:	Other if any	:

In siddha aspects

Nilam	:	Theki	:
Mukkunam	:	Ezhu Udal Thathukkal	:
Imporikal	:	Mukkutram	:
Kanmenthiriyam	:	Envagai Thervugal	:

Kosam : *Neerkuri* :
Paruvagalam : *Neikuri* :
Mukkunam :

Systemic Examination (Gastro Intestinal Tract)

Inspection :
Palpation :
Percussion :
Auscultation :
Bimanual Examination :
 a. Digital Examination :
 b. Proctoscopy :

Investigation

Blood

Total Count : *Sugar* :
Differential Count : *Urea* :
ESR : *Creatinine* :
Hb : *Cholesterol* :

Motion

Ova
Cyst
Occult

Urine

Alubumin
Sugar
Deposit

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- ☆ *Ayurveda Untravelled – Dr. Joshi*
- ☆ *Cega Rasa Sekaram*
- ☆ *Gunavagadam*
- ☆ *Gunapadam Mooligai And Thathu Vaguppu*
- ☆ *Jeeva Ratchamirtham*
- ☆ *Kannusamy Paramparai Vaidhyam*
- ☆ *Noi Naadal Noi Mudalnadal – Part. I & II*
- ☆ *Sattamuni Naadi*
- ☆ *Satta Muni Gnanam*
- ☆ *Siddhar Anubava Vidhya Seimuraigal*
- ☆ *Siddhar Aruvai Maruthuvam*
- ☆ *Siddha Maruthuvam*
- ☆ *Siddha Maruthuvanga Churukkam*
- ☆ *Subramaniam Varma Avathi Nithanam – 500*
- ☆ *Thanvanthiri Vaidhyam*
- ☆ *Therayar Gunavagadam*

- ☆ *Therayar Narambu Soothiram – 150*
- ☆ *Therayar Sekarappa*
- ☆ *Thirumoolar Karukkidai Vaidhyam – 600*
- ☆ *Udal Koorugal*
- ☆ *Udal Thathuvam*
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Table - 1
Incidence of Age

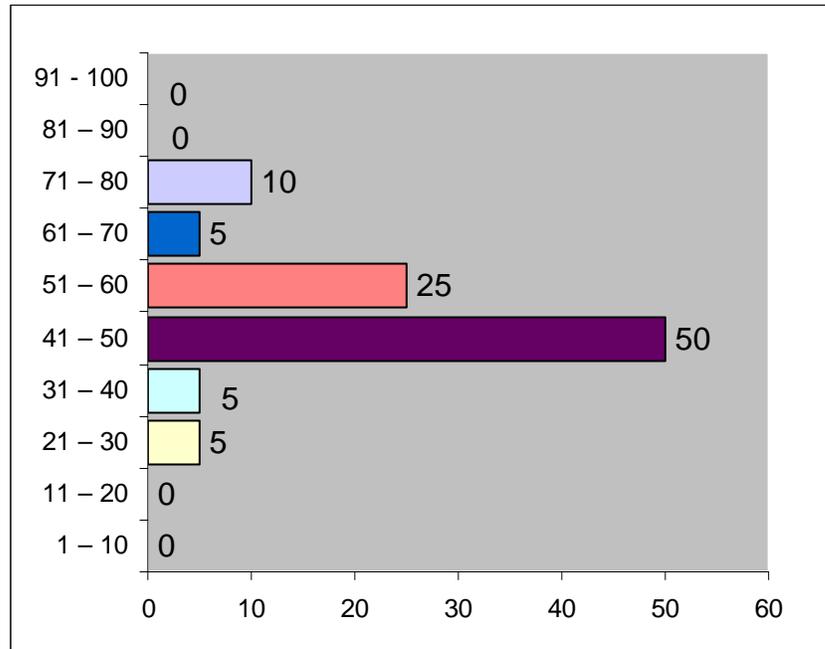


Table - II
Incidence of sex

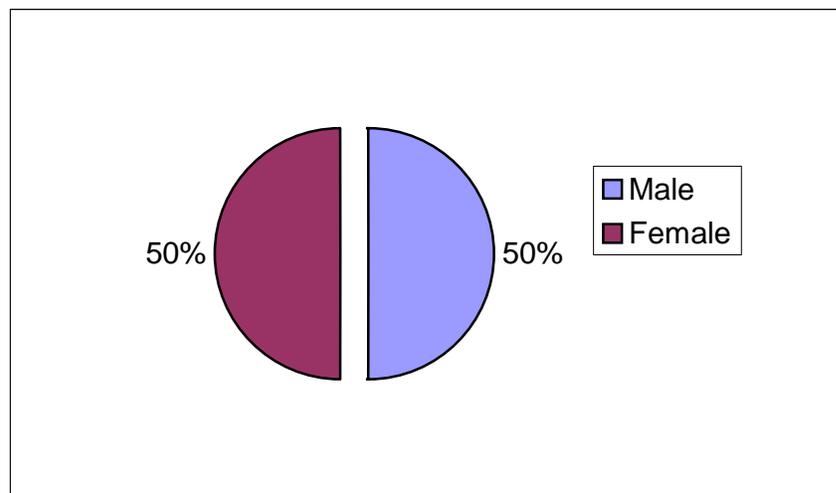


Table IV
Economic Status

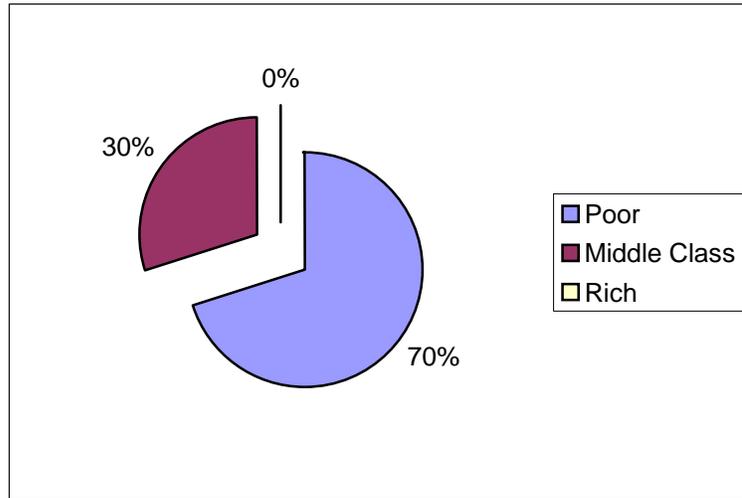


Table V
Family history

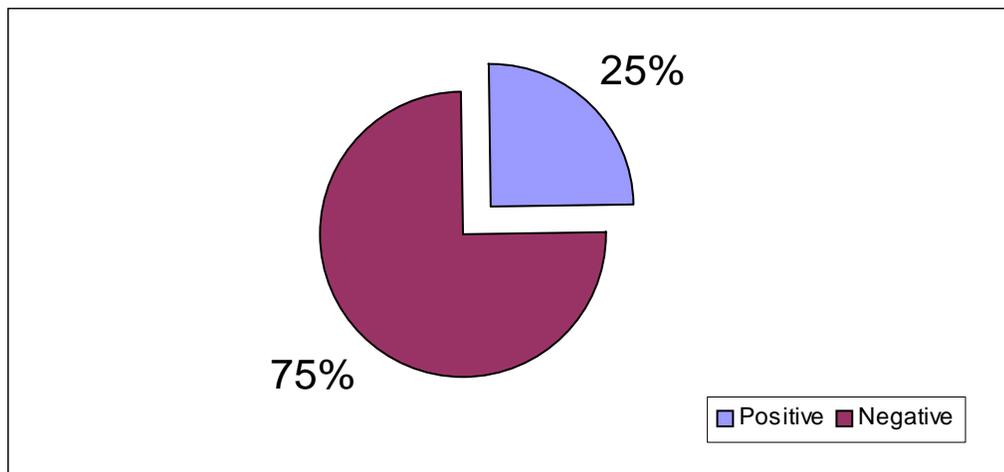


Table VI
Food habits

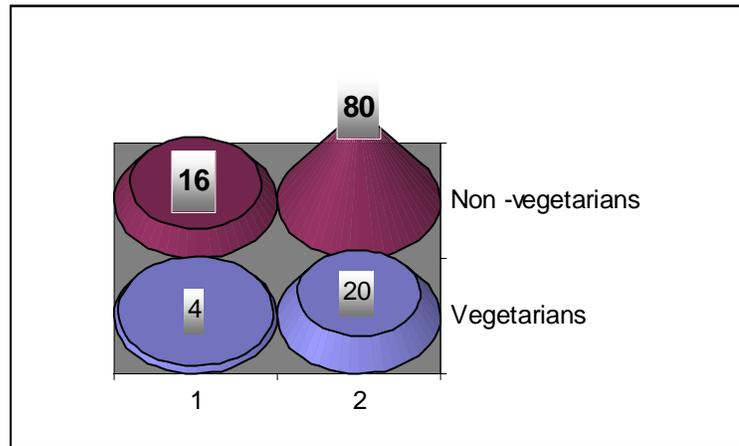


Table VIII
Religion

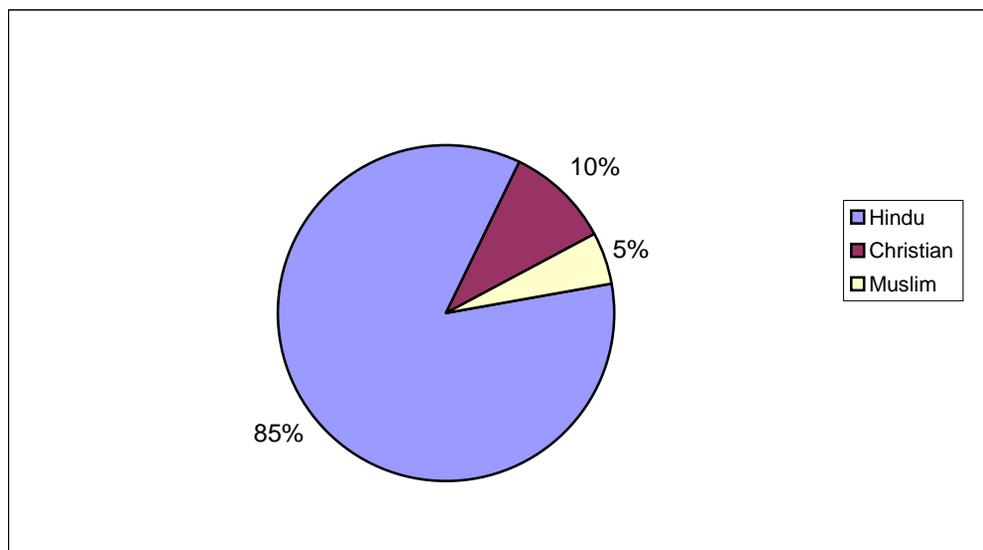


Table X

Paruva kaalangal

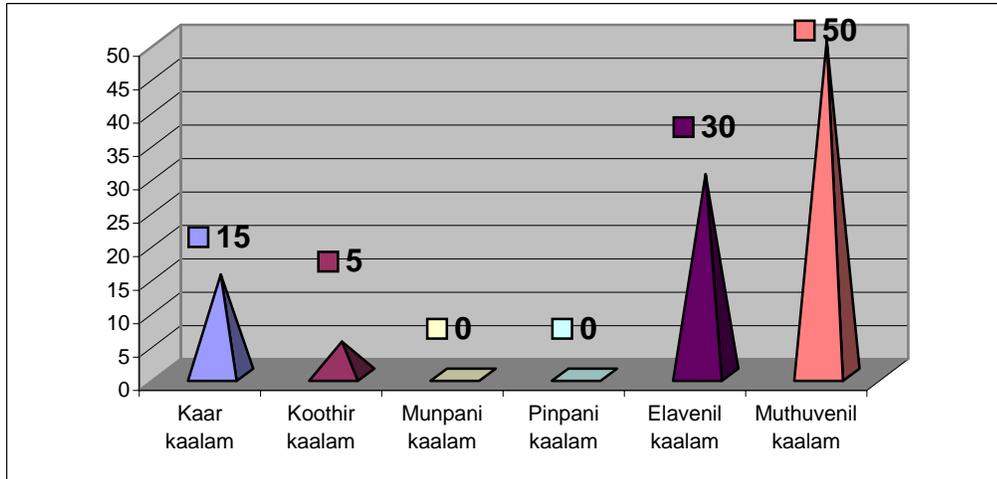


Table XVI

Showing the Clinical Features

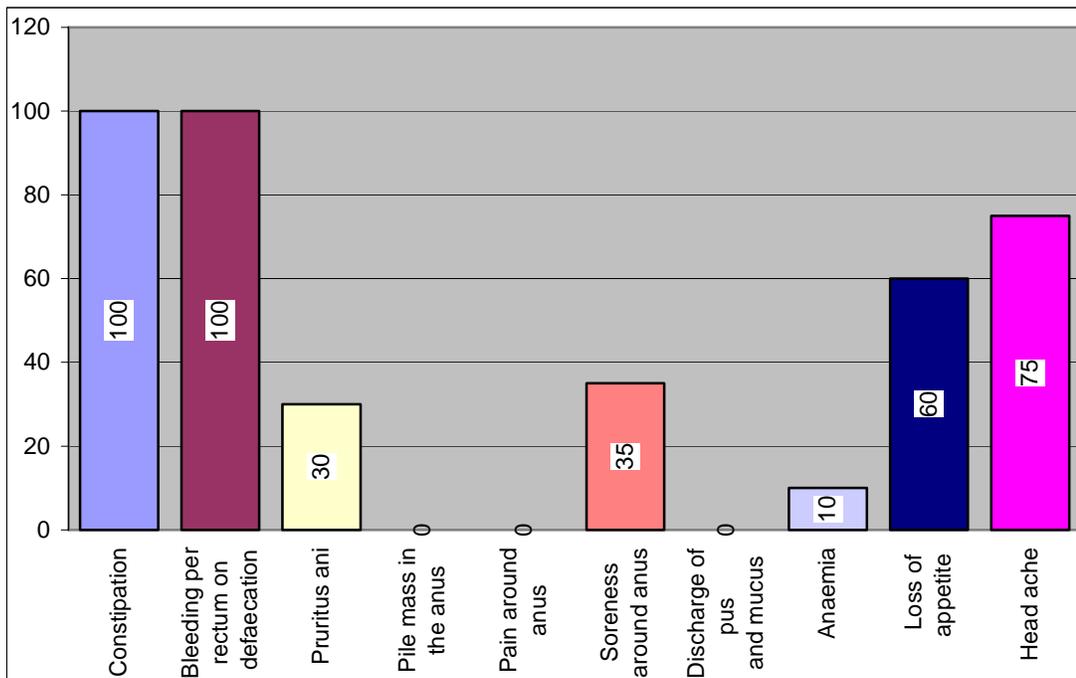


Table XVII

Report of improvement on bleeding per rectum

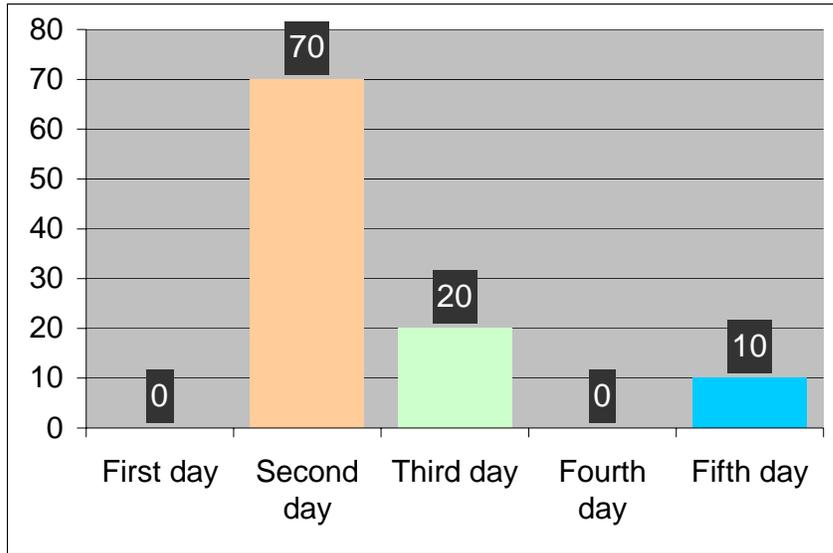
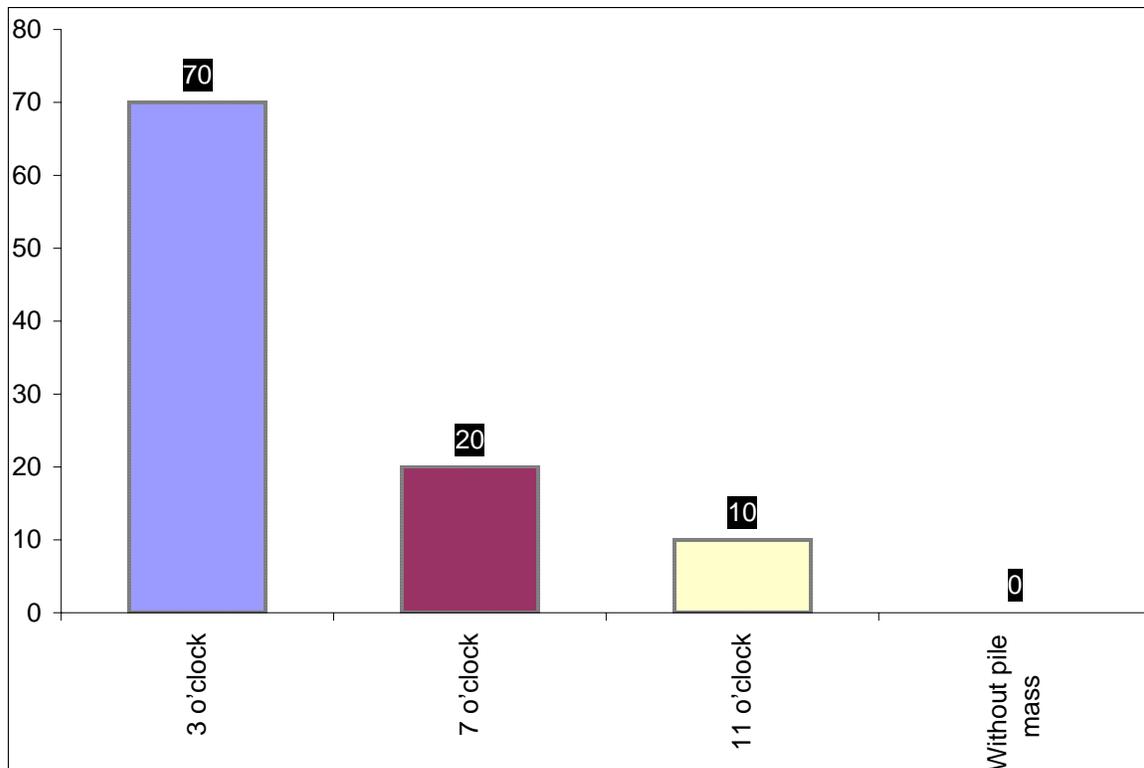


Table XXIV

Position of pile mass on proctoscopy



IV. OCCUPATION, DURATION OF ILLNESS, NO.OF DAYS TREATED AND RESULTS OF 20 O.P. PATIENTS

Sl. No	O.P. No.	Date	Name	Age/ Sex	Occupation	Duration of illness	No.of days treated	Position of pile mass	Motion occult blood	Hb %		Bleeding disorder	Medicines Raththa Moola Nei 4.1gms BD	Result
										B.T	A.T			
1	65065	13.11.06	Radhakrishnan	23/M	Student	7 days	31 days	7 o'clock	Negative	76	76	Nil		Fair
2	25151	19.04.06	Ponammal	75/F	Coolie	3 days	9 days	3 o'clock	Negative	67	72	Nil	„	V.good
3	25098	19.04.06	jamal	48/M	Cook	2 months	8 days	3 o'clock	Negative	70	72	Nil	„	V.good
4	25172	19.04.06	Symon Joseph	62/M	Driver	15 days	14 days	11o'clock	Negative	70	72	Nil	„	V.good
5	25628	21.04.06	Sagar Banu	40/F	Shopowner	5 months	12 days	3 o'clock	Negative	74	74	Nil	„	V.good
6	65522	15.11.06	Rajendran	48/F	Farmer	10 days	23 days	3 o'clock	Negative	60	70	Nil	„	V.good
7	65735	16.11.06	Rathnammal	61/F	Coolie	5 days	22 days	7 o'clock	Negative	70	72	Nil	„	V.good
8	65675	16.11.06	Manonmani	52/F	Coolie	4 days	30 days	7 o'clock	Negative	67	74	Nil	„	Good
9	65886	16.11.06	Samuvel	50/M	Tailor	4 days	22 days	3 o'clock	Negative	70	70	Nil	„	V.good
10	65775	16.11.06	Natarajan	39/M	Driver	2 days	22 days	11o'clock	Negative	72	74	Nil	„	V.good
11	65986	17.11.06	Rajesh	23/M	Tailor	12 days	24 days	3 o'clock	Negative	74	78	Nil	„	V.good
12	66538	20.11.06	Velayutham	33/M	Beedi labour	20 days	26 days	3 o'clock	Negative	70	74	Nil	„	Good
13	66900	21.11.06	Pushbaraj	40/M	Coolie	20 days	25 days	7 o'clock	Negative	67	70	Nil	„	V.good
14	74794	22.12.06	Chellammal	47/F	Cook	1 week	35 days	3 o'clock	Negative	65	68	Nil	„	Fair
15	65494	23.11.06	Rani	35/F	Teacher	1 month	23 days	3 o'clock	Negative	74	74	Nil	„	V.good
16	67564	27.11.06	Arulmanikam	25/M	Driver	3 months	19 days	3 o'clock	Negative	72	74	Nil	„	V.good
17	7523	22.01.07	Raja	40/M	Beedi labour	3 days	6 days	7 o'clock	Negative	76	78	Nil	„	V.good
18	7434	22.01.07	Krishnan	39/M	Clerk	7 days	12days	11o'clock	Negative	74	74	Nil	„	V.good
19	7721	22.01.07	Rumi	22/F	Student	2 months	15 days	3 o'clock	Negative	68	68	Nil	„	V.good
20	7394	22.01.07	Chendur pandian	59/M	Shopowner	15 days	10 days	3 o'clock	Negative	70	72	Nil	„	V.good

The trial drug, Raththa Moola Nei has got the taste of Inippu.

Suvai : Inippu

Thanmai : Thatpam

Pirivu Inippu

*Our great siddhar, Theraiyar depicted, "«ÉçÄ Äçò¼ | ¼; ó¼ÄÄ;Ð
ãÄõ ÄÄ;Ð" which implies the role of pitham in the causation of
disease, Moolam.*

*Taste inippu has antagonise the effect of pitham. Thus Raththa
Moola Nei which has got the taste of Inippu in itself acts as Anti-pitha
drug.*

*Raththa Moola Nei has its thanmai as thatpam. Thatpam
natured drugs acts by eliminating the excessive pitham. Thus the
trial drug has got the Anti-pitha action in Raththa Moolam patients.*

*After the intake of drug, the drug attains the pirivu – Inippu in
gastro intestinal tract. This again acts on excess pitham to eliminate
it.*

*Thus the drug with its taste Inippu, Thanmai – Thatpam, Pirivu
– Inippu has got the Anti-pitha action on the basis of Ethir - Urai
Maruthuvam.*

*The drug, Raththa Moola Nei which has got Anti-pitha action,
shows good prognosis on Ratha Moolam patients.*