

**A CLINICAL STUDY ON STANDARDIZATION OF SIDDHA
DIAGNOSTIC METHODOLOGY, LINE OF TREATMENT AND
DIETARY REGIMEN FOR
SANTHIRA VARTHAM (FRONTAL SINUSITIS)**

Dissertation submitted to

**THE TAMILNADU Dr.M.G.R.MEDICAL UNIVERSITY
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For the partial fulfillment of the requirements to the Degree of
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(BRANCH V – PG - NOI NAADAL DEPARTMENT)**



**DEPARTMENT OF NOI NAADAL
GOVERNMENT SIDDHA MEDICAL COLLEGE
PALAYAMKOTTAI – 627 002.**

OCTOBER – 2016

**GOVT. SIDDHA MEDICAL COLLEGE AND HOSPITAL,
PALAYAMKOTTAI**

DECLARATION BY THE CANDIDATE

I hereby declare that this dissertation entitled “A Clinical Study on standardization of Siddha diagnostic methodology, line of treatment and dietary regimen for Santhira Vartham through Siddha parameters” is a bonafide and genuine research work carried out by me under the guidance of **Dr.M.Krishnaveni, MD(s), Ph.D.**, Professor, Post Graduate Department of Noi Naadal, Govt. Siddha Medical College and hospital, Palayamkottai and the dissertation has not formed the basis for the award of any Degree (other than MD Siddha), Diploma, Fellowship or other similar title.

Date:

Signature of the Candidate

Place:

Dr.A.Priyanga

CERTIFICATE

Certified that I have gone through the dissertation submitted by **Dr.A.Priyanga** (**Reg No: 321315007**) a student of final **MD(s) Branch V Noi Naadal** of this College and the dissertation work has been carried out by the individual only. This dissertation does not represent or reproduce the dissertation submitted and approved earlier.

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Date :

GOVERNMENT SIDDHA MEDICAL COLLEGE AND HOSPITAL

PALAYAMKOTTAI, TIRUNELVELI-627002

TAMIL NADU, INDIA

PH:0462-2672736 / 2572737 /FAX:0462-2582010

BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled “**A Clinical Study on standardization of Siddha diagnostic methodology, line of treatment and dietary regimen for Santhira Vartham through Siddha parameters**” is a bonafide work done by **Dr.A.Priyanga (Reg No: 321315007)**, **Govt. Siddha Medical College and Hospital Palayamkottai** in partial fulfilment of the University rules and regulations for award of **MD (Siddha), Branch V Noi Nadal** under my guidance and supervision during the academic year **October 2013-2016**.

Name & Signature of the guide

Name & Signature of the Head of the Department

Name & Signature of the Principal

GOVT. SIDDHA MEDICAL COLLEGE
PALAYAMKOTTAI
SCREENING COMMITTEE

Candidate's Reg. No. : 321315007

Department : PG - Noi Naadal

This is to certify that the dissertation topic 'A Study on Diagnostic Methodology of "SANTHIRA VARTHAM" through Siddha parameters' has been approved by the Screening committee.

Branch	Department	Name	Signature
I	Pothu Maruthuvam	Dr. S. Aathi Narayanan M.D(s),	
II	Gunapadam	Dr. M. Ravichandran M.D(s), <i>phd</i>	
III	Sirappu Maruthuvam	Dr. S. Kaniraja M.D(s),	
IV	Kuzhandhai Maruthuvam	Dr. D. K. Soundararajan M.D(s),	
V	Noi Naadal	Dr. S. K. Sasi M.D(s),	
VI	Nanju Noolum Maruthuva Neethi Noolum	Dr. M. Thiruthani M.D(s),	

Remarks:

INSTITUTIONAL ETHICAL COMMITTEE,
GOVERNMENT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI,
TIRUNELVELI - 627002,
TAMIL NADU, INDIA.

Ph: 0462-2572736/2572737/2582010

Fax: 0462-2582010

F.No.GSMC/5676/P&D/Res/IEC/2014

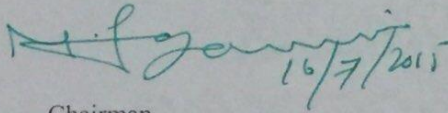
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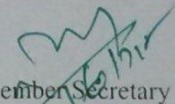
CERTIFICATE OF APPROVAL

Address of Ethical Committee	Government Siddha Medical College, Palayamkottai, Tirunelveli, Tamil Nadu, India. Pincode: 627002.
Principal Investigator	Dr. A. Priyanga, MD(s) - II Year, Department of PG Noi Naadal, Reg. No.: 321315007.
Guide	Dr. S. K. Sasi, MD(s), H.O.D., Department of Noi Naadal, Govt. Siddha Medical College and Hospital, Palayamkottai, Tirunelveli District.
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We approve the trial to be conducted in its presented form.

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Chairman
(Prof. Dr. M. Logamanian)


Member Secretary
(Prof. Dr. S. Soundararajan)



The Tamil Nadu Dr. M.G.R. Medical University

#69, Anna salai, Guindy, Chennai-600 032.

This certificate is awarded to

Dr./Ms./Mr. **PRIYANGA . A**

for participating as ~~Resource Person~~ / Delegate in the Fourteenth Workshop on

“Research Methodology & Biostatistics”

for AYUSH Post Graduates & Researchers

Organised by the Department of Siddha

The Tamil Nadu Dr. M.G.R. Medical University from 5th to 9th May 2014.

Dr. N. KABILAN M.D. (Siddha)
Reader, Dept. of Siddha

Dr. JHANSY CHARLES) M.D.
Registrar

Prof. Dr. D. SHANTHARAM, M.D., D.Diab.,
Vice-Chancellor



KIMS

KERALA INSTITUTE OF MEDICAL SCIENCES

P B No 1, Anayara PO, Trivandrum 695 029, Kerala, India. Ph: +91 471 3041000



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Certificate

This is to certify that Dr A. PRIYANGA MDS has participated as
Faculty/Delegate in the CME 'Pain Management Update 2016' held on January 03, 2016 at KIMS Trivandrum.

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PALAYAMKOTTAI



CERTIFICATE

This is to certify that Dr.**A. PRIYANGA**.....

has participated in the CME Programme on Clinical & Scientific Exploration of Naadigal - 2016 held
at Government Siddha Medical College & Hospital, Palayamkottai on 13.06.2016.

M. Krishnaveni
13/6/16
Co-ordinator

Prof. Dr. M. Krishnaveni M.D.(S), Ph.D.,

A.S.V.
Head of the Dept.

Prof. Dr. S. Victoria M.D.(S),

S. S. S.
Principal

Prof. Dr. S. Victoria M.D.(S),

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INTRODUCTION

INTRODUCTION

Siddha is the mother medicine of ancient Tamil. The word siddha means established truth. The siddha system of medicine, which has been prevalent in the ancient tamil land, is the foremost of all other medical systems in the world. Its origin goes back to B.C 10,000 to B.C 4000.

Siddha is a comprehensive system that places equal emphasis on the body, mind and spirit and strives to restore the innate harmony of the individual. Treatment is aimed at restoring balance to the mind body system. Diet and lifestyle play a major role not only in maintaining health but also in curing diseases. Siddha system presents the slogan “Food is being medicine and medicine is being Food” to people.

According to the siddha system, the individual is a microcosm (andam) of the universe. The human body consists of the five primordial elements earth, water, fire, air and space, the three humours vatha, pitta and kapha and seven physical constituents. The three thoshas are formed by the five basic elements.

Vatham is formed by Aakayam + Vayu. It controls the nervous actions such as movement, sensation etc. Pitha is formed by thee. It controls the metabolic activity of the body, digestion, assimilation and warmth.

Kabam is formed by Nilam + Neer, it controls the stability. When their equilibrium upsets diseases sets in. Food is the basic building material of the human body and gets processed into humors, tissues and wastes. The equilibrium of humours is considered as health and its disturbances or imbalance leads to a diseased state; Saint Thiruvalluvar has indicated the same view in his thirukural,

“மிகினும் குறையினும் நோய்செய்யும் நூலோர்

வளி முதலாய எண்ணிய மூன்று”

The origin of siddha is attributed to lord Siva, who is supposed to have handed it down to his consort Parvathi, Who in turn passed on the sacred knowledge to “Nandi” from whom it was transmitted to the first of ‘Siddhars’.

Siddha is a Tamil word derived from ‘Siddhi’-attaining perfection in life or heavenly bliss.

மாயத்தைக் கண்ட சித்தர்
மதியதை பெருக்கிக் கொண்டு
காயத்திலிருக்கும் போதே
கர்த்தனை கலந்து கொள்வார்
நேயத்தை விட்ட போது
நேர்சிவந் தன்னை சேர்வார்
மாயத்தை கண்டு நட்ட
வாசியில் வாழு வாரே”

-சுப்பிரமணியர் சுத்த ஞானம் - 61.

According to siddars the human body consists of two parts. The sthula thegam refers to body formed by skin, bones, muscles, nerves etc., The sukuma thegam which refers to the spiritual soul.

In health state these 3 humours are in the ratio of 1, ½, ¼ is maintained in equilibrium. They are called the life forces or humours and are explained in pathinen siddhar naadi sasthiram. Siddha diagnosis is unique in

individualization with respect to locate the vitiation of three humours.

Siddhars recorded their mystic findings in medicine yoga and astrology in tamil. Siddhars do not belong to any narrow.

In siddha system of medicine diagnosis is mainly based on eight

fold examinations. It includes examining the naa, niram, mozhi, vizhi, naadi, sparisam, neerkuri and malam. The procedure of spreading pattern of oil in urine(neikuri) and the interpretation of outcomes are clearly mentioned by Agathiyar and Theraiyar.

சித்த மருந்துவத்தில் நோய்களுக்கு எப்படி மருந்துகள் சொல்லப்பட்டதோ, அப்படியே நோய்களை இனம் காண அவற்றின் குணங்களைக் கண்டறிய பலவித முறைகளை தன்னகத்தே கொண்டது சித்த மருத்துவம். சித்தர்கள் கூறிய வழிமுறைகளைக் கொண்டு நவீன கால விஞ்ஞானக் கருவிகளுக்கு இணையான ஏன்!!!! இன்னும் சொல்லப்போனால் அதைவிட சிறப்பாக நோய்களை கணிக்க முடியும். நோய்களைக் கணிக்கும் பல முறைகள் இருப்பினும் அதில் ஒப்பில்லாத தனிச்சிறப்பை உடையது

“ ஐம்புள் இயக்க விதி” என்ற “பஞ்சபட்சி சாத்திர” நூலாகும்.

Sage Yugi classified diseases mainly based on signs and symptoms and 3 humours. Santhiravartham is a type of vatha disease, which is common in society is taken up for their dissertation study. It affects all the age groups.

In this dissertation topic ‘Santhiravartham’. I had made a through study which gives a detailed idea about the signs and symptoms, causes, diagnostic methods and nature of the disease.

AIM AND OBJECTIVES

AIM AND OBJECTIVES

AIM

Vatha diseases is one of the most common disorder which affects mankind both functionally and psychologically.

The aim of this study is to document the pathology of the disease “**SANTHIRA VARTHAM**” with the help of siddha parameters ennvagai thervu especially neerkuri and neikuri.

It generalized occurrence complications and agony undergone by the patients has made the author to choose the disease.

OBJECTIVES

PRIMARY OBJECTIVES:

- * To observe the clinical presentation of the disease “**SANTHIRA VARTHAM**”.
- * To collect the clinical diagnostic evaluation on the basis of siddha literature.
- * To evaluate the clinical observation about incidence of the disease in relation to age, sex, occupation, food and other habits, paruvakalam and nilam.
- * To note the derangements in **UDAL THATHUKKAL** and **UYIR THATHUKKAL** in accordance to the disease.
- * To highlight the importance of diagnostic methods mentioned by the siddhars like Ennvagaithervugal and Thegiyin Elakkanam.
- * To evaluate the pathology of the disease by propagating the views of siddhars in term of scientific proof to the needy world.

SECONDARY OBJECTIVES

- * To establish line of treatment of this disease on the basis of siddha Pathogenesis.
- * To establish the dietary regimen for this disease.
- * To frame the diagnosis based on Iympull Iyakka Vidhi (panchpatchi)

**ELUCIDATION ABOUT
SANTHIRA VARTHAM**

ELUCIDATION ABOUT SANTHIRA VARTHAM

According to Yugi Vaithiyam:

“ சுருபமாயுடம் பெங்கும் வலியுமாகித்
தும்மியே மூக்கடைத்து சுகந்தமற்று
புருவமே மிகவலித்து நெற்றியோடு
புண்போலக் குடைந்திட்டுப் புளுகமாகி
அருபமா யந்தியின் போது தோன்றி
அர்த்த ராத்திரி மட்டு மலைச் சலாகி
சுருபமாய் விடிகிற நேரத்திற் றாணும்
சாய்க்குமே மா சந்திரா வர்த்தாமே”.

- * சந்திரவாதம் - சந்திரனை கடவுளாய் கொள்ளும் சமயம்
- * சுருபம் - வடிவம்
- * உடம்பெங்கும் வலி - Malaise
- * [உடம்பெங்கும் - உடல் உயிருக்கிருப்பிட்டம், மெய்]
- * வலி - ஓர் நோய் → Pain
- * தும்மியே - உயிர்ப்பு, விடுதல், தும்முதல் → Sneezing
- * மூக்கடைப்பு - சலதோஷ அடைப்பு → Nasal

Obstruction

- * சுகந்தமற்று - நறுமணமற்று Loss of smell sensation
- * புருவம் மிகவலித்து - குதிரை, வரை → Pain over the eyebrows.
- * நெற்றி - உச்சி, படைவகுப்பு
- * நெற்றியோடு குடைந்திட்டு - Aching pain in the frontal region

- * அந்தி - மாலைக் காலம்
 * அர்த்த ராத்திரி - நடு இரவு
 * மலைச்சலாகி - மிகுதியான வலி

- T.V.Sambasivan pillai Dictionary

- Madurai Tamil lexicon

The above quote states that, it is attended with pain all over the body, sneezing, obstruction of the nostrils, loss of smell, pain in the eyebrows aching pain in the forehead, restless during the night and can only go to sleep about day break.

The pain is increased during night and subsides with the setting of moon.

Reading lines between Yugi Vaithyam poem

“ சுருபமாயுடம் பெங்கும் வலியுமாகித்

தும்மியே மூக்கடைத்து சுகந்தமற்று ”

Due to allergens (or) infections, nasal mucous membrane are thickened with oedematous swelling. The mucosal lining of the frontal and ethmoidal sinuses are occluded due to inflammation and edema. These result in rhinitis and heaviness of the head.

“அருபமா யந்தியின் போது தோன்றி

அர்த்த ராத்திரி மட்டு மலைச் சலாகி ”

‘In acute inflammation there is vasodilatation and increased vascular permeability of the mucous membrane. Pain begins at the sunset and as if ascends, the pain increases, when sunrises the pain decreases. Finally with the appearance of the sun the headache disappears .

**REVIEW OF LITERATURE OF
SANTHIRAVARTHAM**

REVIEW OF LITERATURE OF SANTHIRAVARTHAM

Before going to explain the dissertation topic, the author explains the common aetiology, classification and common signs and symptoms of vatha diseases and also explain about **SANTHIRA VARTHAM**

SANTHIRA VARTHAM:

Santhira vartham is one of the vatha diseases described in Yugi Vaithyam.

Definition:

It is a type of vatha disorder mostly affecting nasal mucous membrane and para nasal sinuses, which produces severe pain in frontal and ethmoidal region, sneezing and Nasal block.

Classification of Vatha disease:

The following author says the classification of vatha diseases

Sl.No	Name of the Siddha	Text Types
1.	Yugi vaidhya chinthamani என்னவே வாத மது எண்பதாகும்	80
2.	Agasthiyar- 2000	80
3.	Agasthiyar Gurunaadi – 235	84
4.	Agasthiyar Rathina Surukkam – 500	84
5.	Noi Nadal and Noi Mudhal Nadal Part – Ii	85
6.	Theraiyar vaagadam	81
7.	Sarabenthirar Vaidhya muraigal (Vatha Roga Sikitchai)	80
8.	Thanvanthiri Vaidhiyam	80
9.	Jeeva Rakshamirdham	80

2. Classification of Thalai Nokkadu:

There are ten types of thalai nokkadu.

1. வாதத்தலை நோக்காடு
2. பித்தத்தலை நோக்காடு
3. கபத்தலை நோக்காடு
4. சன்னி வாதத்தலை நோக்காடு
5. இரத்தப் பித்தத்தலை நோக்காடு
6. கிருமிக் கந்தத்தலை நோக்காடு
7. சூரியாவர்த்தம்
8. சந்திராவர்த்தம்
9. கர்ணாவர்த்தம்
10. ஒரு தலையினா வர்த்தம்

“தானென்ற கசப்பொடு துவர்ப்பு றைப்பு

சாதகமாய் மிஞ்சுகிலுஞ் சமைத்த வண்ணம்

ஆனென்ற வாறினது பொசித்த லாலும்

ஆகாயத் தேறலது குடித்த லாலும்

பானென்ற பகலுறக்க மிரா விழிப்பு

பட்டினியே மிகவுறுதல் பலா மெய்தல்

தேனென்ற மொழியார் யேற் சிந்தை யாதல்

சீக்கிரமாய் வாதமது செனிக்குந்தானே”

- High intake of food having bitter, Astringent, Pungent taste.
- Intake of food that was prepared on previous day.
- Drinking rain water, Alcohol intake and sleeping in the day.
- Starvation, Lifting heavy weight and increased sexual thinkings

In “Theraiyar Vagadam”

“ வெய்யிலில் நடக்கையாலும் மிகத்தண்ணீர் குடிக்கையாலும்

சேய்யிழை மகளினரை சேர்ந்தனு பவிக்கையாலும்

பையினே உண்மையாலும் பாகற்காய் தின்னையாலும்

தையலே வாதரோகம் சனிக்கு மென்றறிந்து கொள்ளே”

Excessive walking in hot sun, excessive intake of water, over sexual indulgence, intake of bitter guard etc. May play a role in disturbing the normal function of vatham.

According to Pararasasekaram:

“ தொழில் பெறு கைப்புக் கர்த்தல் துவர்த்தல் விஞ்சுகினுஞ் சோறும் ”

பழையதாம் வரகு மற்றைப் பைந்தினை அருந்தினாலும்

எழில் பெறப் பகலு றங்கி இரவினி லுறங்காதாலும்

மழை நிகச் சூழலினாளே வாதங் கோபிக்குங்கானே”

“காணவே மிகவுண்டாலுங் கருது பட்டினி விட்டாலும்

மாணை யார்கண் மோக மறக்கினு மிகந்திட்டாலும்

ஆணவ மலங்க டம்மை யங்ஙனே விடாததாலும்

வானுதன் மடநல் லாளே வாதங்கோபிக்குங் காணே ”

- Intake of food having a taste of bitter, Astringent and Pungent.
- Intake of food that was prepared on previous day.
- Varagu, thinai arunthal.
- Sleep in the day, No sleep in the night
- Intake of high amount of food, Starvation and Increased sexual activities.
- Aanavam Udaimai, Fear, Anger and Sadness

The common aetiology describe by the authors **Yugi Vaidya Chindamani, Theraiyar vagadam, Pararasasekaram** are as follows

- Not taking food at proper time, Decreased intake of sour and Ghee diet.
- High intake of foods having bitter, astringent and pungent .
- Intake of food that was prepared on previous day
- Sleep in the day.
- Increased sexual activities
- Starvation, Intake of rain water.

வாத நோய்களின் பொது குறிகுணங்கள்:

The commonest symptoms and signs of vatha disease have been described in several siddha literatures

I. In Agasthiyar Vaidhya Kavium 1500 ல்

“காண்பா வாதம் மீறல் கால் கைகள் பெருந்து நோகும்

பூண்பா குடல் புரட்டும் மலசலம் பொருமிக்கட்டும்

ஊண்பா குளிர்நங் காய்ச்சல் உடம்பெல்லாம் குத்தும் வாயு

வீண்பா குத மினுக்கும் வேர்வையும் வேர்க்குந் தானே.

1. Pain in the joints of upper and lower limbs
2. Intestinal problems
3. Stagnation of faeces and urine
4. Chillness, Fever
5. Pricking pain all over the body
6. Constriction of Rectum, Sweating

II. In Thiru Moolar vaidhya saram

“வாயுவினாலே மலசலங் கட்டிடும்

வாயுவினாலே வாங்கிடும் மேல்மூச்சு

வாயுவினாலே மலரும் இரணங்கள்

வாயுவினாலே வரும் ருத்திர சோகம்”

1. Stagnation of faeces and urine
2. Dyspnoea
3. Ulcers and Heart disease

“அறிய இம்முன்றின் தாண்மை சொன்னார் நந்தி

எறிய நல்வாத மெறிக்குங் குணங்கேளு

குறியெனக் கை கால் குளைச்சு விலாச்சந்து

பதியென நொந்துடற் பச்சை புண்ணாகுமே”

1. Pain in the wrist joint
2. Ankle joint
3. Costo vertebral joint and ulcer develops.

“புண்ணாய் வலிக்கும் பொருமுங் குடலோடித்

தண்ணா மலத்தைத் தம்பிக்கும் போக்காது

ஒண்ணான ஆசனம் உறவே சுருக்கிடும்

பண்ணார் குளிர் சீதம் பகுத்திடும் வாதமே”

1. Like ulcer pain
2. Intestinal upset
3. Non evacuation of faeces, so stagnation of faeces
4. Chillness

III. In Theraiyar vagadam:

“வாதவீறு அன்னமிறங்காது கடுப்புண்டாய் வண்ணமுண்டமாம்
மோது கட்டுரோகம் சுரமுண்டா மிருமலுமா மறங்காதென்றும்

(.....)

1. Loss of appetite
2. Pain
3. Colouration
4. Fever and Cough.

II. In Agasthiyar 2000

“வாதத்தின் குணமே தென்னில் மயக்குந்தியங்கும் மலர் சிவக்கும்
பாதங்குளிர்ந்து சருவாங்கம் பற்றி நடக்குமுகங் கடுக்குஞ்
சீதத்துடனே வயி'று புண்ணாஞ் சிரிப்பித்ததுந் தெறி மூச்சாம்
போதத் தண்ணீர்தான் வாங்கும் புகழும் பஞ்சகுணமாடம”

1. Giddiness
2. Chillness of feet
3. Vatham increased all over the body
4. Gastric ulcer and Dyspnoea

SANTHIRA VARTHAM

Vatha Rogam has so many classifications. Santhira Vartham is one of the vatha disease.

Signs and symptoms of Santhira Vartham:

The dissertation subject SanthiraVartham taken from the Yugi Vaithiya Sinthamani

சுரபமாயும் பெறுகும் வலியு மாகித்
தும்மியே மூக்கடைத்துச் சுகந்த மற்று
புருவமே மிகவலித்து நெற்றி யோடு
புண்போலக் குடைந்திட்டுப் புளகமாகி
அருபமாய ந்தியின் போது தோன்றி
அர்த்தராத் திரிமட்டு மலைச்சலாகி
சுரபமாய் விடிகிறதே ரத்திற் றானுஞ்
சாய்குமே மாசந்திரா வர்த்த மாமே”.

பாடல் 333

உடம்பெங்கும் வலி உண்டாகி, தும்மல், மூக்கடைந்து, மனம் இல்லாமல், புருவம் மிக வலித்து நெற்றியில் புண்போல் குடைந்து அந்தியில் தோன்றி அர்த்தராத்திரி வரை இருந்து விடியும் போதும் வலி போய்விடும். இவை அனைத்தும் சந்திராவர்த்ததின் குறிகுணங்கள் ஆகும்.

1. Body pain
2. Sneezing
3. Nasal block
4. Anosmia
5. Pain in forehead
6. Pain starts with the evening and disappears at early morning.

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According to Vathanoi maruthuvam:

நோய் குறிகுணம்:

மலச்சிக்கல் செய்யும் ஒத்துக்கொள்ளா உணவு, பகல் உறக்கம், சதா படுக்கை, சதா அமர்ந்திருத்தல், மல, சல, மடக்கல் இவற்றால் மேல் வயிற்றை பற்றி அபானம் இருக்கும்.

இந்த வாயுவானது சிலேத்துமத்தில் கூடி தேகம் எங்கும் வலி உண்டாக்கும். அப்போது தும்மல், நாசி அடைப்பு புருவம் நெற்றி முதலிய இடங்களில் புண் போல் நோகும்.

டாக்டர் S. சிதம்பரதானுப் பிள்ளை

According to Pararasasegaram:

சந்திரவாதம் (படுஞாயிறு)

பழகிய சந்திரவாதம் பயன்பெற முன்பு சொன்ன

அழகிய குணமு முண்டா யந்தியம் போது தோன்றி

எழுமுத யத்தே துரு மிக்கமுகக் கனியுந் தேனும்

குழலுமா மொழிதல் லாளே கூறினோங் கண்டு கொள்ளே.

நான்காம் பாகம்

ஐ.பொன்னையா.

According to vathanoi nithanam 800

பந்தியொடு சந்திரவாதமது சொல்லுவேன் பார் தேகம் தரித்து நோகும்

புகரும் இரு புருவமும் நெற்றி இரு கன்னமும் வலிகுத்து புண்போல் நோரும்

கந்தமது மாறியே நாசியது அடைக்குமே கரும் தும்மல் அடுத்தடுத்து

கதிரவன் அணைகின்ற வேளையது தோன்றியே கண்ணும் அழலுமீதும்

சிந்தையோடு பாதிரா வேளையது தன்னிலே சிறிதாய் குறைந்துவருமே

சிறந்ததை காலமதில் மாறுமிது முற்றமே சியலாக மாலை தூங்கும்

தந்து முகனுக்கிளைய கைந்தனுரையின்படி தரு கும்பமுனி வாக்கியம்

தப்பாதுலகறிய தமிழாக தான் தரணி தனிலுரைத்தேன் உண்மையுடனே

பாடல் 675

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According to Theraiyar vagadam :

சந்திர வாதமுடம்பு குளிர்ந் தெழுந்தே நடுக்குஞ் சீதவாய்வாம்

முந்திய குத்திசிவாஞ் சந்துகள் தோறுங் குடைந்து

வந்திய தொந்த வாதம் நரம்புகளெல்லா மிசித்து வலம் விடாது

அந்து அவ்வாகு வாதம் வீக்கமுண்டா முடலிற்றிமிருண்டாமே.

பாடல் எண் 67

சந்திர வாதநோயில் உடம்பு குளிர்ந்து நடுக்ககம் காணும்

சீதவாய்வினில் முதலில் சூதம் வலி கண்டு இசிவும் காணும், என்புகள் முட்டுகள் தோறும் குடைச்சலும் முட்டுகளில் வீக்கமும் காணும், தொந்த வாதத்தில் நரம்புகளில் இசிவு காணும், மலம் வெளியாகாது. அவ்வாறு வாத நோயில் உடலில் வீக்கம் காணும் தொடு உணர்வு இல்லாமல் போகும்.

According to sikicharathinam:

சந்திரா வர்த்தம் (Hemicrania or Moon pain)

இது வாயுவானது சிலேத்துமத்தின் கூடி தேகமாதியெங்கும் வலியுண்டாகும். அப்போது தும்மல், நாசியடைப்பு, புருவம், நெற்றி முதலில் இடங்களில் புண்போல் நோதல் ஆக இக்குணம் உடைத்தாயிருந்து சூரியோ தயமாக நோய் சாந்தப்படும்.

நோய் எண் 77

வாதநோய் மருத்துவம், பரராச சேகரம், தேரையர்வாகடம், வாதநோய் நிதானம் 800, சிகிச்சர் இரத்தின தீபம் ஆகிய நூல்களில் கூறியிருக்கும் சந்திராவர்த்ததின் குறிகுணங்கள், யூகி முனி நூலில் கூறும் குறிகுணங்களும் ஒன்றாகவே உள்ளது.

**THEORETICAL VIEW OF THE
DISSERTATION TOPIC**

SIDDHA PHYSIOLOGY

THEORETICAL VIEW OF THE DISSERTATION TOPIC

SIDDHA PHYSIOLOGY

Physiology:

The science of the functions of living organisms and its components, and the physical and chemical factors and processes involved is known as physiology.

உயிர்த் தோற்றம் மற்றும் உடல் தோற்றம்

“ உருப்பொருள் தாங்குமுடலுமுயிரும் ”

உடற்காகார மொன் பஞ்சபுதப்

பஞ்சீகரணப் பாண்மையா மெனவும்

உயிர்க் காதர முயிர்த்தா தெனவும்

முப்பிரிவாகி முக்குணமணுகி

உடலையு முயிரையு மோம்பிக் காத்து

வருமென முது மறை வகுக்குந் துணிவே”

உருப்பொருளாகிய கரு உடமையைத் தாங்குவது இந்த உடலும் உயிருமேயாகும். சரீரத்திற்கு அடிப்படை ஐம்பெரும் பூதங்கள் பஞ்சீகரணப்படும் தன்மையேயாகும். ஊயிர் உடலில் தங்கி இருப்பதற்கு ஆதாரம் “உயிர்தாது” அல்லது “சீவதாது” ஆகும். இந்த உயிர்தாது மூன்று பிரிவாக மூன்று குணங்களை (சத்துவ, ரசோ , தமோ) பெற்று சரீரத்தையும் சீவனையும் வளர்த்து காப்பாற்றி வருவதாக வேதநூல்கள் கூறுகின்றன.

ஒவ்வொரு அணுவிலும் 96 தத்துவங்கள் அடங்கி இருக்கின்றது. இந்த தத்துவங்கள் அருவருப் பொருளாகிய அணுவினுள் கிடப்பதைக் கண்ணால் காண முடியாது எனினும் 96 தத்துவங்களைக் கொண்ட அணு பல அணுக்களாகிய உடலில் அமையும் போது உருவத்திற்கேற்ப பெரிதாகி ஒன்றோடொன்று பின்னி இணைந்து செயல்படுன்றன.

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The Siddha physiology involves the

Thathuvas - Ninty six basic elements

such as

Udal kattukkal - Seven somatic compounds

Vegams	-	Fourteen reflexial functions
Suvaigal	-	six tastes
Udar thee	-	Four body fire
Udal vanmai etc.	-	Three immunities

The living and non living things which are present both in the microcosm has ninety six basic elements. These elements are responsible for the creation, protection and destruction of life which is mediated through the “Pancha poothic and mukkuttra”

Theory.

Pootham	- 5	Kosam	- 5
Pori	- 5	Aatharam	- 6
Pulan	- 5	Mandalam	- 3
Kanmendhriyam	- 5	Malam	- 3
Gnanendhriyam	- 5	Dosham	- 3
Karanam	- 4	Edanai	- 3
Arivu	- 1	Gunam	- 3
Naadi	- 10	Vinai	- 2
Vaayu	- 10	Raagam	- 8
Aasayam	- 5	Avathai	- 5

Pancha Pootham – Five basic elements

The fundamental principle of siddha science involves the five basic elements namely.

1. Mann - Earth

2. Neer - Water
3. Thee - Fire
4. Vayu - Air
5. Aagayam - Ether

As per the siddha concepts, not only the universe but also the human body is formed by the above mentioned five “Poothas”

That is why “Sattamuni” explains as

“அண்டத்தி லுள்ளதே பிண்டம்

பிண்டத்தி லுள்ளதே அண்டம்”

‘அண்டமும் பிண்டமுமொன்றே

அறிந்துதான் பார்க்கும் போது

Moreover any changes that occur in the universe has its impact also in the body.

Characters of Pancha Pootham:-

1. Mann-Earth

All the organic living bodies and non organic substances are created by the earth. Bones, muscles and tissues represent earth in body.

2. Neer-water

It combines all the things serum, lymph, saliva etc, represent water in the body.

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3. Thee- Fire

It gives colour and brightness to the thing. Digestion and circulation represent fire in the body.

4. Vayu-air

All the spaces are filled by this pootham. Respiration and Nervous system represent air in the body.

5. Agayam-Ether

It lodges the other four poothams.

According to “Sathaga Naadi Nool” the pancha poothic parts of human body are explained as follows:

“ பார்ப்பா பூதமைந்து மண், நீர் தேயு
பரிவாயு வாகாய மைந்தினாலே
சேர்ப்பா சடமாச்சு மண்ணின் கூறு
சேறிமயிர் தோல் என்றைச்சி நரம்போடைந்தாகும்
நேர்ப்பா அப்புவின் கூறுதிரமச்சை
நீர் மூளை சுக்கில மோடைந்தாகும்
கார்ப்பா தேயு கூறு பயமாங்காரம்
கடும் சோம்பல் நித்தரை மைதுன களஞ்சே
அஞ்சான வாயுவின் கூறிருத்தல் லோடல்
அவை நடத்தல் கிடத்தலுடன் நிறுலஞ்சாம்
அஞ்சாகு மாகாயக் கூறு காமம்
அதிகுரோத லோப மத மோக மஞ்சாம்”

Sl.No	Pancha Pootham	Panchapootha and human constitutions
1.	Mann	It acts on Hair Skin Bone, Muscle, Nerve
2.	Neer	It acts on Blood, Bone Marrow, Body fluids, Brain,

		Sperm
3.	Thee	Fearness, Anger, Idleness, Sleeping, Sexual intercourse
4.	Vayu	Sitting, Standing, Walking, Running, Lying
5.	Aagayam	Sex, haterness, Stringyness, Lust, Pride

Gnanenthiriyam (or) Pori-Five sense organs

1. Ear - It stands as space
2. Skin - It stands as air
3. Eye - It stands as fire
4. Tongue - It stands as water
5. Nose - It stands as earth.

Pulan-Functions of the five sense organs

1. Hearing
2. Touch
3. Vision
4. Taste
5. Smell

Kanmenthiriyam – Five motor organs of action

Sl. No.	Pancha Pootham	Responsible functions
1.	Kai- Upper limb	Flexion, extension
2.	Kaal-Lower limb	Walking
3.	Vaai- Mouth	Speaking
4.	Eruvai-Anal orifice	Defecation
5.	Karuvai – Reproductive orifice	Reproduction

Panchabootam (Basic Elements)	Pori (Organ)	Pulan (Sens)	Kanmendhiriy am(Organs of action)	Gnanendhirim
Mann	Nose	Kanthm	Karuvaai	Anantham
Neer	Mouth	Rasam	ERuvaai	Visarkam
Thee	Eye	Rubam	Kai	Thanam
Vayu	\skin	Sparism	Kaal	Kamanam
Aakayam	Ear	Sapthm	Vaai	Vasaam

These porigal and pulangal are important in the diagnosis of diseases.

Anthakaranam – 4 Intellectual faculties

1. Manam - Mind (or) the thinking faculty
2. Puththi - Knowledge, the power of discrimination
3. Agangaram - Achievement faculty
4. Siddham - The deciding faculty

Arivu –I(WISDOM)

To analysis Nalvinai, Theevinai

Dhasa naadi - 10 nerves

Naadi's are subdivided into 10 kinds. These are

1. **Idakalai** - From right big toe runs upward and turns to opposite side at the level of moolatharam to the left nostril. It controls the left side of the human body.
2. **Pinkalai** - From left big toe runs upward and turns to opposite side at the level of moolatharam to the right nostril. It controls the right side of the human body.
3. **Suzhumunai** - From moolatharam runs upwards between the Idakalai and pinkalai mid of the eyebrow above the nose.
4. **Purudan** - It acts on the nerve of the right eye.
5. **Kaanthari** - It acts on the nerve of the left eye.
6. **Aththi** - It acts on the nerve of right ear.
7. **Alambudai** - It acts on the nerve of left ear.
8. **Sikuvai** - It acts on the nerve of tongue.
9. **Sanguni** - It acts on the nerve of reproductive organs.
10. **Gugu** - It acts on the nerve of rectum.

Uyir thaathukkal – Three humors

The physiological functions of the body are mediated by this three humors which are made up of the five elements. These three functional factors maintain the integrity of the human body. According to different functions and sites each element is divided as follows.

1. Vatham - Ten types
2. Pitham - Five types
3. Kabam - Five types

According to the following verses:

வந்த கலை மூன்றில் வாய்பாமபானனுடன்
தந்த பிராணன் சமானனும் - சந்ததுறைக்
கூட்டுறவின் ரேசித்தல் கூறு வாதம் பித்தம்
நாட்டுங் கபமேயாம் நாடு

Vatham : Idakalai + Abanan
Pitham : Pinkalai + Pranan
Kabam : Suzhumunai + Samanan

Vatha, Pitha, kaba humours will be in the proportion of 1: ½ :¼

Uyir thathukkal function as

வாதமாய் படைத்து - Creation
பித்த வன்னியாய்க் காத்து - Protection
சேட்ப சீதமாய்த் துடைத்து - Destruction

Characters	Vatha constitution	Pitha Constitution	Kaba Constitution
Build and Appearance	Lean and lanky, lengthy built	Moderate build	Short, uniform thickness, Broad build.
Skin -colour & Complexion	Dark and light admixed complexion. Dry skin	Red and Yellow. Wrinkles and shiny	Yellowish white. Fleshy, flabby and Shiny
Bones and Joints	Cracking sound of	Thin covering of Bones and joints by soft tissue	Plump joints and limbs
Hair and eyelashes	Split hair and dark eyelashes	Sparse hair with Graying	Dark and Dense hair
Appearance of Eyes	Lengthy Eyes	Easily suffering eyes due to heat and alcohol	Sparkling eyes
Vision	Long sight	Short sight	Clear sight
Voice	Clear and high pitched voice	Clear and medium pitched voice	Husky and unclear. Low pitched voice
Tongue	Lengthy, sharp ended tongue with black patches	Medium and yellow or red coloured	Blunt, thick tongue with white coated
Appetite	Scant appetite for cold food items	Increased appetite and intolerance to hunger, thirst, heat	Less appetite and tolerant to hunger, thirst, heat
Taste	Desire for pungent, salt, sweet, heat	Desire for bitter, sweet, astringent	Desire for sour, bitter, astringent
Sleep	Sleeping with half closed eyes	Medium sleep	Deep sleep
Dreams	Flying dreams around the hills, sky. Walking around the dense forest.	Seeing like yellow colour flowers, fire, sun, thunder.	Seeing the cooling places like lotus in the pond
Strength	Poor strength	Medium strength	Immense strength
Character	Unstable mind, change of mood according to situation	Medium, discipline, Good habits, Eagerness	Stable mind Discipline and increased knowledge

The term vatham denotes vayu, pain, dryness and flatulence. Vatham is responsible for respiration and control of all movements.

Location - Abanan, faeces, Idakalai, Pelvic bone, spermatic cord, skin, nerves, joints, hairs and muscles.

Character - It governs the other two basic elements and responsible for all physical process in general. For this reason, disturbance in vatha tend to have more severe implication than the other two humors and other affect the mind as well as entire physical body and also responsible for respiration.

Functions - Pain in the whole body, twitching, pricking pain, inflammation, reddish complexion, roughness of skin, hardness of limbs, astringent sense of taste in the mouth, constipation, oliguria, blackish discolouration of skin, stool, urine and muddy conjunctiva.

Qualities			Opposite Qualities		
1. Unctuous	-	பசுமை	1. Dry	-	வறட்சி
2. Hot	-	அக்னி	2. Cold	-	குளிர்ச்சி
3. Solid	-	கட்டி	3. Light	-	இலேக
4. Soft	-	மிருது	4. Rough	-	கடினம்
5. Stable	-	ஸ்திரம்	5. Unstable	-	அசைத்தல்
6. Heavy	-	பளுவு	6. Subtle	-	அனுத்துவம்

Types of Vathams

Based on functions and locations it is classified into 10 types.

1. Uyirkaal – Praanan

Praanan means the forward or primary airforce. It is mainly responsible for respiration and it is necessary for proper digestion and utilization of the food material. It controls the mind and five sensory organs. It is located in the brain.

2. Keel nokunkaal - Abaanan

Tendency to move downwards, responsible for defaecation, micturition, ejection of sperm and ova.

3. Paravu Kaal – Viyaanan

Viyaanan means the diffusive air. It is responsible for the nutrition and movement of all movable and immovable parts of the body. It causes the feeling of sensation. It carries the ingested food extracts to the various parts of the body. It is centered in the heart.

4. Melnukkukkaal – Udhaanan

Responsible for all kinds of upward motion such as nausea, vomiting and eructation. It is situated in the midscale throat.

5. Samaanan

It responsible for digestion and it regulates all other four main vital air forces.

6. Naagan

It responsible for opening and closing of the eye, intelligence of an individual.

7. Koorman

Responsible for vision, lacrimation and yawning.

8. Kirugaran

It is situated in the tongue, salivary and nasal secretions.

Induce appetite, salivation, sneezing, concentration of mind and responsible for taste sense.

9. Devathathan

It causes laziness, ocular movements and anger.

Praana vayu, bladder, moolagni, Heart, Umbilical region, abdomen sweating, saliva, blood, eyes and skin.

Characters:

It governs digestion, heat, visual perception, hunger, thirst, luster, complexion, understanding, intelligence courage, softness of the body.

Functions:

Acidity, burning sensation in the throat, stomach, yellowish discolouration of skin, eye, urine, sense of defaecation, profuse sweating, dizziness etc.

Qualities			Opposite Qualities		
1. Hot	-	அக்னி	1. Cold	-	குளிர்ச்சி
2. Acute	-	குருரம்	2. Harmless	-	சாந்தம்
3. Liquid	-	சலரூபம்	3. Solid	-	கட்டி
4. Sour	-	புளிப்பு	4. Sweet	-	இனிப்பு
5. Pungent	-	காரம்	5. Bitter	-	கசப்பு

Classification of Pitham:

Pitham is the thermal life force of the body. It is subdivided into four types.

1. Analam

It controls the appetite and help in digestion.

2. Ranjaka Pitham

It is responsible for the colour and contents of the blood. It is also responsible for the formation of tissues.

3. Saathaga Pitham

It controls the whole body and is responsible for fulfilling purpose.

4. Alosagam

It is located in the eyes and responsible for visual Perception.

5. Pirasagam

It gives complexion to the skin.

IYAM

Kabam is life representation of Appu and Mann pootham. It is responsible for maintenance of body structure and also responsible for the defence mechanism.

Location:

Samanan. Suzhumunai, Vinthu, head, fat, bone marrow, blood, nose, colon, joints, chest, tongue etc.

Characters:

It governs stability, lubrication, holding together of the joints, ability to cope with hunger, thirst, worry, heat ect.

Functions:

Fair complexion,itching, dullness, cold, heaviness, loss of sensation, sweetness in mouth,indigestion etc.

Qualities of Kabam			Opposite qualities		
1. Unetuous	-	ஈரம்	1. Dry	-	வறட்சி
2. Swee	-	இனிப்பு	2. Pungent	-	காரம்
3. Heavy	-	பளுவு	3. Light	-	லேசு
4. Cold	-	குளிர்ச்சி	4. Hot	-	வெப்பம்
5. Smooth	-	மிருது	5. Rough	-	கடினம்
6. Stable	-	அசைவின்மை	6. Mobile	-	அசைத்தல்
7. Viscid	-	வழுவுழுப்பு	7. Sandy	-	கரகரப்பு

Classifications of Kabam

According to its location and functions it is decribed in three forms.

1. Avalambagam

It lies in the respiratory organs and controls the heart and other four forms of kabam.

2. Kilethagam

It is present in the stomach. It makes the food wet and helps for digestion.

3. Pothagam

It is present in tongue and is responsible for the sense of taste.

4. Tharpagam

It is present in the head and is responsible for the coolness of the eyes.

5. Santhigam

Located in joints and responsible for free movements of the joints.

Kosam – Five Major System:

1. Annamayakosam - Made up of seven udal thathukkal
2. Piraanamaya Kosam - Combination of piranan and kanmendhiriyam
3. Manomayakosam - Conjugation of manam and gnanendhiriyam.
4. Vingnaanamaya Kosam - Combination of putthi and kanmendhiriyam
5. Anandhamaya Kosam - Conjugation of pranam and suzhuthi.

Aasayam- Five visceral cavities:

1. Amarvasayam - It lodges the ingested food.
2. Pahir vasayam - The digestion of food separation and absorption of saaram from the digested food.
3. Mala vasayam - Responsible for the expulsion of undigested food parts and flatus.
4. Sala vasayam - Responsible for the formation and excretion of urine
5. Sukkila vasayam - Place for the formation and growth of the sperm and ova.

Aatharam – Six Stations of the Soul :

- 1 Moolatharam - Pranam arises from here. It lies in between anus and genitalia as kundalini
- 2 Swathitanam - It lies 2 inches above the moolatharam. It is the place of earth.

- 3 Manipooragam - It lies 8 inches above the swathintanam. It is the

- place of water.
- 4 Anagatham - It lies 10 inches above the manipooragam . It is the place of fire.
- 5 Vishukti - It lies 10 inches above the Anagatham. It is the place of air.
- 6 Aackinai - It lies in between the two eyebrows. It is the place of Space.

உடற்கட்டிகள் - Seven Somatic Components

There are seven physical constituents situated in the body.

“இரசம் உதிரம் இறைச்சி தோல் மேதை
மருவிய வத்தி வாழும் பொடு மச்சை
பரவிய சுக்கிலம் பாழாம் உபாதி
உருபம் லானுடல் ஒன்றெனலாமே”.

1. Saram – Chyle

It contains nutrients from digested food and nourishes all the tissues, organs and systems. It enriches the blood.

2. Senneer – Blood

It governs oxygenation in all tissues in vital organs. It is responsible for the nourishment, strength, vigour and valour of the body.

14 வேகங்கள் Urges - Reflexial functions

Reflex

An involuntary response to stimulus. Reflexes are specific and predictable and are usually purposeful and adoptive. They depend upon an intact neural pathway between point of stimulation and responding organ. Fourteen kinds of reflexial functions are explained in the “Siddha Maruthuvanka Surukkam”.

They are quoted as follows

பகிர்ந்திட அவற்றைக் கேளாய்
விதித்திடும் வாதத் தும்மல்
மேவுநீர் மலங் கொட்டாவி
கசித்திடு பசிநீர் வேட்கை
காசமோ டிளைப்பு நித்திரை
மதித்திடு வாந்தி கண்ணீர்
வளர் சுக்கிலஞ் சுவாசமாமே”

These reflexes are essential for the normal functions of human body.

- | | | |
|----------------------------|---|----------------------|
| 1. Vatham | - | Abanavayu |
| 2. Thummam | - | Sneezing |
| 3. Siruneer | - | (Urine) |
| 4. Malam | - | Stool |
| 5. Kottavi | - | Yawning |
| 6. Pasi | - | Hungry |
| 7. Neervetgai | - | Thirsty |
| 8. Kasam | - | Erupal |
| 9. Elaippu | - | Fatigue / Exhaustion |
| 10. Nithirai | - | Sleep |
| 11. Vaanthi | - | Vomit |
| 12. Kanneer | - | Tear |
| 13. Sukkilam or Suronitham | | |
| 14. Suvasam | - | Respiration |

Suvai is the peculiar sensation caused by the contact of soluble substances with the tongue. The sense effected by the tongue, the gustatory and other nerves and the digestive center. Combination of two poothas constitute a Suvai – Taste.

According to “Maruthuvathani Padal” the formation of each suvai is quoted as follows:-

“ மண்ணுடனே புனல் நீர்க்கால் முறையாகச் சேர்ந்திட்டால்
 வருமா மினிப்புத்
 திண்ணமிலம் துவர்ப்புரசம் சதா கதியோடார்தீ விண்
 மிடமா முறைப்பும்
 எண்ணறிய கசப்பு முண்டாம் தண்ணீரில் தணலிணைப்பால்
 எழுமா முவர்ப்பு
 உண்ணரிய அறுசுவையின் சிற்பிபடுதெனுங் குருசித்தர்
 உரைத்த மறையே”.

Each suvai has two poothams

- | | | | |
|---------------|--------|---|---------|
| 1. Sweet | - Mann | + | Neer |
| 2. Sour | - Mann | + | Thee |
| 3. Salt | - Neer | + | Thee |
| 4. Bitter | - Vayu | + | Aagayam |
| 5. Pungent | - Vayu | + | Thee |
| 6. Astringent | - Mann | + | Vayu |

உடல் வன்மை - Three types of immunity:

The udal vanmai is divided into three types. These are,

- | | | |
|-----------------|---|--|
| Eyarkai Vamai | - | It is in herited vitality. |
| Kalavanmai | - | Seasonal immunity |
| Seyarkai Vanmai | - | Improvement of vitality obtained by good habits,
physical exercise and proper diet. |

Developing the immunity and stamina according to the age of the preson, season and environment.

Four Body Fires:

The normal digestive fire is called sadarakini and it is a combination of samanavayu, analapitham and kilethega kabam.

1. Samakini:

When the sadarakini is normal with the proper balance of the three constituent of it, it is called samakini. The balanced diet of an individual is properly digested time.

2. Mandhakini:

An increased kilethagam with the deficiency of anala pitham caused condition in which food is poorly digested and the process of digestion takes longer time.

3. Deekshakini:

An increased anala pitham with the deficiency of kilethagam leads to this condition, causing an excessive digestive fire burning larger quantum of food in a lesser duration of time.

4. Vishamakini:

The samana vayu is mostly affected there by causing irregular digestion and may make the food poisonous.

SIDDHA PATHOLOGY

SIDDHA PATHOLOGY

Siddha pathology deals with Mukkuttram and Piniyarimuraimai,

Mukkuttram:

The Vatha, Pitha and Kabam humours will be in the Proportion of 1: ½:¼. The fall or rise in the above proportion of uyri thathukkal are disturbed. This situation is called “kuttram “ or “ thodam” which leads to various disease conditions.

The changes of the uyir thathukkal caused by,

1. Diet variations.
2. Environmental Changes,
 - i) Seasonal Variation of humours
 - ii) Regional variation of humours
3. Alteration in the udal kattukkal
4. Self suppression of fourteen reflexes.

The self exaggeration and decreased feature of the three humours.

Vatham

Increased Features:

Blockish discolouration, affinity on hot foods, tremors, distended abdomen, prinking pain, joint pain, dislocation of joints, nerve weakness, constipation weakness, giddiness etc.

Decreased Features:

Body pain, diminished activity, syncope, decreased intellectual quotient, increased kaba condition.

Pitham

Increased Features:

Yellowish discolouration of conjunctiva, skin, urine and faeces, polyphagia, polydipsia, burning sensation all over the body, hunger and sleeplessness.

Decreased Features:

Cough , dyspnoea, excessive sleep, decreased appetite, symptoms associated with defective growth of kabam and cold pallor.

Kabam

Increased Features:

Diminished activity, excessive salivation, heaviness, whiteness, cough,dyspnoea, excessive sleep and loss of appetite.

Decreased Features:

Giddiness, dryness of the joints, prominence of bones , produse sweating palpitation of the heart, drycough and lightness.

Diet Variation

Our health is directly related to the food, food is need for the proper functioning of all parts of the body. Food is formed on the basis of Aru Suvaigal. So any alteration (high or low) in the particular suvai leads to diseases.

“புளிதுவர் விஞ்சுங் கறியாற் பூரிக்கும் வாதம்
ஒளி யுவர் கைப்பேறில் பித்துச் சீறும் - கிளிமொழியே
கார்ப்பிணிப்பு விஞ்சிற் கபம்விஞ்சுஞ் சாட்டிரதச்
சேரப் புணர் நோயணுகாதே”.

Sour, astrigent increases Vatham

Salt and bitter increases Pitham

Pungent and sweet increases Kabam.

Environmental Variations

1. Regional Changes of Humours

The place where the people are living is also responsible for a disease

(Thinai)

1. Kurinji - kabam
2. Mullai - Vatham and pitha diseases Predominates.

3. Marutham - All the thosas will be maintained in normal level.

4. Naithal - Vatha disease with increased body mass, liver enlargement and flatulence.

2. Seasonal Changes of Humours

Sl.No.	Kalam	Kuttram	State of Kuttram
1.	Kar kalam(ஆவணி- புரட்டாசி)	Vatham Pitham	Vettrunilai Valarchi Thannilai Valarchi
2.	Koothir kalam (ஐப்பசி-கார்த்திகை)	Vatham Pitham	Thannilai Valarchi Vettrunilai Valarchi
3.	Koothir kalam (ஐப்பசி – கார்த்திகை)	Vatham Pitham	Thannilai Valarchi Vettrunilai Valarchi
4.	Munpani kalam (மார்கழி –தை)	Pitham	Thannilai Valarchi
5.	Muthuvenil kalam (ஆனி –ஆடி)	Vatham Kabam	Thannilai Valarchi Thannilai Adaithal
6.	Pinpani kalam (மாசி –பங்குனி)	Kabam	Thannilai Valarchi
7.	Elavenil kalam (சித்திரை வைகாசி)	Kabam	Vettrunilai Valarchi

The functional units namely the three humours are affected by various factors they immediately change the nature of the physical constituents of the body.

Sl. No.	Udal kattukkal	Decreased features	Increased features
1.	Saaram	Features identical to those in increased kabam occurs loss of appetite, salivation, depression etc.	Loss of weight, dryness of skin, diminished activities of sense organs, tiredness
2.	Senneer	Increased blood pressure, reddish eye, and skin, jaundice, haematuria, boils and tumours in different parts of the body, splenomegaly etc.	Tiredness, anaemia, dryness, lassitude.
3.	Oon	Extra growth around the neck, face, abdomen, thigh, genitalia etc.	Muscle wasting, lethargic sense organs.
4.	Kozhuppu	Identical features of increased oon, associated with dyspnoea, on exertion.	Loin pain, emaciation splenomegaly.
5.	Enbu	Excessive ossification and dentition	Joint pain, falling of teeth, nails associated with splitting of hairs and nails.
6.	Moolai	Heaviness of the body and eye, swollen interphalangeal joints, oliguria, non-healing ulcers.	Osteoporosis, Blurred vision.
7.	Sukkilam (or) Suronitham	Increased Sexual activity, urinary calculi etc.	Pain in the genitalia failure of reproduction

Effects on self suppression of :

Fourteen Vegams (Reflexes)

Reflexes are essential for the normal physiology when there is any self suppression to those reflexes, that will lead to the pathological state.

Sl.No.	Vegams	Diseases
1.	Vaatham	Heart disease, vatha gunmam, kudal vatham, body pain, oliguria, constipation, loss of appetite.
2.	Thummal	Head ache, defect of the special sensory organs and its activity, pain over the face, pain in the hip joint.
3.	Siruneer	Neer kattu, urethral ulcer, pain in the joints, pain in the penis, gas formation in the abdomen.
4.	Malam	Diarrhoea caused by increased abanan, head ache, weakness and its lead to many disease.
5.	Kottavi	Dullface, lassitude, loss of appetite , white discharge, urinary infection , loss of consciousness, abdominal pain.
6.	Pasi	All organs are affected , emaciation, soolainoi, syncope, joint pain.
7.	Neervetkai	All organs are affected , emaciation, soolainoi, syncope, joint pain.
8.	Kasam	Increased cough, bad breathing heart disease etc.
9.	Elaippu	Peptic ulcer , syncope, rigor, identical features of suppression of thummal.
10.	Nithirai	Heaviness of head , redness of the eye, deafness, confused speech and vatha related diseases.
11.	Vaanthi	Itching, anaemia, eye diseases, pitha related diseases, asthuma, fever and cough.
12.	Vizgineer	Heart diseases, upper respiratory disorders, eye disorders, wounds in the scalp and peptic ulcer.
13.	Sukkilam	Fever, neer kattu, pain in the upper and lower limbs, pain in all joints, spermotorrhoea and leucorrhoea.
14.	Suvassam	Cough, fever, epigastric pain , vettai noi.

ANATOMY OF NOSE
SIDDHA ASPECT

ANATOMY OF NOSE

SIDDHA ASPECT

மூக்கு

மூக்கு நாற்றப் புலனின் கருவியாகும். இப்புலன் சுவாசப் பைக்குள்ளே தூசு, கார்ப்பான வாயு முதலியவைகள் புகாதபடிக்குக் காவலாகவும், போசனத்தைத் தெரிவு செய்வதற்கு உதவியாகவும் நிற்கின்றது.

இப்புலனின் கருவிக்கு மூக்கு, நாசியறையென இரு பகுதிகளுண்டு.

மூக்கு தோற்றமான முற்பகுதியாகும். மூக்கு முக்கோண வடிவமாய் முகத்தின் நடுவில் மேலுதட்டுக்கு மிதக்கப் புடைத்துக் கீழ் நோக்கி இருக்கின்றது. மேற்பகுதி நெற்றியோடு பொருந்தியிருக்கும். கீழ் பகுதியாகிய அடியில் வட்டித்த துவாரங்கள் இரண்டு காணும். நாசித் துவாரங்களிரண்டும் ஒன்றிலிருந்தொன்று நடுவிற் பிரிக்கப்பட்டிருக்கின்றன. இத்துவாரங்களிலிருக்கும் மயிர்கள், தூசி, பூச்சி முதலிய அன்னிய பதார்த்தங்கள் காற்றுடன் உடல் செல்லாமற் காக்கும்.

மூக்கு, எலும்புகளாலும் முருந்துகளாலும் உண்டாகி வெளியில் தோலினாலும் உள்ளே சளிச் சவ்வினாலும் மூடப்பட்டு. இரத்த தசிரங்களும் நரம்புகளும் உடையதாயிருக்கிற உறுப்பாகும்.

எலும்புக் கட்டு

மூக்கின் மேற்பகுதி, இதிற் சேர்ந்த எலும்புகள் நாசி யென்புகளும், மேற்றாடையென்புகளின் நாசி விகங்களுமே. முருந்துப் பகுதியில் மேற் பக்கமுருந்துகள் இரண்டும் கீழ்ப்பக்க முருந்துகள் இரண்டும் நடுமுருந்து ஒன்றுமாக ஐந்து துண்டுகளுண்டு. மேற்பக்க முருந்துகள் நாசியென்பின் கீழ் விளிம்புகளுக்குக் கீழேயிருக்கும். இவைகளின் வடிவம் முக்கோணம், முன்னோரம் பின்னோரத்திலும் தடிப்பாய் நடுமுருந்துடனும், பின்னாரம் நாசி யென்புடனும், மேற்றாடையின் நாசி விகத்துடனும் தொடுக்கப்பட்டிருக்கும்.

கீழோரம் இழை நெசவாற் கீழ்ப்பக்க முருந்துடன் தொடுக்கப்பட்டிருக்கின்றது. கீழ்ப் பக்க முருந்துகள் மேற் பக்கமுருந்துகளுக்குக் கீழேயிருக்கும் மெல்லியதும் வளையக் கூடியதுமான இரு தகடுகளாம். அவை வளைந்து நாசி துவாரத்தின் அகப் பக்கம் புறப்பக்கம் இரண்டிற்கும்

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பங்காகின்றன. இதின் பிற்பகுதியிற் தனித்தனியான மூன்று நாலு முருந்துமுத் துண்டுகள் காணப்படும். இவை திலவ முருந்துகள் எனப்படும். பிற்பகுதி உரத்த சவ்வால் மேற்றாடையென்பின் நாசி முள்ளோடு தொடுக்கப்பட்டிருக்கும். இம்முருந்துகள் இரண்டும் கூடுவதால் மூக்கின் நுனியுண்டாகும்.

நடு முருந்தின் வடிவம் முக்கோணம் இதனோரங்கள் நடுப்பகுதியைப் பார்க்கத் தடிப்பாயிருக்கும். அதிக தடிப்பான முன்னோரம். நாசி யென்புகளுடனும் மேற் பக்க முருந்துகளின் முற்பகுதியுடனும் கீழ்ப்பக்க முருந்துகளின் அகப் பகுதியுடனுந் தொடுத்திருக்கும். இதின் பின்னோரம் பாஹுவென்பின் இலம்ப தகட்டோடும்இ கீழோரம் கூடக வென்போடும் மேற்றாடையென்பின் அண்ண விகங்களோடுஞ் சந்திக்கின்றன.

இம்முருந்துகளெல்லாம் ஒன்றுடனொன்றும், அடுக்கவிருக்கும் எலும்புகளோடும் பரிமுருந்து எனப்படும் உரத்த இழைச் சவ்வினாற் கட்டப்படுகின்றன. இச்சவ்வு முருந்துகளை அசைய இடங் கொடுக்கும்.

ஐம்பொறிகள்

நாசியின் பேசிகள்

தோலுக்கு அடுக்கவிருக்கும். அவை நாசிச, சிகரி, நாசி ஒட்ட மேற்றி, முன்பின் நாசிப் பட்சகிகள், நாசிப் பிரசாரி, நாசிச்சிறு பிரசாரி நாசியிறக்கி என்பவைகளே.

முக்கின் தண்டையும் பக்கங்களையும் முடுகிற தோல் மெல்லிது நுகைவாயொட்டியிருக்கின்றது. கொழுந்தையுஞ் சிறைகளையும் முடுகிற தோல் அதிகந் தடித்தது. நெருங்கியதாய் ஒட்டி இருக்கின்றது. இதில் அனேக நிணக்குதுவங்கள் இருக்கின்றன.

நாசியின் உட்பக்கத்தை முடுஞ் சளிச்சவ்வு வெளியிற் தோலுடனும் உள்ளே நாசியறையை முடுஞ் சவ்வோடும் தொடர்பாகும்.

மூக்குக்கு நாடிகள்

முக நாடி, ஒட்ட வோரநாடி, நயன நாடிஇ குவளைக் கீழ் நாடிகளிலிருந்து வருகின்றன.

மூக்கு நாளங்கள்

நயன முக நாளங்களிற் முடிகின்றன.

மூக்கு நரம்புகள்

முக நரம்பு, குவளைக் கீழ் நரம்பு, கபிக் கீழ் நரம்பின் கிளைகளும் நயன நரம்பினது நாசிக் கிளையின் ஓர் கூந்தலுமே.

நாசி அறைகள்

நாசி அறைகள் முகத்தின் நடுவில் முன்பின் நேருக்கு இருக்கின்றன. அவைகளின் முன் துவாரங்கள் முகத்திலும் பின் துவாரங்கள் தொண்டையிலும் முடியும்.

1. நெற்றி என்பு
2. சதுக என்பு
3. பாடர என்பு
4. மேல் தாடை என்பு

நாசியின் சளிச்சவ்வு

நாசியால் வரும் சளி நாசிக்கு உள்ளூறையாயிருக்கும் சளிச் சவ்விலிருந்தே வருகிறது. மூளையிலிருந்தல்ல. சளிச்சவ்வு அதற்குள்ளே இருக்கின்ற பரியஸ்தியச் சவ்வோடும் பரி முருந்தெனுஞ் சவ்வோடும் நெடுங்க ஓட்டிக் கொள்ளும். அது வெளியே தோலோடும் பின்னே தொண்டையின் சளிச் சவ்வோடும் ஒரே படலமானது. மேலும் அது நாசிப்புரை கண்ணீர் குழல் வழியாய்க் கட் குழிக்கும் யுஸ்தகித் துவாரம் வழியாய்க் காதுக்கும் சூசக அறைகளுக்கும் நாசிக் கால்வாயிலிருக்கும் பல தொளை வழியாய் நெற்றியறை, சதுக வறை, பாடர வறைகளுக்கும், அனுகுகைக்கும் ஓடியிருக்கும்

இச்சவ்வு பல பகுதியிலும் தடிப்பாய் இருப்பதினாற்றான் நாசியறை ஒடுங்கினதாகவும் சுருளென்புகள் பருத்ததாகவும் தோற்றுவது. இதினாற்றான் இவ்வறைக்குள் திறக்குங் துவாரங்கள் மிக ஒடுங்கி அல்லது முற்றாய் நிரவிப் போவது.

மேல் நாசிக் கால்வாயில்

- பின் பாடர துவாரங்கள் ஒடுங்கியும், சதுக தாலுத் துவாரம் முற்றாய் நிரவியுமிருக்கும்.
- நடுநாசிக் கால்வாயில் பிரணாளித் துவாரம் அரைக்கரைவாசி மறைந்தும், அனுகுகையின் துவாரம் ஒடுங்கிக் கங்காளத்தில் இருப்பதைப் பார்க்கச் சிறுத்துமிருக்கும்.
- கீழ் நாசிக் கால்வாயில் நாசிப்புரை சளிச்சவ்வின் மடிப்பினால் மறைந்தும், முன்னண்ணகாத துவாரம் முற்றாய் நிரவியுமிருக்கும்.

- மேற்பகுதியிற் சதுக வறைக்குச் செல்லுந் துவாரம் ஒடுங்கியும் பாடர வென்பினது திகந்த தகட்டினுள்ள துவாரங்கள் நிரவியும் இருக்கும்.

நாசியறையின் நாடிகள்:

நயன நாடியின் நின்று கிளம்பிப் பாடர வறைகள், நெற்றியறைகள், நாசியின் மேற் பகுதியிற் படரும் முன்பின் பாடர நாடிகளும், தாடையுள் நாடியிற் கிளைத்துச் சுருளென்புகளையும் நாசிக் கால்வாய்களையும் நாசி மத்தியையும் மூடுஞ் சளிச் சவ்விற் படருஞ் சதுகத் தாலு நாடியும், தாடையுள் நாடியிற் கிளைத்து அனுகுகையின். சளிச் சவ்விற் படருஞ் காவட நாடிமே. இந்நாடிகள் சளிச் சவ்விற் படர்ந்து கிளைத்து ஒன்றை ஒன்று சந்தித்து அடர்த்தியாய் பின்னும்.

நாசியறையின் நாளங்கள்:

சளிச்சவ்வில் அடர்த்தியான பின்னலாகப் படரும். இவைகளிற் சில நாளங்கள் சதுக தாலு நாடியோடு கூடிச் செல்லும் நாளங்களோடு சதுக தாலுந் துவாரம் வழியாகச் செல்லும். சில, காவட நாடியோடு சென்று முக நாளத்திற் சேரும் சில. பாடர நாடிகளோடு நயன நாளத்தில் முடியும். இன்னுஞ் சில நாளங்கள் பாடர தகட்டினுள்ள துவாரங்கள் வழியாகக் கபால வறைக்குள்ளே கிடங்கும் நாளங்களில் முடியும்.

நாசியறையின் நரம்புகள்:

- மோப்ப நரம்பும், நயன நரம்பின் நாசிக் கிளையும், மேற்றாடை நரம்பினது முற்றசனக் கிளையின் கூந்தல்களும், விதிய நரம்பும், நாசியண்ண நரம்பும், தாலு முன் இறங்கு நரம்பும், சதுக தாலுக் கிரந்தியின் சதுக தாலுக் கிளைகளுமே.

- நாற்றப் புலனுக்குரிய நரம்பாகிய மோப்ப நரம்பு நாசிமத்தின் மேல் மூன்றத்தொரு பங்கிலும் மேற் சுருள் , நடுச் சுருள் என்புகளிலும் படரும். நயன நரம்பின் நாசிக்கிளை நாசி மத்தியின் முன் பங்கு மேற் பங்குக்கும் நாசியறையின் புறச் சுவருக்கும் கூந்தல்களை விடும்.

- மேற்றாடை நரம்பினது முற்றசனக் கிளையின் கூந்தல்கள் கீழ் நாசிக் கால்வாய்க்குங் கீழ்ச் சுருளென்புக்குஞ் செல்லும்.
- விதிய நரம்பு நாசி மத்தியின் மேற்பங்கு பிற்பங்குக்கும் மேற் சுருளென்புக்கும் செல்லும் சதுக தாலு கிரந்தியின் முன் மேல் நாசிக் கிளைகளும் இப்படியே செல்லும்.
- நாசியண்ண நரம்பு நாசி மத்தியின் மையப்பகுதிக்குச் செல்லும். தாலு முன் நரம்பு நடுச் சுருள் கீழ்ச் சுருளென்புகளில் செல்லும்

PHYSIOLOGY OF NOSE

SIDDHA ASPECT

PHYSIOLOGY OF NOSE

SIDDHA ASPECT

மூக்கு நாற்றப் புலனின் கருவியாகும். இப்புலன் புப்புசப் பைக்குள்ளே தூசு, தும்பு, காற்று முதலியவைகள் புகாதபடிக்குக் காவலாகவும் உணவைத் தெரிய செய்வதற்கு உதவியாகவும் நிறகின்றது.

நாசியின் சளிச் சவ்வு:

நாசியால் வருஞ்சளி நாசிக்கு உள்ளூறையாயிருக்கும் சளிச்சவ்வு தனக்குள்ளே இருக்கின்ற பரியாந்திரச் சவ்வோடும் பரிமுருந்தெனுஞ் சவ்வோடும் நெடுக ஒட்டிக் கொள்ளும். அது வெளியே தோலோடும் பின்னே தொண்டையின் சளிச் சவ்வோடும் ஒரே படலமாக இருக்கும். மேலும் இது நாசிப்புரை, கண்ணீர்க் குழல் வழியாய் கட்டுழிக்கும். தொண்டை, காது. துவாரம், வழியாய் காதுக்கும், நாசிக்கால்

வாயிலிருக்கும் பல தொளைகள் வழியாய் நெற்றியறை சதுகவறை போன்றவைகளுக்கும் ஓடியிருக்கின்றது.

இச்சவ்வு பல பகுதியிலும் தடிப்பாய் இருப்பதனாற்றான நாசியறை ஒடுங்கினதாகவும் சுருள் என்புகள் பருத்ததாகவும் தோற்றுகிறது. மோப்ப நரம்பும், நயன நரம்பின் முற்ற சனக்கிளையின் கூந்தல்களும் வழிய நரம்பும், நாசியிண நரம்பும்இதாலுமுன் இறங்கு நரம்பும், சதுக்கத்தாலுக் கிரந்தியின் சதுக்கத்தாலுக் கிளைகளுமேயாம்.

நாற்றப் புலனுக்குரிய நரம்பாகிய மோப்பு நரம்பு நாசி மத்தியின் மேலு மூன்றிலொரு பங்கிலும் மேல் சுருள் நடுச்சுருள் என்புகளிலும் படரும் சயன நரம்பின் நாசிக் கிளை, நாசி மத்தியின் முன் பங்கு மேறபங்குக்கும் நாசியறையின் புறச் சுவருக்கும் கூந்தல்கள் விடும்.

ANATOMY

ANATOMY OF NOSE

MODERN ASPECT

The Nose:

The nose is externally pyramidal shaped.

Boundaries:

It has a roof, floor, medial wall and lateral wall.

Roof:

It is a narrow area. The anterior part of the roof is formed by the frontal bones.

- The middle of the roof is formed by cribriform plate of the ethmoid bone.

- The posterior part of the roof is formed by the body of the sphenoid bone.

Floor:

- Palatine process of the maxilla.
- Horizontal process of the palatine bones,

THE MEDIAL WALL OF THE NOSE

(Septum of the nose)

- The Septum divides the nasal cavity into right and left cavities.
- The septum may or may not be situated in the Midline. The Septum is formed by bones and cartilages and covered by the Mucoperiosteum and skin.

Components of the Septum

- Postero Superiorly by the perpendicular plate of the ethmoid bone. Postero inferiorly by the vomer bone.
- Antero inferiorly by the septal cartilage.

Accessory Components

- Rostrum of the sphenoid bone. Accessory Components
- Rostrum of the sphenoid bone.

- Frontal bone.
- Nasal bone.
- Anterior nasal spine of the Maxillae.
- Palatine bone.
- The medial crus of the greater alar cartilage.
- The nasal septum may be divided into following parts:
- Cuticular part is situated antero inferiorly.
- Cartilagenous part is situated in the middle.
- Bony part is situated postero superiorly.

Borders

- It has 4 borders namely,
- Anterior border.
- Posterior border
- Inferior border.
- Superior border.

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Surfaces

It has 2 surfaces namely,

- Right surface.
- Left surface.
- The surface of the septum may show bony spurs. Along the antero inferior part of the septum there may be an opening for the vomero nasal organ of jacobson may be situated.

Blood supply

- Long spheno palatine artery.
- Greater palatine artery.
- Superior labial branch of the facial artery.
- Anterior ethmoidal artery.

In the antero inferior quadrant of the nasal Septum these arteries

communicate freely to form the Kieselbach's area (little area). Injury to this area causes epistaxis.

Venous drainage:

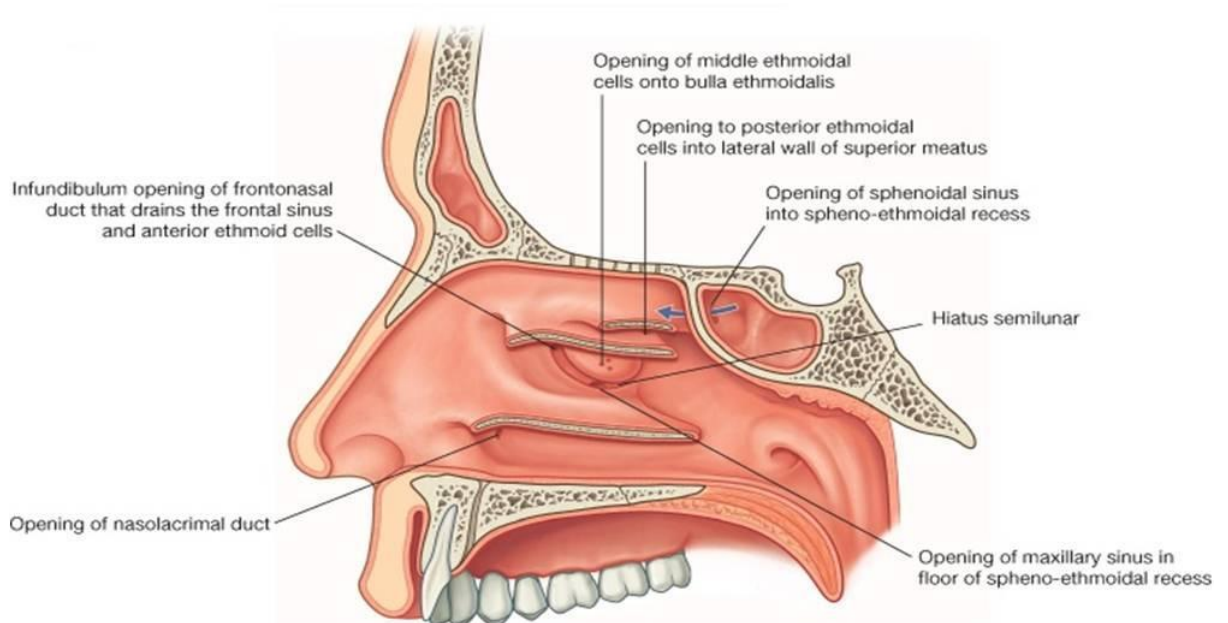
- Facial vein
- Pterygoid venous plexus.

Lymphatic drainage:

- Submandibular lymph nodes,
- Retropharyngeal lymph nodes.
- Antero Superior group of deep cervical nodes.

Nerve Supply:

- Olfactory nerves carry the sense of smell from the upper part of the septum.
- Nasopalatine nerve.
- Antero ethmoidal nerve.
- Anterior superior alveolar nerve.



Autonomic Nerve Supply:

Vidians nerve through the spheno palatine ganglion.

THE LATERAL WALL OF THE NOSE

This is an irregular space bounded by the nasal surface of the many bones. The bones forming the lateral wall of the nose are arranged into 3 zones.

The anterior zone is formed by,

- Maxilla
- Nasal bone.

The middle zone is formed:

- Ethmoid bone.
- Maxilla.
- Conchal bone.

The posterior zone is formed by,

- Perpendicular plate of the palatine bone.
- Medial pterygoid bone.
- The lateral wall is irregular because it has three bony elevations called conchae.

The space between the adjacent conchae is known as the meatus:

- The lateral wall is lined by mucous membrane called mucoperiosteum.
- The superior and middle conchae are formed by the labyrinthine part of the ethmoid bone.
- The inferior conchae is formed by the conchal bone or turbinate bone. The inferior conchae articulates anteriorly with the maxilla and posteriorly with the perpendicular plate of the palatine bone.

The lateral wall is divided into three are as:

- Vestibule.
- Atrium of the middle meatus.
- Area of conchae and meatuses.

The Vestibule:

This area is lined by the skin. So it is provided with hairs called Vibrisae. The vibrisae arising from the anterior wall of the vestibule are directed backwards and vibrisae from the posterior wall are directed forwards. These vibrisae forming a sieve at the nasal entry. The vestibule is limited above by the limen nasi.

Atrium of the middle meatus:

This depression is situated above the Vestibule but in front of the middle meatus. It is limited superiorly by a ridge known as agger nasi. The agger nasi is developed in lower mammals.

Area of conchae and meatuses:

There are 3 conchae and 4 meatuses.

The conchae are,

- Superior concha
- Middle concha
- Inferior concha

The meatuses are,

- Spheno ethmoidal recess.
- Superior Meatus.
- Middle Meatus.
- Inferior Meatus.

The spheno ethmoidal recess is situated between the superior concha and body of the sphenoid bone. In to this space the sphenoid air sinus is opened. Sometimes within the spheno ethmoidal recess the highest concha may be present. This concha divides the recess into superior meatus and spheno ethmoidal recess.

The Superior Meatus:

The superior meatus is the narrowest among the meatuses. It is situated between the superior and middle conchae. The posterior ethmoidal air cells opens into this space.

The Middle Meatus:

This is the space between the middle concha and inferior concha. Anteriorly the middle meatus opens into the atrium of the middle meatus. The bulla ethmoidalis is an elevation caused by the middle ethmoidal air cells found in the meatus.

Below the bulla ethmoidalis there is a semilunar shaped gutter called hiatus semilunaris is situated.

The hiatus semilunaris is bounded below by the uncinat process of ethmoid bone. Into the anterior part of the hiatus, ethmoidal infundibulum opens. This opening is a common passage for the frontal air sinus and anterior ethmoidal air cells.

On the surface of the bulla ethmoidalis the middle ethmoidal air cells are opening. The posterior part of the hiatus semilunaris receives the openings of the maxillary air sinus. There may be more than one opening for the maxillary air sinus.

In the anterior part of the inferior meatus, the naso lacrimal duct opens. This opening is guarded by the Hasner's valve. This valve does not permit entry of air into the naso lacrimal duct.

Blood supply to the lateral wall of the nose:

The lateral wall of the nose is divided into 4 quadrants. Each quadrant has separate blood supply.

Antero Superior quadrant:

- Anterior ethmoidal artery
- Posterior ethmoidal artery
- Facial artery

Postero Superior Quadrant:

- Spheno palatine artery (Maxillary artery)

Antero inferior Quadrant:

- Facial artery
- Perforating branches of greater palatine artery

Postero Inferior Quadrant:

- Greater Palatine artery and its branches.

Venous Drainage:

- Anterior part drains into anterior facial vein.
- Middle part drains into pterygoid venous plexus.
- Posterior part drains into pharyngeal venous plexus.

Lymphatic drainage:

- Anterior part drains into sub mandibular lymph nodes.
- Posterior part drains into retero pharyngeal lymph nodes.

Nerve Supply:

- The sense of smell from the lateral wall is carried by the olfactory

nerves.

Parasympathetic supply:

- Vidian's nerve (Nerve of the pterygoid canal)

Sensory supply:

Antero superior Quadrant

- Anterior ethmoidal nerve.

Postero superior Quadrant

- Spheno palatine branches of spheno palatine ganglion.

Anterior inferior Quadrant

- Anterior superior alveolar nerve.

Postero inferior Quadrant

- Greater palatine nerve. (spheno palatine ganglion).

The mucous membrane covering the respiratory portion of nasal cavity as a ciliated columnar epithelium with interspersed Goblets cells. The underlying lamina propria is rich in mucous glands and blood vessels.

The Paranasal Sinus are lined by ciliated columnar epithelium, but they lac vascular plexus. They drain through small ostia in to the nasal cavity. This ostia can be obstructed by only moderate mucosal swelling, (eg. Oedema caused by inflammation) tumour or foreign body. The anatomic relationship favour certain routes of spread of disease and therefore play an important role in the development of complication.

ANATOMY OF PARANASAL SINUSES

Paranasal Sinuses

The paranasal sinuses are air containing bony spaces around the nasal cavity and lined by the mucous membrane of ciliated columnar epithelium. They develop as mucous diverticula of the nasal cavity and invade the neighbouring bones at the expense of the diploic tissue. The sinuses are arranged in pairs and are named as follows,

- Frontal,
- Ethmoidal,
- Sphenoidal,
- Maxillary

They are divided into two groups. Anterior group comprises the frontal air sinus, the maxillary air sinus and the anterior ethmoidal air cells.

The posterior group comprises the posterior ethmoidal air cells and the sphenoidal sinus.

The anterior group of sinuses drains into the middle meatus and the posterior group drains into the superior meatus and the sphenoidal recess. 54

The sinuses are present in rudimentary format birth, except the frontal sinuses which start development two or three years after birth. They enlarge rapidly during the ages of 7-8 yrs (time of eruption of permanent teeth) and then after puberty.

Functions of Para Nasal Sinuses:

The exact function is not known. Probably they may have following functions.

- Warming and moistening of inspired air may be partly done by the large mucosal surfaces of these adjacent sinuses.
- The air filled sinus cavities probably add resonance for the production of sounds.
- The temperature buffers: It is regarded that these chambers probably protect the contents of orbits and cranial fossae from the internasal temperature variations.
- Probably sinus formation in the cranial bones helps in reducing the weight of the cranial bones.
- The sinus mucosa may act as a donor site for reconstructive procedures. eg. for subglottic stenosis and implantation of maxillary sinus mucosa into the nasal cavity in atrophic rhinitis.
- Protection of the orbit by acting as a shock buffers.
- Facial growth occurs rapidly after the formation of the sinuses.

FRONTAL SINUSES:

They are two in number and are contained within the two tables of the squamous part of the frontal bone, deep to the medial end of superciliary arches. It extends upwards above the medial end of eyebrow and backwards into the medial part of the roof of the orbit. Each sinus is triangular in shape.

Capacity : Each sinus has a capacity of about 7 cc.

Communications

It opens into the middle meatus of nose at the anterior end of the hiatus semilunaris either through the infundibulum or through the fronto nasal duct.

The right and left sinuses are usually unequal in size separated by a thin plate of bone. The sinuses are better developed in males than in females. The frontal sinus is lined with columnar epithelium.

Blood Supply	:	Supra orbital artery
Lymphatic drainage	:	Sub mandibular nodes
Nerve Supply	:	Supra orbital nerve
Venous drainage	:	into the anastomotic vein between the supra orbital and superior ophthalmic veins in the supra orbital notch.

MAXILLARY SINUS:

It lies in the body of the maxilla and is the largest of all the paranasal sinuses. It is pyramidal in shape with its base directed medially towards the lateral wall of the nose and the apex directed laterally in the zygomatic process of maxilla. Average measurements of each sinus are as follows.

The fully developed maxillary air sinus should extend from the first premolar to the third molar tooth. The sinus reaches upto the floor of the orbit and thus occupies practically the whole body of the maxillary bone.

Boundaries:

Each sinus is roughly pyramidal in shape and presents the following boundaries.

Apex:

Zygomatic process of maxilla.

Base:

By the nasal surface of the body of maxilla, in which lies in the recent state the opening of the maxillary sinus close to its roof. In the disarticulated skull the base presents a large opening the maxillary hiatus which is reduced in size by the following bones.

- Uncinate process of ethmoid bone from above.
- Ethmoidal process of inferior nasal concha.
- Descending process of lacrimal bone from the front.
- Perpendicular plate of palatine bone from behind.

In macerated skull two openings are present. One above on the other below the uncinat process in recent state usually the lower opening is closed by a plug of mucous membrane.

Roof:

It is formed by the floor of orbit and it traversed by the infra orbital vessels and nerve in a bony canal.

Floor:

It is formed by the alveolar process of maxilla. The floor is marked by several conical elevations produced by the roots of the upper molar and premolar teeth. The roots may even penetrate the bony floor to lie beneath the mucous lining, so that the infection of maxillary air sinus in apical tooth abscess becomes obvious. Extraction of poorly covered tooth can result in an abnormal communication between mouth and antrum known as oro-antral fistula.

Anterior Wall:

Related to the infra orbital plexus of vessels and nerves and the origins of muscles of upper lip. Within the wall anterior superior alveolar vessels and nerves traverse in a bony canal the canalis sinuses.

posterior wall:

It is pierced by posterior superior alveolar vessels and nerves and forms the anterior boundary of infra temporal and pterygo palatine fossae.

Communications:

It opens into the middle meatus of the nose in the lower part of the hiatus semilunaris and the opening lies just below the bulla ethmoidalis. The openings are nearer the roof than the floor of the sinus. So the opening is located much higher from the floor of the sinus is disadvantageous position for natural drainage.

The maxillary air sinus is lined by ciliated columnar epithelium. It is richly provided with glands which are situated chiefly around the ostium.

Blood Supply:

From the anterior middle and posterior superior alveolar vessels of maxillary.

Lymphatic Drainage

Submandibular nodes.

Nerve Supply

From the anterior middle and posterior superior alveolar nerves branches of maxillary and infra orbital nerves.

Venous Drainage:

Facial vein and pterygoid plexus of veins.

ETHMOIDAL SINUS:

There are numerous small inter communicating spaces which lie within the labyrinth of the ethmoid bone. They are completed by the frontal, maxillary, lacrimal, sphenoidal and palatine bones. They lie between the upper part of the

nasal cavity and the orbits and are separated from the orbits by extremely thin orbital plates of ethmoids.

The sinuses are divided into anterior, middle and posterior groups.

Anterior Sinuses:

The anterior ethmoidal sinus is made up of upto 11 air cells. It opens into the anterior part of the hiatus semilunaris of the nose.

Middle Sinuses:

The middle group generally comprises three cavities which opens into middle meatus by one of more orifices on or above the ethmoidal bulla.

Posterior Sinuses

The posterior group varies from one to seven in number and usually opens by one orifice into superior meatus of the nose.

Blood Supply:

Anterior and posterior ethmoidal branches of ophthalmic artery.

Lymphatic Drainage:

Anterior and middle groups of sinuses drain into submandibular lymph nodes. Posterior group drains into retropharyngeal lymph nodes.

SPHENOIDAL SINUSES:

These paired sinuses are located within the body of sphenoid bone above and behind the nasal cavity. Each sinus is some what asymmetrical and presents the following average measurements.

Extents:

Posteriorly it may extend upto the anterior margin of foramen magnum. Anteriorly it may encroach the roof of the orbit laterally extends upto the pterygoid canal.

Relations:

Above : Optic chiasma and hypophysis cerebri.

Below : Roof of the nasopharynx

On each side cavernous sinus and internal carotid artery. Behind pons and medulla oblongata separated by the basilar venous plexus. In front the sphenoidal recess.

Communications:

Each sinus opens into the sphenoidal recess and hence into the superior meatus of nose.

Blood Supply:

Posterior ethmoidal vessels.

Nerve Supply:

Posterior ethmoidal nerve and orbital branches of the pterygopalatine ganglion.

Lymphatic Drainage:

Retropharyngeal nodes.

PHYSIOLOGY

PHYSIOLOGY OF THE NOSE AND PARANASAL SINUSES

The nose forms the gateway of the respiratory system and serves' the following important functions.

1. Respiratory Passage:

The inspired air passes upwards in a narrow stream medial to the middle turbinate and then downwards and backwards in the form of an arc and thus respiratory air currents are restricted to the central part of the nasal chambers.

2. Filtration:

The nose serves as an effective filter for the inspired air.

- Vibrissae (nasal hair) in the nasal vestibule arrests large dust particles of inspired air.
- The fine particulate matter and bacteria are deposited on the mucous blanket which covers the nasal mucosa. The mucous contains various enzymes like lysozymes having anti-bacterial properties.
- The mucous with the particulate matter is carried by the ciliary movements posteriorly to the oropharynx to be swallowed

3 Air conditioning and humidification:

The highly vascular mucosa of the nose maintains constancy of temperature of air and thus prevents the delicate mucosa of the respiratory tract from any damage due to temperature variations. The humidified air is necessary for proper functioning and integrity of the ciliated epithelium.

4. Vocal Resonance:

The nose and paranasal sinuses serve as vocal resonators and nasal passages are concerned with production of nasal consonants like M and N. Thus obstructions of nasopharynx and nose alter the tone of voice.

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5. Nasal Reflex Function:

The respective fields of various reflexes lie in the nose. Those include

sneezing and naso-pulmonary, naso-bronchia and olfactory reflexes. These protect the mucosa and regulate the vasomotor for tone of the blood vessels.

The nasal cavity serves as an outlet for lacrimal and sinus secretions.

6. Aeration:

Air in the nasal cavity helps in aeration of the paranasal sinuses and of the middle ear through eustachian tube.

7. Olfaction:

This function is less developed in human beings. This sensation plays the most important role in behaviours and reflex responses of lower animals.

PATHOLOGY

PATHOLOGY

SINUSITIS:

Definition:

Sinusitis is an inflammation of the mucosal lining of sinus cavity.

Sinusitis:

- Acute sinusitis
- Chronic sinusitis

Acute sinusitis:

Acute inflammation of sinus mucosa is called Acute sinusitis. The sinus most commonly involved is the maxillary followed in turn by

- Ethmoid
- Frontal and Sphenoid

Very often, more than one sinus is infected (multisinusitis) (sometimes, all the sinuses of one or both sides are involved simultaneously. (Pansinusitis uni (or) bilateral)

Sinusitis may be open or closed type depending on whether the inflammatory products of sinus cavity can drain freely into the nasal cavity through the natural ostia or not. A closed sinusitis causes more severe symptoms and also likely to cause complication.

Pathology of Acute sinusitis :

Acute Inflammation of sinus mucosa causes hyperaemia, exudation of fluid, outpouring of polymorpho nuclear cells and increased activity of serous and mucous glands.

Depending on the virulence of organisms, defences of the host and capability of the sinus ostium to drain the exudates, the disease may be mild

(non-suppurative) or severe (suppurative). Initially, the exudate is serous; later it may become mucopurulent or purulent. Severe Infection cause destruction of mucosal lining. Failure of ostium to drain results in empyema of the sinus and destruction of its bony walls leading to complication. Dental infections are very fulminating and soon results in suppurative sinusitis.

Acute maxillary sinusitis:

Aetiology:

- Diving and Swimming
- Dental infections are important source of maxillary sinusitis.
- Trauma to the sinus such as compound fractures, penetrating injuries or gun shot wounds may be followed by sinusitis.

Clinical features

It depends on

1. Severity of inflammatory process
2. Efficiency of ostium to drain the exudates.

Closed ostium sinusitis is of greater severity and leads more often to complications.

(i) Constitutional symptoms:

- Fever
- General Malaise
- Body ache

They are the result of toxaemia.

Head ache:

Usually, this is confined to forehead and may thus be confused with frontal sinusitis.

iii). Pain:

Typically, it is situated over the upper jaw, but may be referred to the gums or teeth.

iv) Tenderness :

Pressure or tapping over the anterior wall of antrum produces pain.

v) Redness and Odema of cheek:

Commonly seen in children. The lower eyelid may become puffy.

vi) Nasal discharge :

Anterior rhinoscopy shows pus or mucopus in the middle meatus.

vii) Post Nasal discharge:

Pus may be seen on the upper soft palate on posterior rhinoscopy.

Complications:

1. Acute maxillary sinusitis may change to subacute or chronic sinusitis
2. Frontal sinusitis – Frontonasal duct which opens in middle meatus is obstructed due to inflammatory odema.
3. Osteitis or osteomyelitis of the maxilla.
4. Orbital cellulitis or abscess.

ACUTE FRONTAL SINUSITIS

Aetiology

Usually follows viral infections of upper respiratory tract followed later by bacterial invasion.

Entry of water into the sinus during diving or swimming external trauma to

the sinus, eg-fractures or penetrating injuries. odema of middle meatus, secondary to associated ipsilateral maxillary or ethmoid sinus infection.

Clinical features

1. Tenderness:

Pressure upwards on the floor of frontal sinus, just above the medial canthus, causes exquisite pain. It's elicited by taping over the anterior wall of frontal sinus in the medial part of supraorbital region.

2. Odema

Odema of upper eyelid with suffused conjunctiva and photophobia.

3. Nasal discharge:

A vertical streak of mucopus is seen high up in the anterior part of the middle meatus.

Complication

1. Orbital cellulitis
2. Osteomyelitis of frontal bone and fistula formation.
3. Meningitis, extradural abscess/frontal lobe abscess
4. Chronic frontal sinusitis if the acute infection is neglected or improperly treated.

ACUTE ETHMOID SINUSITIS

Aetiology:

Acute ethmoiditis is often associated infections of other sinuses ethmoid. sinuses are often involved in infants and young children.

Clinical features:

1. **Pain:** It's localised over the bridge of the nose, medial and deep to the eye. It is aggravated by movements of the eye ball.
2. **Oedema of lids:** Both eyelids become puffy and swollen. There is increased lacrimation. Orbital cellulitis is an early complication.
3. **Nasal discharge:** On anterior rhinoscopy, pus may be seen in middle or superior meatus depending on the involvement of interior or posterior group of ethmoid sinuses.
4. Swelling of the middle turbinate.

Complications:

1. Orbital cellulitis and abscess
2. Visual deterioration and blindness due to involvement of optic nerve.
3. Cavernous sinus thrombosis.
4. Extradural abscess, meningitis/ brain abscess.

ACUTE SPHENOID SINUSITIS**Aetiology**

Isolated involvement of sphenoid sinus is rare. It is often a part of pansinusitis or is associated with infection of posterior ethmoid sinuses.

Clinical features:

1. **Headache:** Usually localised to the occiput or vertex.
2. **Post Nasal discharge:** A streak of pus may be seen on the roof and posterior wall of naso pharynx or above the posterior end of middle turbinate.

Chronic Sinusitis:**Pathophysiology:**

Acute infection destroys normal ciliated epithelium impairing drainage from the sinus. Pooling and stagnation of secretions in the sinus invites infection. Persistence of infection causes mucosal changes, such as loss of cilia, oedema and polyp formation, thus continuing the vicious cycle.

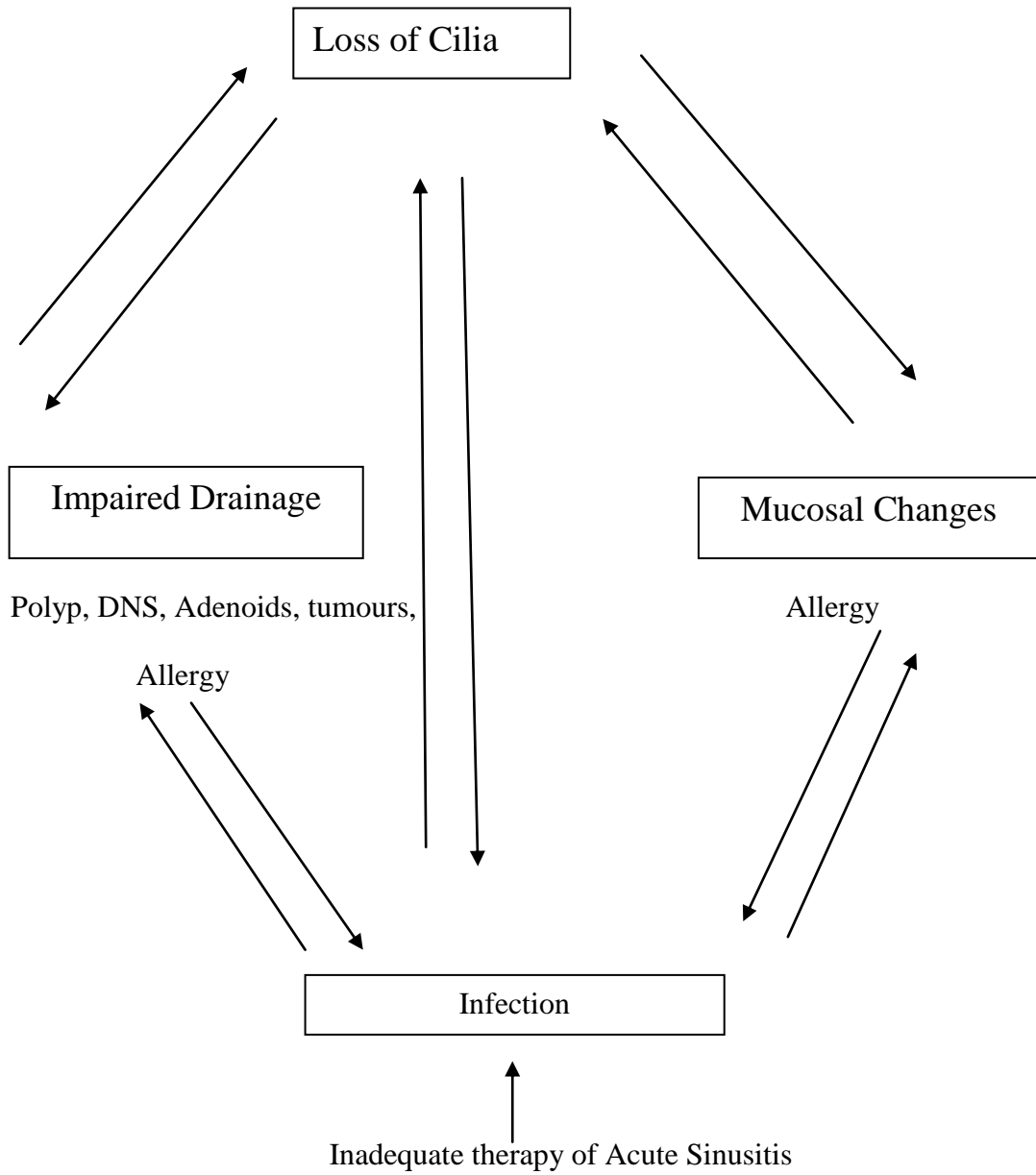
Pathology:

In chronic infections, process of destruction and attempts at healing proceed simultaneously.

Sinus mucosa becomes thick and polypoidal (hypertrophic sinusitis) or undergoes atrophy [atrophic sinusitis]. Surface epithelium may show desquamation, regeneration or metaplasia. Submucosa is infiltrated with lymphocytes and plasma cells may show microabscesses, granulations, fibrosis or polyp formation.

CAUSATIVE FACTORS AND PATHOPHYSIOLOGY OF**CHRONIC SINUSITIS**

Pollution, Chemicals, Infections



COMPLICATION OF SINUSITIS:

Osteomyelitis: Infection from the sinus can lead to osteitis in compact bone and osteomyelitis in cancellous or diploic bone. Acute infection of the frontal sinus or ethmoid labyrinth may lead to ostiomyelitis with resultant orbital cellulitis and proptosis. It may also be complicated by cavernous sinus thrombosis and cerebral abscess in the frontal lobe.

The subperiosteal abscess may burst producing fistulae. The chronic inflammation may lead to scarring of the ostium with resultant mucocele or pyocele.

Mucocele:

This is a cystic swelling commonly affecting the frontal and ethmoid sinuses. The swelling contains tenacious mucous. It causes expansion of the sinus and thinning of the bony wall. It may also cause displacement of the orbit. Its contents may get infected.

Oroantral fistula:

The communication between the oral cavity and maxillary sinus usually occurs after dental extraction particularly of premolars and molars. The roots of these teeth are separated by thin bone which can easily get broken at the time of extraction and thus result in fistula. The common symptoms include passage of fluids or food particles into the nose and blowing of air from nose into the mouth. The patient may suffer from symptoms of recurrent sinusitis.

Proper treatment of sinus infection may allow a fistula to heal up but a persistent large fistula requires surgery. The adjacent flaps can be rotated from the buccal mucosa or the palate and the fistula site closed. This procedure may or may not be combined with Caldwell – Luc operation.

Secondary effects of sinusitis:

1. Secondary changes include Hypertrophy of lateral pharyngeal bands.
2. Persistent laryngitis
3. Recurring attacks of bronchitis or bronchiectasis etc.,

Pathology:

Chronic sinusitis according to histological changes in the sinus mucosa may be as follows.

Hypertrophic (or polypoidal catarrhal Sinusitis)

In this, the inflammation mainly affects the efferent vessels and lymphatics. Soft tissues are affected secondarily. Initially there is periphlebitis and perilymphangitis. If repeated attacks occur, the venous and lymphatic changes produce oedema and polypoidal mucous membrane polypi, oedema of periosteum and rarefaction of bone.

Atrophic (or sclerosing or suppurative sinusitis)

The main change occurs in afferent vessels causing cellular reaction around the arterioles and arteries, and later the vessel wall becomes thickened and narrowed resulting in endarteritis and thrombosis. In this condition, usually, there is much less oedema. Both these types hypertrophic and atrophic may occur side by side in the same sinus producing atrophy at one place and polypoidal hypertrophy at a nearby place.

Papillary / Hypertrophic sinusitis:

Here occurs metaplasia of ciliated columnar epithelium to stratified squamous type and through out the papillary hyperplastic epithelial cells or stroma may be seen inflammatory cells. It is a viral infection.

Follicular type:

In this condition, small follicles are seen in the mucous membrane of the sinuses.

Glandular sinusitis:

On this, the glandular elements increase markedly in the submucosal lining of sinuses.

Complications of chronic sinusitis:

Methods of spread of Infection

- By direct continuity
- Thrombophlebitis of diploic veins leading to infection of the bone marrow.
- Perivascular lymphatics

Complications of anterior group:

- Orbital complications, eg. orbital cellulitis/abscess.
- Mucocele
- Fistulae (oroantral / sublabial)
- Intracranial complications
- Thrombophlebitis
- Brain abscess
- Extra dural abscess
- Basal meningitis
- Osteomyelitis of bone (frontal and maxillary)
- Pott's puffy tumour – described by sir pericivall pott in 1760, it is doughy swelling of forehead due to osteomyelitis of frontal sinus which gives moth eaten appearance on x-ray.

Complication of posterior group:

- Superior orbital fissure syndros orbital apex syndrome

- Cavernous sinus thrombophelbitis
- Oroantral fistula/sublabial fistula
- Optic Neuritis with Impaired vision.

Other secondary effects:

- Pharyngitis/laryngitis/Tracheitis
- Bronchitis/Bronchiectasis
- Asthma

Focal sepsis:

- Poly arthrititis
- Tenosynovitis
- Fibrositis
- Dermatological conditions

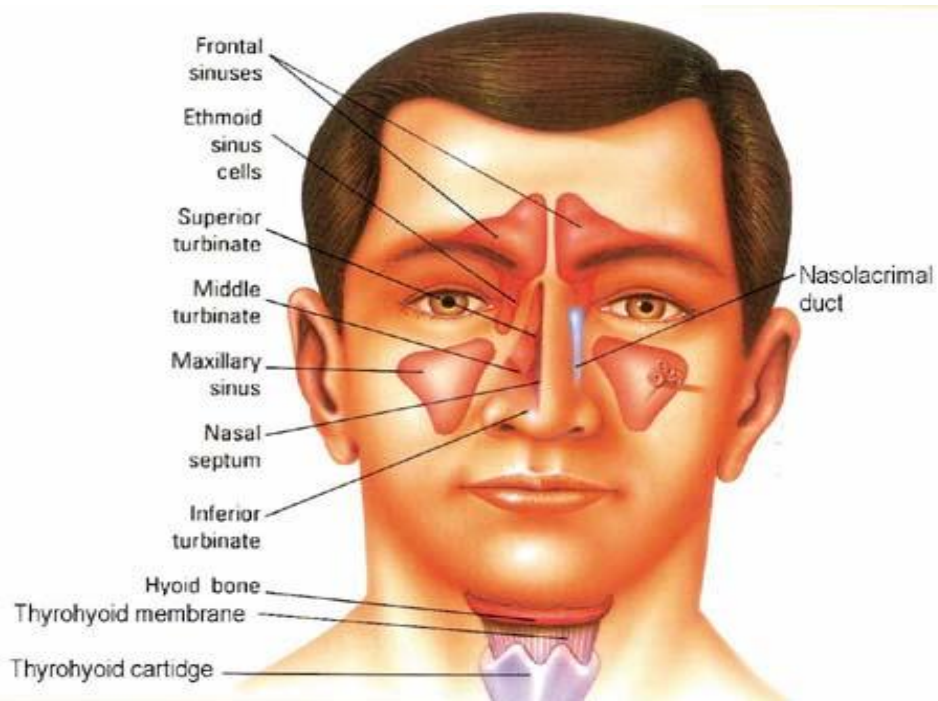
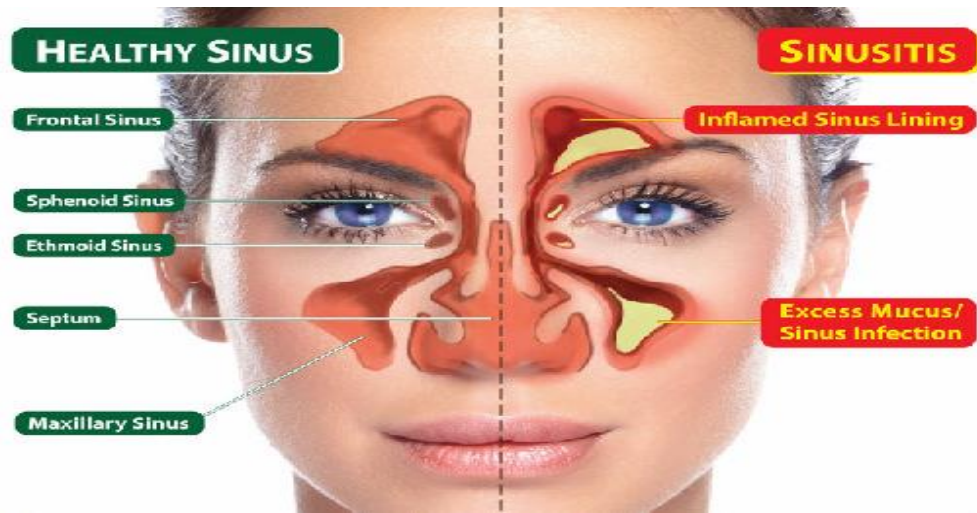
Orbital complications:

Such as orbital cellulitis or subperiosteal abscess occurs from the ethmoidal and frontal sinuses by direct spread.

Infection extends between orbital muscles, Nerves and Blood vessels.

Clinical features:

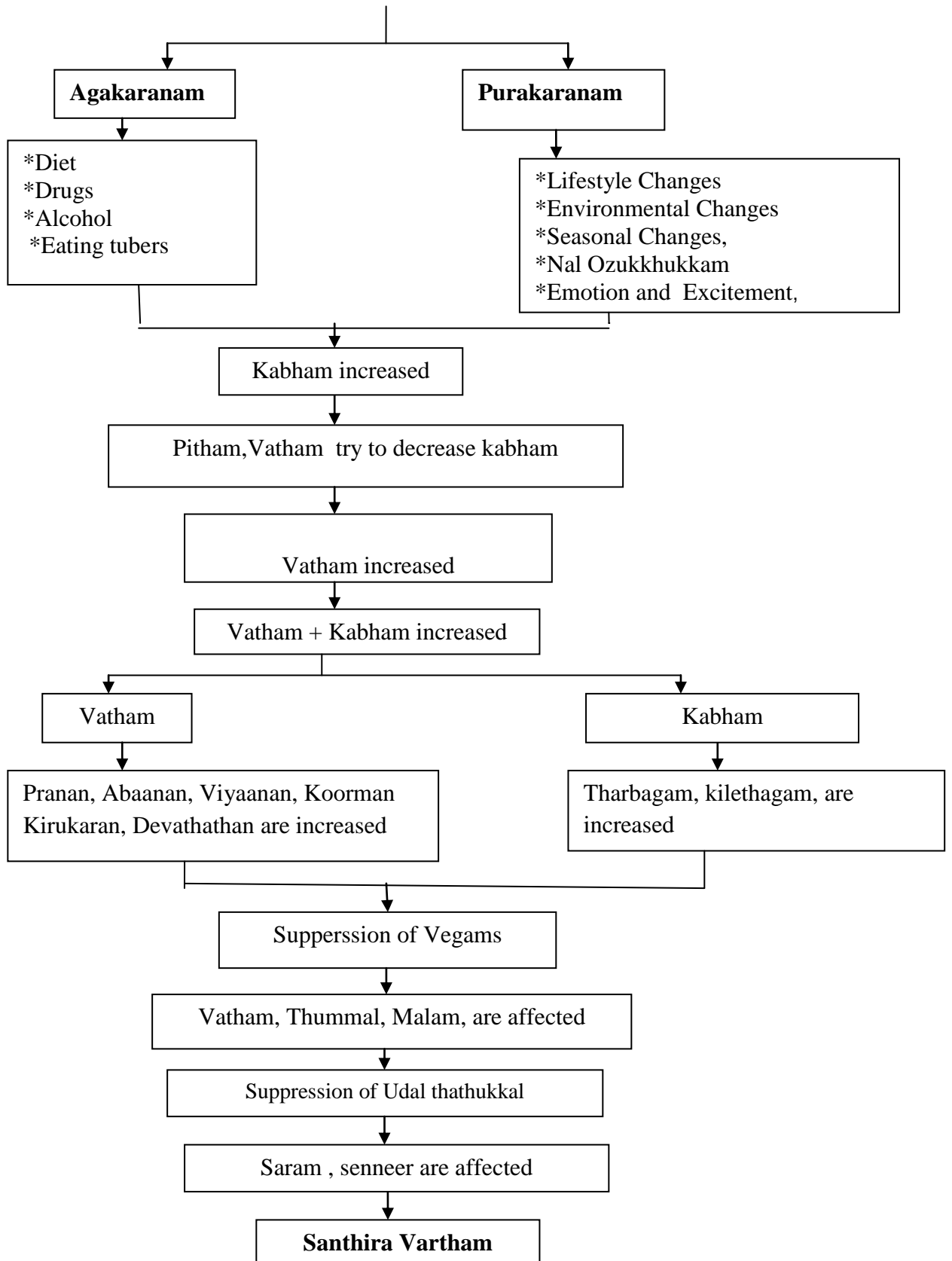
- High fever
- Pain in the eye on the side of lesion
- Chemosis and oedema of eyelids
- Proptosis and diplopia
- Eye displaced laterally or inferolaterally depending upon the sinus involved.
- Headache
- Vision may be diminished.



**DETAILED VIEW OF
DISSERTATION**

ETIOPATHOGENESIS

**DETAILED VIEW OF DISSERTATION TO
ETIOPATHOGENESIS**





PATHOGENSIS

- அக மற்றும் புற காரணங்களில் கபஸ்தானமாகிய தலையில்

கபம் தன்னிலை வளர்ச்சி அடைகிறது.

- கபம் மிகுதியடைவதால் பித்தம் தன்னளவில் குறைகிறது
- கபம் வளர்ச்சி அடைவதால் வாதம் தன்னளவில் மிகுந்து காணப்படுகிறது.
- வாத மிகுதியுடன் கபமும் கூடி தச வாயுக்கள், ஐந்து கபங்கள், 14 வேகங்கள் மற்றும் உடல் தாதுக்களில் பாதிப்பு ஏற்படுத்துகிறது.
- வாதம் மிகுவதால் தசவாயுக்களில் பிராணன் , அபனன் , வியானன், கூர்மன், கிருகரன், தேவதத்தன் கேடடைகிறது.
- கபம் மிகுதியால் தற்பகம், கிலேதகம், கேடடைகிறது.
- பின் 14 வேகங்களில் தும்மல், நித்திரை, விழிநீர், மலம், வாயு இவைகளும் கேடடைகிறது.
- பின் உடற்கட்டுகளில் சாரம் மற்றும் செந்நீர் இவைகளை கேடடையச் செய்து நோயை பிறப்பிக்கிறது.

PATHOLOGY OF SANTHIRA VARTHAM:

Mukkutra verupadugal, that is three humours changes play major role in the development of disease. When the mukkutram of the human body or the functional units are being affected by various factors, they immediately disturb the functions of the affected organ.

This titel ‘SANTHIRA VARTHAM’ show that this disease is caused mainly by alterations in kabha humour. But according to ‘The Principle of disease’.

“ வாதமலாது மேனி கெடாது ”

Changes in vatha humour plays vital role in causing this disease followed by Kabham alterations. So in “SANTHIRA VARTHAM ” vatha humour is first affected.

ALTERATION IN MUKKUTRAM

CHANGES IN VALI

Praanan:

- Nasal congestion and difficulty in breathing

Abaanan:

- Constipation present

Udaanan:

- sneezing, cough

Viyaanan:

- Pain in the forehead and full body

Samaanan:

- Loss of appetite

Nagan:

- Pain in the eye

Koorman:

- Pain in the forehead , It produces watering of the eyes

Kirukaran:

- It produces sneezing, profuse watery nasal discharge

Devathathan:

- Heaviness of the body

CHANGES IN AZHAL

Anal Pitham	Loss of appetite.
Prasaga Pitham	Colour changes in the skin.
Ranjaga Pitham	Palloriness of tongue and conjunctiva.
Alosaga Pitham	Eye sight affected.
Sadhaga Pitham	Difficult in doing routine works.

CHANGES IN IYAM

Avalambagam	-	Cough
Kilethagam	-	Excessive salivation
Pothagam	-	Anosmia present
Tharpagam	-	Pain in eye and watery discharge

ALTERATION IN UDAL THATHUKKAL:

Saaram

- Heaviness of the body

senneer

- Increased Eosinophils and ESR

EVALUATION OF THE DISSERTATION TOPIC

MATERIALS AND METHODS

EVALUATION OF THE DISSERTATION TOPIC

MATERIALS AND METHODS

MATERIALS:

The clinical study on Santhira Vartham was carried in the out patients in post graduate department of noi naadal at Govt. Siddha Medical College, Palayamkottai.

35 cases with clinical signs and symptoms of Santhira Vartham were studied under the guidance of faculties of post graduate department.

Selection of patients:

The clinical study was done in 45 cases, out of that 35 cases were selected on the basis of clinical symptoms indicated in the siddha text.

Selection of criteria:

Inclusion Criteria:

Pain in the forehead

Cough / Sneezing

Aggravating pain during evening time, pain subsides at morning time

Exclusion Criteria:

Nasal polyp

Nasal septal deviation

Tonsillitis

Pain in one side of the head (migraine)

METHODOLOGY

STUDY DESIGN:

Observational type of study

STUDY ENROLLMENT:

In the study, patients reporting at the PG Noi Naadal OPD of GSMC, Palayamkottai with the clinical symptoms of “Santhira Vartham” is referred to the Research group. Those patients are screened using the screening proforma and examined clinically for enrolling in the study based on the inclusion and exclusion criteria. Based on the inclusion criteria the patients are included first and excluded from the study on the same day if they hit the exclusion criteria.

The patients who are to be enrolled would be informed about the study, and the objectives of the study in the language and terms understandable for them.

After ascertaining the patients willingness, a written informed consent would be obtained from them in the consent form.

All these patients are given unique register card in which patients Register number of the study, Address, Phone Number and Doctors Phone Number etc., are entered so as to report to research group easily if any complication arises.

Complete clinical history, complaints and duration, examination findings all would be recorded in the prescribed proforma in the history and clinical assessment forms and lab investigation forms. Screening form-I is filled up: Form I -A , Form-II and Form III is used for recording the patients' history , clinical examination of symptoms and sign.

STUDY ON SIDDHA CLINICAL DIAGNOSIS:

The diagnostic methods of Siddha syatem included

Poriyaal arithal

Pulanaal arithal

Vinaathal

Mukkttra nilaigal

Enn Vagai thervugal

Udal kattu nilaigal.

INVESTIGATIONS DURING THE STUDY

The patients will be subjected to basic laboratory parameters during the study.

Blood:

Total WBC count

Differential count

Haemoglobin estimation

ESR

Blood Sugar

Blood urea

Serum Cholesterol

Urine:

Albumin

Sugar

Deposits

Other investigation:

Culture test

- X-ray for PNS
- CT

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TREATMENT DURING THE STUDY:

Normal treatment procedure followed in GSMC is prescribed to the study patients and the treatment is provided at free cost.

STUDY PERIOD:

Total Period : 24 Months

Recruitment for the study : upto 22 Months

Data entry analysis : 1 Months

Report preparation and submission : 1 months

DATA MANAGEMENT:

After enrolling the patient in the study, a separate file for each patient is opened and all forms is filed in the file. Study No and Patient No is entered on the top of file for easy identification and arranged in a separate rack at the concerned OPD unit. Whenever study patient visits OPD during the study period, the respective patient file is taken and necessary recordings are made at the assessment form or other suitable form.

The screening forms are filed separately.

STATISTICAL ANALYSIS:

All collected data are entered into a computer using MS Access / MS Excel software by the investigators. Descriptive analysis is made and necessary tables / graphs generated to understand the profile of patients included in the study.

OUTCOME OF THE STUDY:

Establishing the diagnostic characteristics of “Santhira Vartham” through siddha parameters.

Cost effective diagnosis.

It helps to promotion of self diagnosis methods.

It is very useful for remote areas,where the laboratory investigations are not available. Eary diagnosis will help to avoid the complication.

DIAGNOSTIC METHODOLOGY

DIAGNOSTICMETHODOLOGY

Piniyari Muraimai – Diagnosis

Ennvagai thervugal

Pini yari muraimai means method of finding out the disease.

The following three words are combined to form this word Piniyari muraimai.

Piniyari muraimai = Pini + yari + muraimai

Pini means - The disease which catch the body.

Yari means - Identifying the disease.

Muraimai means - Rules and methods

Since Ennvagai thervugal are having a broad and important role in diagnosing the particular disease, it is very much needed to have a thorough knowledge in it. According to siddha medical science without having knowledge in Ennvagai thervugal, we can't diagnose the diseases.

As per siddha literature, the diagnosis is based upon three main principles.

1. Poriyalarithal
2. Pulanarithal
3. Vinaathal

Poriyalarithal and Pulanalarithal

Porigal means five organs of perception. Pulangal means five objects of the sense organs.

Porigal		Pulangal
----------------	--	-----------------

- | | | |
|-----------|---|--------|
| 1. Nose | - | Smell |
| 2. Tongue | - | Taste |
| 3. Eyes | - | Vision |

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- | | | |
|---------|---|-------|
| 4. Skin | - | Touch |
| 5. Ear | - | Sound |

The application of poriyalarithal and pulanalarithal forms the fundamental step in the diagnosis of a disease.

Vinaathal –Interrogation:

It is asking questions concerned with the history of disease and its clinical symptoms etc. to the patient (or) asking to his neighbour , when the patient is not able to speak or the patient is a child. These three principles are effected through the Envagai thervugal.

Envagai Thervugal – Eight types of Investigation

This methodology of diagnosis is considered as the pioneer for the present day examination methods and is a guideline for it. It was formed and presented by siddhars as a unique method.

“Theraiyar” mentions the Envagai thervugal as follows.

“மெய்க் குறி நிறம் தொனி விழி நாவிருமலம் கைக்குறி”

According to “Noi Nadal” the eight types of investigations are quoted as below.

“நாடிப் பரிசம் நாநிறம் மொழி விழி

மலம் முத்திரமினது மருத்துவராயுதம்”

- | | | |
|-------------|---|-----------|
| 1. Naadi | - | Pulse |
| 2. Sparisam | - | Palpation |
| 3. Naa | - | Tongue |
| 4. Niram | - | Colour |
| 5. Mozhi | - | Speech |

6. Vizhi - Eye

7. Malam - Motion

“Yugi Muni” explains the importance of ennvagai thervugal as follows,

“அன்பான சாத்திரங்கள் அறிய வேண்டும்
அன்பான நாடிதனைப் பிடிக்க வேண்டும்
குன்றான மலைபோன்ற நோயெல்லாம்
குறிப்புடன் அசாத்தியமு சாத்தியமுங்கண்டு
தன்றான அட்டவித பரிட்சை கண்டு
தக்கான குணங்குறிகள் யாவுந் தேர்ந்து
வன்றான வாகடத்தின் நுணுக்கம் பார்த்து
வளமாக பிணியதனைத் தீர்ப்போர்தாமே...”

It is essential to analyse the importance and application of each of the eight types of investigations to diagnose a particular disease.

1. Naadi-Pulse

Definition: The rhythmic expansion of an artery which may be felt by the finger. In siddha

உடலில் உயிர் தரித்திருப்பதற்கு காரணமான சக்தியே தாது அல்லது நாடி என்பர்.

On the other hand, it is defined as a series of pressure waves within an artery caused by contraction of the left ventricle and corresponding with the heart rate.

Naadi plays the most important role in ennvagai thervu and it has been considered to be the most important for assessing the prognosis and diagnosis of the disease. Any variation that occurs in the three humors is reflected in the

naadi. These three humors organize, regularize and integrate the functions of the human body. So, Naadi serves as a good indicator of all ill health. Naadi can be perceived by feeling it at the appropriate sites. The following ten sites are mentioned in our siddha literatures.

Places for pulse

“தாது முறை கேள் தனித்த குதிசந்தோடு
ஓதுறு காமியமந்தி நெடு மார்பு
காது நெடு மூக்கு கண்டம் கரம்புருவம்
போதுறு முச்சி புகழ் பத்தும் பார்த்திடே”

குதிசந்து, காமியம், உந்தி, மார்பு, காது, மூக்கு, கண்டம், கரம், புருவம், உச்சி ஆகிய பத்து இடங்களாகும்.

It is felt by palpation ordinarily at all places because the arteries are placed superficially. Even though Naadi can be felt through ten major arteries, this will be very prominent in radial artery at the lower end of the radial bone.

Naadi is felt as,

Vatham	-	Tip of index finger
Pitham	-	Tip of middle finger
Kabam	-	Tip of ring finger

In normal condition, the ratio of the naadi is as follows,

“மெய்யளவு வாதமொன்று
மேல் பித்தம் மோரரையாம்
ஐயங்கா லென்றே அறி”

The gait of the Naadi

Compared to the various animals, reptiles, birds,

“வாகினிலன்னங் கோழி மயிலென நடக்கும் வாதம்
ஏகிய வாமையட்டை யிவையென நடக்கும் பித்தம்
போகியே தவளைபாம்பு போலவாம் சேத்துமந்தான்”

Vatham	-	Movement of swan and hen
Pitham	-	Movement of Tortoise and leech
Kabam	-	Movement of frog and serpent

The Naadi is important in siddha system in diagnosis of disease even in case of patients economic status problem, and also to avoid stress. Even in coma stage, the disease can be diagnosed through naadi.

2. Sparisam – Palpation:

In the examination of sparisam includes

- Temperature of skin
- Warmth (or) cold
- Smoothness
- Dryness
- Patches
- Abnormal growth
- Tenderness

3. Naa – Tongue:

From ancient siddha system the tongue has been regarded as an invaluable clinical indicator of the health and disease.

In the examination of tongue,

- Colour of the tongue

- Coating
- Dryness, increased salivation
- Deviation, movement
- Variation in taste and the conditions of teeth and gums.
- Ulceration are also be noted.

4. Niram – Colour:

Diagnosis made with help of colour of the skin, nails, hair, conjunctiva, teeth, mucous membrane etc. The colour of the body is mentioned below.

Vatham	-	Black
Pitham	-	Yellow
Kabam	-	White
Mukcuttram	-	Variety of colours

5. Mozhi – speech:

In the examination of mozhi, the quality of sound is assessed.

Whether of nasal character, Brass or shrill, slurred, inarticulate and hoarse may be noted.

6. Vizhi – Eye:

The eyes are considered as the windows of the body. Both the physiological and pathological conditions are reflected in the eyes and this helps in the diagnosis of diseases.

In the examination of eye:

Changes of Colour

1. redness, yellowishness, pallor
2. Dryness, lacrimation
3. Sharpness of vision
4. Bitot spots
5. Papillary response
6. Condition of eye lashes
7. Inflammation may be noted

Thegi

Character of eye

1. Vatha thegi - Round, horrible, rough eye with thick eyelids and pleasing look.
2. Pitha thegi - Red in heat, anger, hunger, intoxication and has hyperactive thin eye lid.
3. Kaba thegi - Beautiful, clear shiny eyes with long sightedness, the eyebrows are thick and black.

7. Malam – Stools

It is the waste material that is eliminated through the anus. It is formed in the colon and consists of a solid (or) semi solid mass of undigested food remains, bacteria and various secretions and some water.

In the examination of malam, its nature whether it is solid, semisolid or liquid, its colour, increased or decreased quantities are to be noted. Other findings such as diarrhoea, presence of blood (occult blood), mucous, undigested matter in the stools and odour all are to be noted.

8. Moothiram – Urine

Urine is the fluid excreted by the kidneys, which contains many of the body's waste products. In modern aspect biochemical analysis of urine is

commonly used in the diagnosis of diseases and in pregnancy test.

In the siddha system of medicine, examination of urine by Neerkkuri and neikkuri are more useful to diagnose the disease with the help of colour, smell, abnormal constituents, froth, excessive or scanty urination, mixing of blood, pus, chyle, sugar and albumin etc.

Siddhars insist the importance of the urine examination as follows.

“தாக்க சாத்திரி களாளோர்
தங்களிற் நோந்து நாடி
நாடி வர்க்கமாம் நாடி தன்னில்
வருவது மயக்க மென்றே
உற்ற நீர் பரிடசையாய்ந்தே
யுரைத்தனிதற்கு நேராய்
மற்றொரு விதி நூலில்லை
மருந்துவக் கலை வல்லோர்க்கதே”.

சித்த மருத்துவாங்க சுருக்கம்

பொருள்:

மருத்துவக் கலை வல்லவர்க்கு நோயை கணிப்பதற்கு நீர்க்குறியைக் காட்டிலும் சிறந்த முறை வேறில்லை எனலாம்.

Collection of urine for Neerkkuri and Neikkuri

“அருந்து மாறி ரதமும் அவிரோதமாய்
அ.கல் அலர்தல் அகாலவூன் தவிர்ந்தழற்
குற்றளவருந்தி உறங்கி வைகறை
ஆடிக் கலசத் தாவியே காதுபெய்

89

தொரு முகூர்த்தக் கலைக்குட்பட்டு நீரின்

நிறக்குறி நெய்க்குறி நிருமித்தல் கடனே”

- தேரையர்

Prior to the day of urine examination, the patient should be advised to take balanced diet and should have good rest. The very first urine of the patient is collected in a glass or a porcelain container. Though the urine should be examined only according to the rules and regulations, at times of emergency they can be relaxed which is quoted as.

“அருப்ப முற்றார்க் கவ்விதி விலக்கே”

Neerkuri

“வந்த நீர் கரி எடை மணம் நுரை எஞ்சலென்

றைந்திய லுளவை யறைகுது முறையே”

According to above mentioned lines Niram, Edai, Manam, Nurai and Enjal are to be noted in the examination of urine.

1. Niram

It indicates the colour of urine voided it may be yellow, red, green, black, crystal and smoky etc.

2. Edai

It indicates the specific gravity of urine (increased or decreased quantity).

3. Manam

It indicates the smell of urine such as pleasant, foul smelling, honey smell, fruit smell and flesh smell etc.

4. Nurai

It indicates the frothy nature of urine.

5. Enjal

It indicates the inorganic and organic deposits like salts, crystals etc., and amount of urine extracted.

Neikkuri

A drop of gingelly oil is dropped into wide vessel containing the urine to be tested and keep it under the sunlight. The variations of three humors in disease can be diagnosed by the behaviour of gingelly oil on the surface of urine.

‘அரவென நீண்டிடின் அ.:தே வாதம்’

The drop of oil lengthening like a snake indicates vatham.

‘ஆழி போற் பரவின் அ.:தே பித்தம்’

If the drop of oil spreads like a ring it indicates pitham.

‘முத்தொத்து நிற்கின் மொழிவதன் கபமா’

The drop of oil remains floating as a pearl indicates kabam.

In thontha state, the oil spreads in mixed form.

By the careful examination of the urine with gingelly oil, the physicians can know whether the disease is curable or not. For this purpose siddhars have explained various spreading of oil on urine surfaces.

OBSERVATION AND INFERENCE

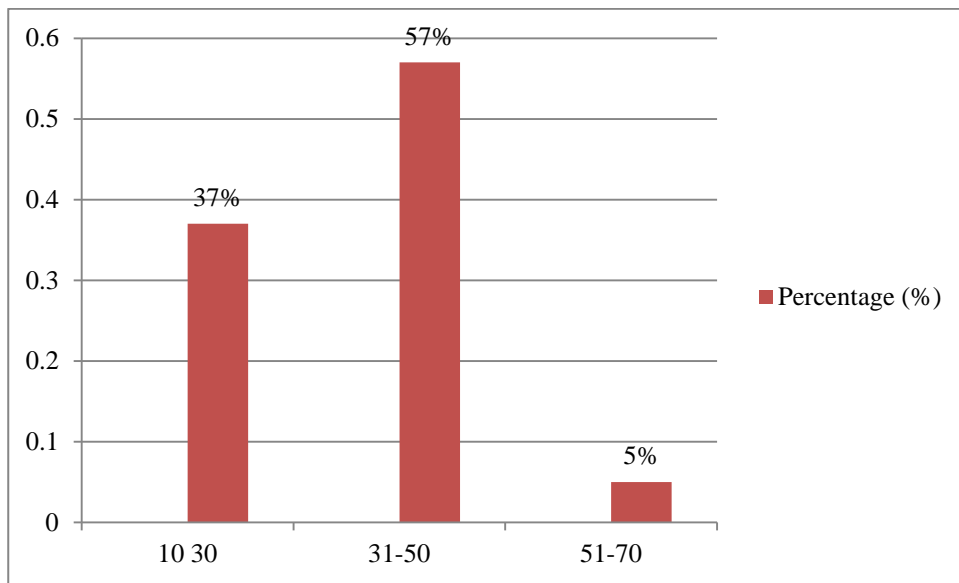
OBSERVATION AND INFERENCE

Results were observed with respect to the following criteria

1. Age distribution
2. Sex distribution
3. Ayul kaalam
4. Seasonal changes
5. Thina
6. Socio-economic status
7. Diet
8. Personal Habits
9. Occupational status
10. Etiological Factor
11. Clinical symptoms
12. Mukkutram
13. Udal thathukkal
14. Thegi
15. Ennvagai thervugal
16. Iympull Iyakkavidhi (Panchapatchi)
17. Lab investigation

1.AGE DISTIRIBUTION

S.No	Age	No.of cases	Percentage (%)
1	10 -30	13	37%
2	31-50	20	57%
3	51-70	2	5%



Among these 35 cases
57% of cases were in the age group of 31 – 50

2. SEX DISTRIBUTION

S.No	SEX	No.of cases	Percentage
1	Male	19	54%
2	Female	16	45%

Among these 35 cases

54% of cases were male

3.AYUL KAALAM

S.No	AYUL KAALAM	No.of cases	Percentage (%)
1	Kaba kaalam (0-33Years)	17	48%
2.	Pitha kaalam (34-66Years)	18	51%

Among these 35 cases

18 % of the cases were in the Pitha kaalam

4. THINAI

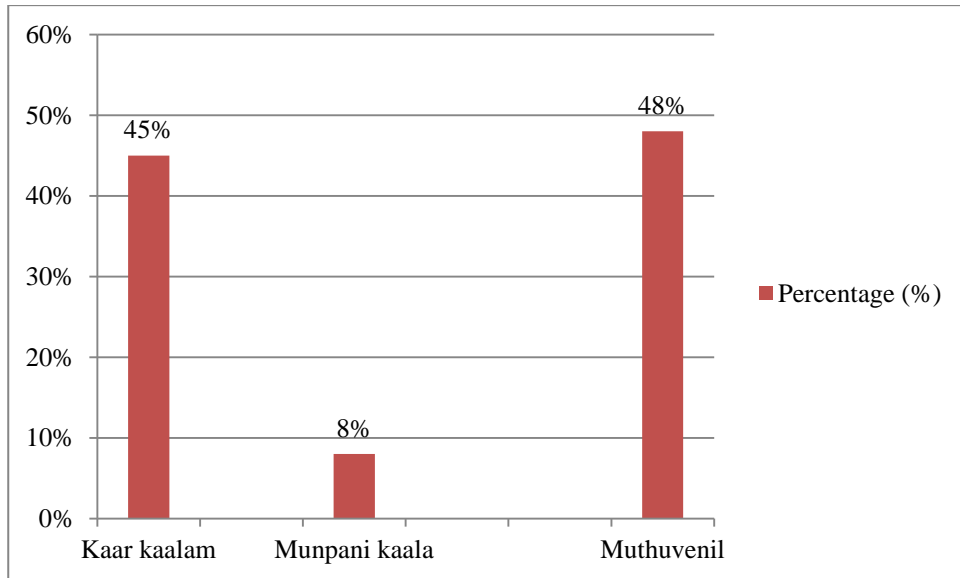
S.No	Thini	No.of cases	Percentage (%)
1	Marutham	35	100%
2.	Neithal	-	-

Among these 35 cases

100% of cases were from marutha nilam

5. SEASONAL CHANGES

S.No	Seasons	No.of cases	Percentage (%)
1	Kaar kaalam	16	45%
2.	Koothir kaalam	-	-
3.	Munpani kaala	3	8%
4..	Muthuvenil	17	48%



Among these 35 cases

48 % of the cases were affected during Muthuveni Kaalam

6. SOCIO ECONOMIC STATUS

S.No	SocioEconomic Status	No.of cases	Percentage (%)
1	Upper	5	14%
2	Middle class	25	71%
3.	Lower class	5	14%

Among these 35 cases

71% of the cases comes under middle class

7. DIET

S.No	Seasons	No.of cases	Percentage (%)
1	Vegetarian	6	17%
2	Mixed diet	29	82%

Among these 35 cases

94% had taken mixed diet

8. PERSONAL HABITS

S.No	Habits	No.of cases	Percentage (%)
1	Tea / Coffee (> 4 times/ day)	35	94%
2	Alcohol	3	8%
3	Smoking	8	22%

Among these 35 cases

94 % of cases had the history of Tea/coffee intake

9.OCCUPATIONAL STATUS

S.No.	Occupation	No.of.Cases	Percentage%
1	Student	4	11%
2	Farmer	4	11%
3	Manual Labour	14	40%
4	House wife	13	37%

Among these 35 cases

40% of cases were Manual Labour

10. ETIOLOGICAL FACTORS

S.No	Factors	No.of cases	Percentage (%)
1	Upper respiratory tract infection	35	100%
2.	Allergies	20	57%

Among these 35 cases

100 % of cases were had Upper respiratory tract infection

11.UDAL THADHUKKAL

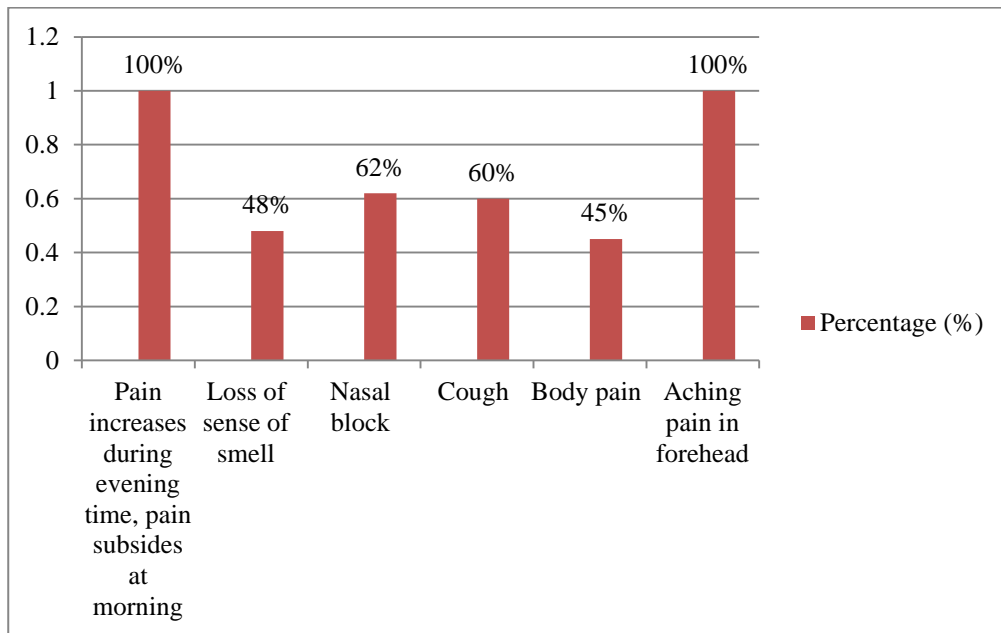
S.No	Pitham	No.of cases	Percentage (%)
1	Saaram	35	100%
2	Senneer	35	100%

Among these 35 cases

Saaram , Senneer were affected in 100% of cases.

12. CLINICAL SYMPTOMS

S.No	Symptoms	No.of cases	Percentage (%)
1	Pain increases during evening time, pain subsides at morning	35	100%
2	Loss of sense of smell	17	48%
3	Nasal block	22	62%
4	Cough	21	60%
5	Body pain	16	45%
6.	Aching pain in forehead	35	100%

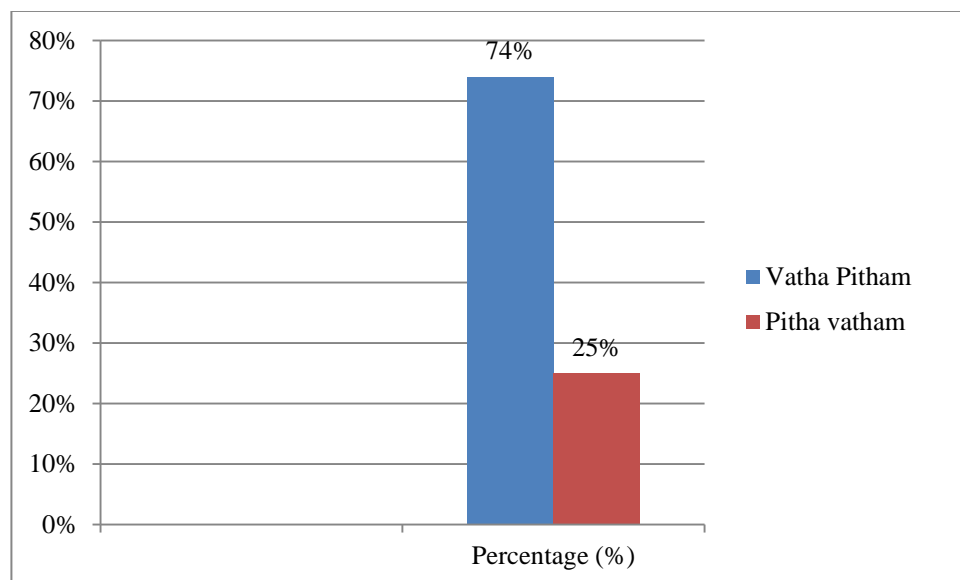


Among these 35 cases

100% of cases were present with Aching pain in forehead, during evening time heaviness of Head,

13. THEGI

S.No	Thegi	No.of cases	Percentage (%)
1	Vatha Pitham	26	74%
2	Pitha vatham	9	25%



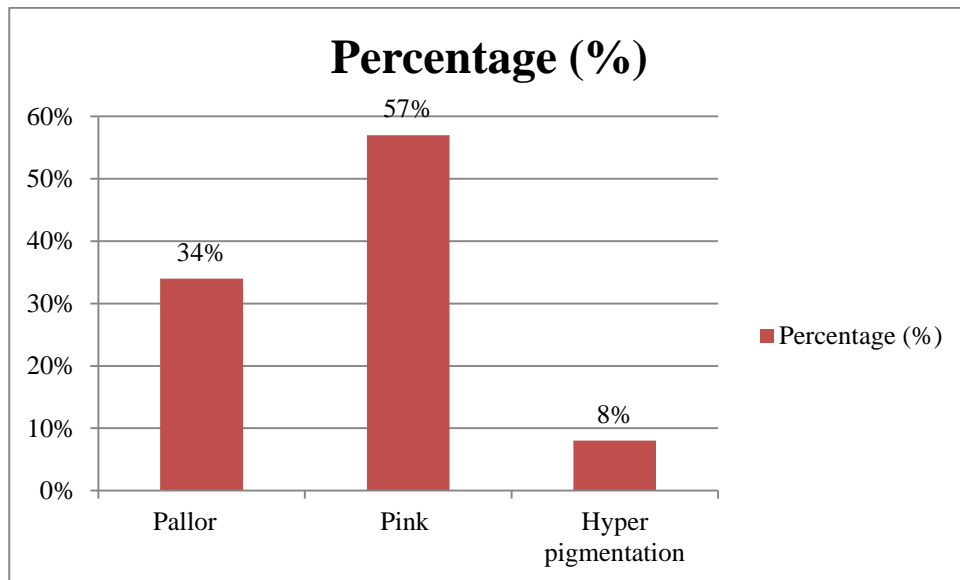
Among these 35 cases.

74% of cases had Vatha Pitham

14. ENNVAGAI THERVUGAL

NAA
NIRAM

S.No	Niram	No.of cases	Percentage (%)
1	Pallor	12	34%
2	Pink	20	57%
3	Hyper pigmentation	3	8%



Among these 35 cases
57% of cases with pink tongue

15. COATED TONGUE

S.No	Coated tongue	No.of cases	Percentage (%)
1	Present	22	62%
2	Absent	13	37%

Among these 35 cases
62% of cases present with coated tongue

16. MOZHI

S.No	Pitch	No.of cases	Percentage (%)
1	High pitch	-	-
2	Moderate pitch	24	68%
3	Low pitch	11	31%

Among these 35 cases
68% of cases with moderate pitch

17. VIZHI - COLOUR OF VENVIZHI

S.No	Colour of ven vizhi	No.of cases	Percentage (%)
1	Venmai	28	80%
2	Manjal	07	20%

Among these 35 cases
80 % of cases were present with venmai venvizhi

18. COLOUR OF CONJUNCTIVA

S.No	Colour of conjunctiva	No.of cases	Percentage (%)
1	Pale	13	37%
2	pink	22	62%

Among these 35 case

62 % of cases with pink conjunctiva

19. SPARISAM

S.No	Sparisam	No.of cases	Percentage (%)
1	Veppam	4	11%
2	Mitha Veppam	23	65%
3.	Thatpam	8	22%

Among these 35 cases .

65% of cases had mitha veppam

20. QUANTITY OF STOOLS

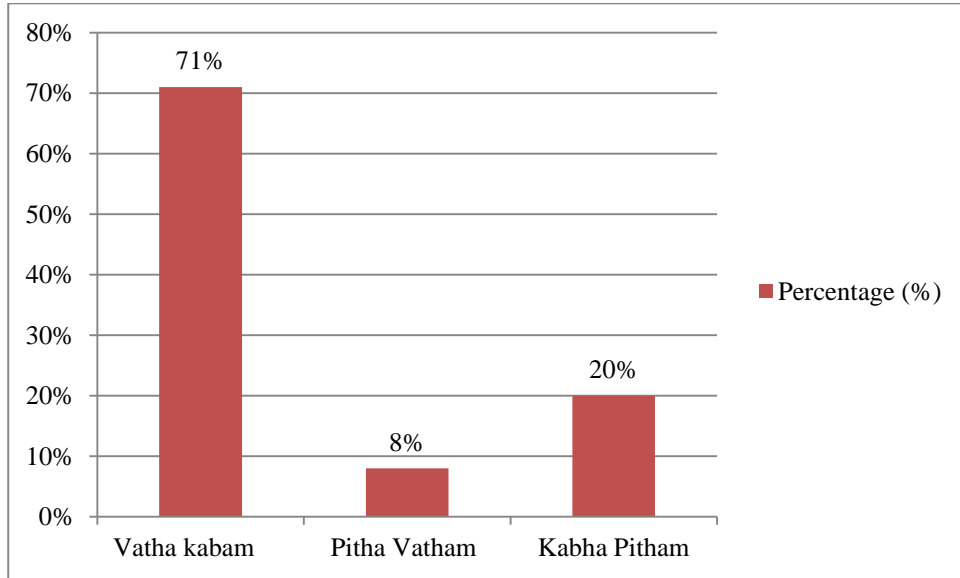
S.No	Quantity	No.of cases	Percentage (%)
1	Normal	24	68%
2	Reduced	11	31%

Among these 35 cases

68% of cases had normal quantity of stool

21. NAADI

S.No	Naadi	No.of cases	Percentage (%)
1	Vatha kabam	25	71%
2	Pitha Vatham	3	08%
3.	Kabha Pitham	7	20%

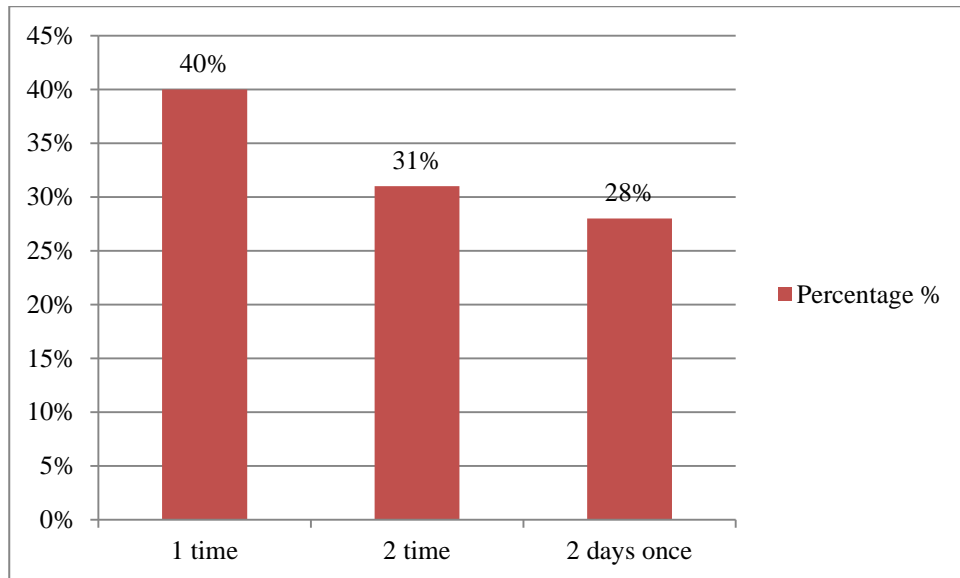


Among these 35 case

71% of cases had vatha kabam

22.MALAM

S.No	No.of Frequency/day	No.of Case	Percentage %
1	1 time	14	40%
2	2 time	11	31%
3	2 days once	10	28%



Among these 35 cases
40% of cases had one time

23. COLOUR OF STOOLS

S.No	Colour	No.of cases	Percentage (%)
1	Yellowish brown	32	91%
2	Brown	03	8%

Among these 35 cases .

91% of cases had yellowish brown colour stools.

24.CONSTIPATION

S.No	Constipation	No.of cases	Percentage (%)
1	Present	16	45%
2	Absent	19	54%

Among these 35 cases

54 % of cases were absent with constipation

45% of cases were present with constipation

NEERKURI

25. COLOUR OF URINE

S.No	Colour of Urine	No.of cases	Percentage (%)
1	Dark Yellow	5	14%
2	Light Yellow	24	68%
3	Clear	6	17%

Among these 35 cases

68 % of cases had light yellow coloured urine.

26. NEIKURI

S.No	Neikuri	No.of cases	Percentage (%)
1	Aravu	17	48%
2	Aazhi	8	22%
3	Muthu	10	28%

Among these 35 cases .

48% of cases shows Aravu in Neikuri

27. SPREADING OF NEIKURI

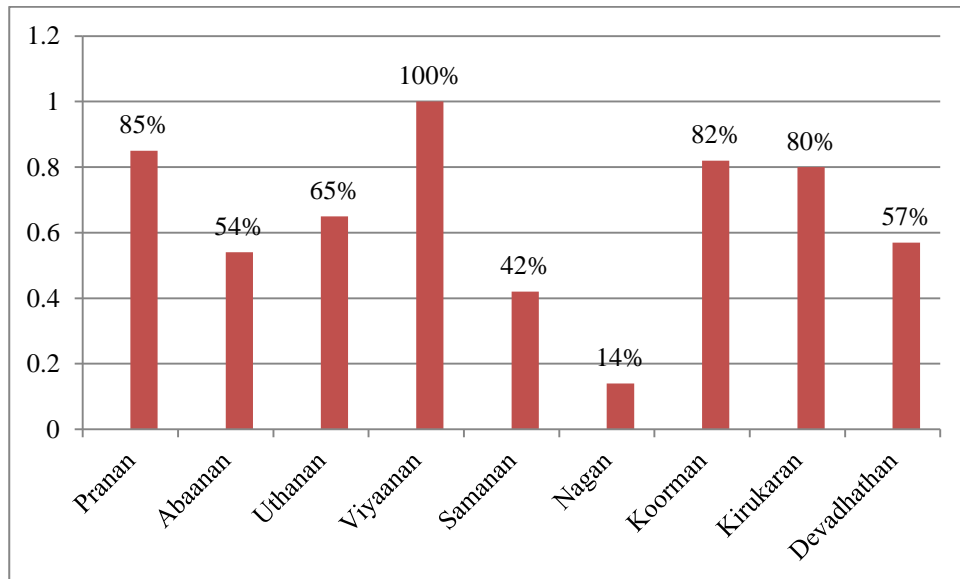
S.No	Spread	No.of cases	Percentage (%)
1	Fast spread (viraintha paraval)	17	48%
2	Slow spread (Mella Paraval)	13	37%
3	No Spread	5	14%

Among these 35 cases

48 % of cases have Fast spread pattern in 'Nei Kuri'

VATHAM

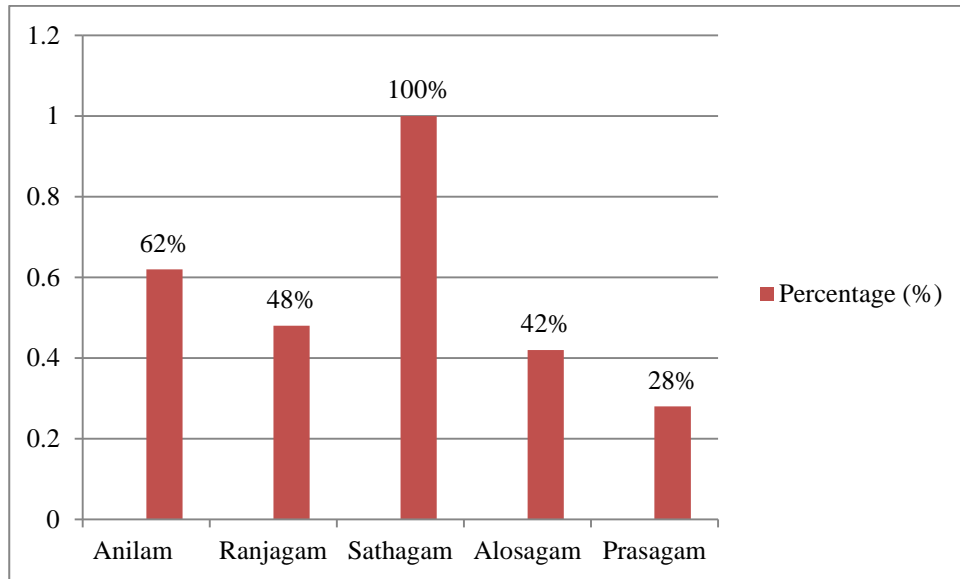
S.No	Seasons	No.of cases	Percentage(%)
1	Praanan	30	85%
2	Abaanan	19	54%
3	Uthanaan	23	65%
4.	Viyaanan	35	100%
5.	Samanan	15	42%
6.	Naagan	5	14%
7.	Koorman	29	82%
8.	Kirukaran	28	80%
9.	Devadhathan	20	57%



Among these 35 cases

100% of the cases were affected in Viyaanan

S.No	Pitham	No.of cases	Percentage (%)
1	Anilam	22	62%
2.	Ranjagam	17	48%
3.	Sathagam	35	100%
4.	Alosagam	15	42%
5.	Prasagam	10	28%

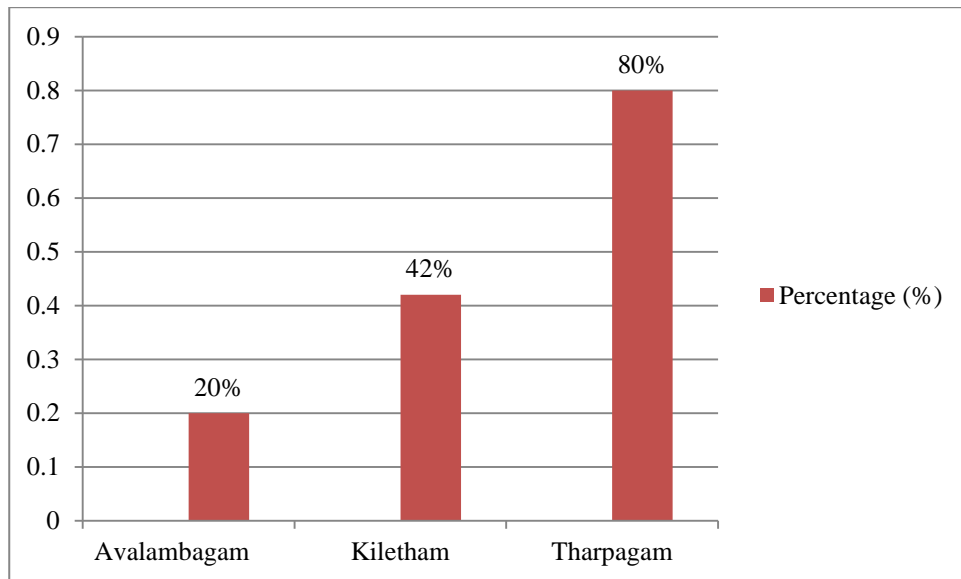


Among these 35 cases

Sathagam was affected in 100% of cases

30.KABHAM

S.No	Kabam	No.of cases	Percentage (%)
1	Avalambagam	7	20%
2	Kiletham	15	42
3	Pothagam	-	-
4.	Tharpagam	28	80%
5	Santhigam	-	-



Among these 35 cases

80% of cases were affected in Tharpagam

30. SIGNS AND SYMPTOMS

S.No	Signs and Symptoms	No.of cases	Percentage (%)
1.	Pain increases during evening time, pain subsides at morning Heaviness head .	35	100%
2.	Pain in forehead	35	100%
3.	Loss of sense of smellfacial pain	17	48%
4.	Nasal Slock	22	62%
5.	Body pain	16	45%
6.	Cough	21	60%

Among these 35 cases

100% of cases were present with aching pain forehead, during evening time heaviness head.

THE PICTURE OF ENNVAGAI THERVUGAL

So.No	Reg. No.	Op. No.	Age/ Sex	Naa	Nir.	Mo.	Vi.	Naa	Sp.	Mal.	Neerkuri	Neikuri
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											Ni	M a	Ed	Nu	En	
1.	1.	57772	55/F	N	V	S	N	KP	K	YB	LY	A	1.006	A	N	K
2.	2.	54426	35/M	P/F	N	T	PC	VP	MV	YB	DY	A	1.005	A	N	P
3.	3.	58274	43/M	Pi	N	S	PC	KP	K	YB	LY	A	1.002	A	N	P
4.	4.	59172	20/M	N	N	D	N	VP	MV	YB	DY	A	1.014	A	N	V
5.	5.	52331	29/F	Pi	F	T	PC	VP	MV	YB	LY	A	1.011	A	N	V
6.	6.	61650	40/M	P/F	N	T	N	VP	K	YB	LY	A	1.005	A	N	K
7.	7.	52334	30/F	WC	V	S	PC	PV	MV	B	CL	A	1.008	A	N	P
8.	8.	67544	19/M	P/F	F	S	PC	VP	MV	YB	LY	A	1.024	A	N	K
9.	9.	68867	20/F	Pi	V	T	PC	VP	K	YB	DY	A	1.014	A	N	V
10.	10.	69345	27/M	N	N	S	PC	VP	MV	YB	LY	A	1.023	A	N	P
11.	11.	58398	52/M	WC	N	S	PC	KP	MV	YB	DY	A	1.011	A	N	K
12.	12.	71102	50/M	P/F	N	S	N	VP	MV	YB	LY	A	1.003	A	N	V
13.	13.	71878	27/F	Pi	V	S	PC	VP	V	YB	LY	A	1.011	A	N	V
14.	14.	71920	45/M	WH	F	T	PC	VP	MV	B	CL	A	1.009	A	N	V
15.	15.	72881	31/F	CO	V	T	PC	KP	K	YB	LY	A	1.022	A	N	K
16.	16.	72632	28/M	WC	N	S	PC	KP	MV	YB	LY	A	1.007	A	N	K
17.	17.	74147	30/M	Pi	N	S	PC	VP	MV	YB	LY	A	1.021	A	N	V
18.	18.	74329	46/M	Co	N	S	PC	VP	MV	YB	CL	A	1.018	A	N	V
19.	19.	74420	33/M	N	F	S	PC	VP	MV	YB	LY	A	1.015	A	N	V
20.	20.	74548	32/F	N	V	S	PC	VP	MV	YB	LY	A	1.006	A	N	P
21.	21.	74574	38/M	Wc	F	S	PC	VP	MV	YB	LY	A	1.021	A	N	K
22.	23.	75037	29/F	Pi	N	S	PC	VP	V	YB	CL	A	1.017	A	N	V
23.	24.	75032	35/F	P/F	N	T	N	VP	MV	YB	LY	A	1.005	A	N	V
24.	25.	75533	15/M	P/F	F	S	PC	KP	K	YB	LY	A	1.007	A	N	K
25.	26.	73857	34/F	WH	N	S	PC	PV	MV	YB	CL	A	1.025	A	N	P
26.	27.	75893	42/F	Pi	F	S	PC	VP	K	YB	LY	A	1.011	A	N	V
27.	28.	75048	31/M	WC	F	S	N	VP	MV	YB	CL	A	1.023	A	N	V
28.	29.	76138	22/F	N	F	S	PC	VP	V	YB	LY	A	1.027	A	N	K
29.	30.	77628	29/M	Pi	N	S	PC	PV	MV	B	LY	A	1.008	A	N	P
30.	31.	77630	35/M	WH	N	T	PC	VP	MV	YB	LY	A	1.014	A	N	V

31	32	106618	48/F	Pi	F	S	N	VP	MV	TB	LY	A	1.009	A	N	V
32.	33.	2025	35/M	WC	N	S	PC	KP	K	YB	LY	A	1.023	A	N	K
33.	39.	19043	42/F	PF	V	T	N	VP	V	YB	CL	A	1.004	A	N	V
34.	43	43474	50/MPi	F	F	T	PC	VP	MV	YB	LY	A	1.017	A	N	P
35.	45.	43999	36/F	Pi	F	S	Pc	VP	MV	YB	DY	A	1.003	A	N	V

THE PICTURE OF ENNVAGAI THERVUGA

P	-	Pallor	PV	-	Pitha Vatham	V	-	Veluthukanal
V	-	Veppam	N	-	Normal	A	-	Absent
S	-	Samaoli	P	-	Pitha neer	PC	-	Pallor conjunctiva
Pi	-	Pink	VP	-	Vatha Pitham	CL	-	Clear
V	-	Vatha neer	LY	-	Light yellow	F	-	Fair
F	-	Fissure	MV	-	Mitha Veppam	DY	-	Dark Yellow
K	-	Kabha neer	T	-	Thazhntha oli			



PATCHI

Sl.No	Reg.No	Op.No	Va/The	Affected			
				Patchi	Bootham	Kutram	Aatharam
1.	1.	57772	V	Aa	Kaatru	V	Vi
2.	2.	54426	V	Ka	Mann	V	Mu.Sw.
3.	3.	58274	V	Ka	Mann	V	Mu.Sw
4.	4.	59172	V	Ma	A	V	Aa
5.	5.	52331	V	Aa	Kaatru	V	Vi
6.	6.	61650	T	Ko	Kaatru	V	Vi
7.	7.	52334	V	Aa	Kaatru	V	Vi
8.	8.	67544	V	Va	Thee	P	An
9.	9.	68867	V	Ma	A	V	Aa
10.	10.	69345	V	Ma	A	V	Aa
11.	11.	58398	T	Ko	Kaatru	V	Vi
12.	12.	71102	T	Ko	Kaatru	V	Vi
13.	13	71872	T	Ma	A	V	Aa
14.	14.	71920	T	Ko	Kaatru	V	Vi
15.	15.	72881	T	Ko	Kaatru	V	Vi
16.	16.	72632	T	Ko	Kaatru	V	Vi
17.	17.	74147	V	Ko	Neer	K	Ma
18.	18.	74329	V	Ko	Neer	K	Ma
19.	19.	74420	V	Ko	Neer	V	Ma
20.	20.	74548	V	Ma	A	K	Aa
21.	21.	74574	V	Ko	Neer	V	Ma

22.	23.	75037	V	Aa	Kaatru	P	Vi
23.	24.	75032	V	Va	Thee	K	An
24.	25.	75533	V	Ko	Neer	K	Ma
25.	26.	72857	V	Ko	Neer	V	Ma
26.	27.	75893	V	Ma	A	V	Aa
27.	28.	75048	V	Ma	A	V	Aa
28.	29.	76138	V	Ma	A	K	Aa
29.	30.	77628	T	Ma	Mann	K	Mu.Sw.
30.	31	77630	T	Ma	A	V	Aa
31.	32.	106618	T	Ko	Kaatru	V	Vi
32.	33.	2025	T	Ka	Thee	P	Aa
33.	39	19043	V	Ka	Mann	V	Mu.Sw
34.	43	43474	T	Ka	Thee	P	Aa
35	45.	43999	T	Ko	Kaatru	V	Vi

Va - Valarpirai V - Vatham K - Kabam
Th - Theipirai P - Pitham Ko - Kozhli

Ma - Mayil Va - Vallooru Aa - Anathai

Mu - Mulatharam Sw - Swadhittanam

Ma - Manipuragam

An - Anagatham

Vi - Visuddhi

Aa - Aakkinai

45% of cases had Kozhli patchi 26% of cases had Mayil Patchi.

34% of cases Visuddhi Aatharam was affected 26% of cases Aakkinai Aatharam was affected.

34% of cases Kaatru Bootham was affected 25% of cases Aagayam Bootham was affected.

LABORATORY INVESTIGATION

Sl. No	Reg.No	Op.No.	Age/ Sex	TC	DC	ESR	HB	Su	Ur	Ch	Cr	Alb	Sug	Dep.	X-ray
--------	--------	--------	-------------	----	----	-----	----	----	----	----	----	-----	-----	------	-------

					P%	L%	E%	½ hr	1hr									
1.	1.	57772	55/F	7400	58	33	9	14	30	10	140	22	130	0.9	NIL	NIL	NAD	F.S.
2.	2.	54426	35/M	10400	54	41	5	6	12	13	125	38	120	0.07	NIL	NIL	NAD	F.S.
3.	3.	58274	43/M	8200	62	34	4	12	25	13.5	95	30	158	1.02	NIL	NIL	NAD	F.S.
4.	4.	59172	20/M	8800	60	35	5	30	61	14	92	36	140	1.2	NIL	NIL	NAD	F.S.
5.	5.	52331	29/F	7900	65	28	7	14	30	11.5	89	24	170	0.9	NIL	NIL	1-3Pus.	F.S.
6.	6.	61650	40/M	9600	65	25	10	30	72	15	115	30	160	1.45	NIL	NIL	NAD	F.S.
7.	7.	52334	30/F	6200	55	37	8	15	30	10.5	91	20	130	0.06	NIL	NIL	NAD	F.S.
8.	8.	67544	19/M	8400	62	24	14	20	40	13	100	38	125	1.02	NIL	NIL	NAD	F.S.
9.	9.	68867	20/F	10200	60	34	6	14	26	9	105	30	118	0.07	NIL	NIL	NAD	F.S.
10	10.	69345	27/M	10000	69	27	5	15	40	12	132	37	154	1.14	NIL	NIL	NAD	F.S.
11	11.	58398	52/M	9900	60	32	8	14	26	13.5	112	25	200	1.02	TR	T	NAD	F.S.
12	12.	71102	50/M	7700	58	28	14	30	61	14.5	142	38	172	1.18	NIL	T	NAD	F.S.
13	13.	71878	27/F	10100	61	27	6	15	30	8.5	105	32	160	1.46	NIL	NIL	NAD	F.S.
14	14.	71920	45/M	8100	56	33	11	6	12	11.6	120	40	230	0.09	NIL	NIL	NAD	F.S.
15	15.	72881	31/F	6200	67	27	6	14	46	9.5	125	28	240	1.02	NIL	NIL	NAD	F.S.
16	16.	72632	28/M	6900	62	29	5	12	29	12	115	35	200	0.07	NIL	NIL	NAD	F.S.
17	17.	74147	30/M	10000	54	41	5	7	15	12.4	110	32	158	1.14	NIL	NIL	NAD	F.S.
18	18.	74329	46/M	7200	65	28	7	6	12	13	120	22	192	1.18	NIL	NIL	1-3Epi	F.S.
19	19.	74420	33/M	7500	67	28	5	14	35	13.5	140	24	178	1.07	NIL	NIL	NAD	F.S.
20	20.	74548	32/F	10400	66	24	5	10	22	9.5	140	22	118	1.24	NIL	NIL	NAD	F.S.
21	21.	74574	38/M	8000	77	22	5	7	21	14	135	38	200	1.09	NIL	NIL	NAD	F.S.

22	23.	75037	29/F	6500	90	32	8	12	24	13	112	37	160	0.07	NIL	NIL	NAD	F.S.
23	24.	75032	35/F	7300	54	25	14	16	28	10.7	105	58	175	1.02	NIL	NIL	NAD	F.S.
24	25.	75533	15/M	10000	65	34	10	17	36	13.9	110	16	154	0.08	NIL	NIL	NAD	F.S.
25	26.	73857	34/F	9200	52	37	6	21	45	15	125	30	160	1.16	NIL	NIL	NAD	F.S.
26	27.	75893	42/F	12000	60	32	8	12	25	12	140	35	165	1.14	NIL	NIL	NAD	F.S.
27	28.	75048	31/M	11200	64	30	6	24	42	14.7	135	28	178	0.07	NIL	NIL	NAD	F.S.
28	29.	76138	22/F	8300	68	22	7	6	12	8.4	114	22	180	0.08	NIL	NIL	NAD	F.S.
29	30.	77628	29/M	67000	62	27	11	15	30	15.4	138	36	210	0.09	NIL	NIL	NAD	F.S.
30	31.	77630	35/M	10000	54	32	14	17	35	13.7	145	29	168	1.45	NIL	NIL	NAD	F.S.
31	32.	106618	48/F	11000	70	22	8	25	58	12	125	32	154	0.07	NIL	NIL	NAD	F.S.
32	33.	2025	35/M	9700	64	24	5	27	46	14	115	29	165	1.24	NIL	NIL	NAD	F.S.
33	39.	19043	42/F	12000	62	31	7	17	29	9.5	140	34	200	0.09	NIL	NIL	NAD	F.S.
34	43.	43474	50/M	5400	65	25	5	19	36	15	130	22	220	1.12	NIL	NIL	NAD	F.S.
35	45.	43999	36/F	9200	68	28	8	21	38	11.2	200	24	180	1.16	NIL	NIL	NAD	F.S.

TR-TRACE

FPC-Few Pus Cells ,

FPC- Few Epithelial Cell

F.S. -Frontal Sinusitis

TAMILNADU MEDICAL SERVICES CORPORATION LIMITED
GOVERNMENT DISTRICT HEAD QUARTERS HOSPITAL, TIRUNELVELI



CT - SCAN CENTRE

SCAN REPORT



PATIENT NAME	Mrs.Malar	DATE	23.08.15
PATIENT NO	59643	AGE	35
CLINICAL IMPRESSION		SEX	F

REPORT

CT SCAN OF PNS (PLAIN)

Serial axial sections of para nasal sinuses were studied from the level of hard palate to frontal bone without administration of IV contrast.

Frontal sinus - Air fluid level in the right frontal sinus

Maxillary sinus - Air fluid level in the right and left maxillary sinuses

Ethmoid sinuses are clear.

Sphenoid sinuses are clear.

Nasal cavity looks clear.

Impression :

Maxillary frontal sinusitis.

Dr. P. Balamurugan

RADIOLOGIST

TAMILNADU MEDICAL SERVICES CORPORATION LIMITED
GOVERNMENT DISTRICT HEAD QUARTERS HOSPITAL, TIRUNELVELI



CT - SCAN CENTRE
SCAN REPORT



PATIENT NAME	MR. RAMACHANDIRA RAJ	DATE	18.08.15
PATIENT NO	57325	AGE	28
		SEX	M

CLINICAL IMPRESSION

REPORT

CT SCAN OF PNS (PLAIN)

Serial axial sections of para nasal sinuses were studied from the level of hard palate to frontal bone without administration of IV contrast.

Frontal sinus - Air fluid level in the right frontal sinus

Maxillary sinus - Air fluid level in the right and left maxillary sinuses

Ethmoid sinuses are clear.

Sphenoid sinuses are clear.

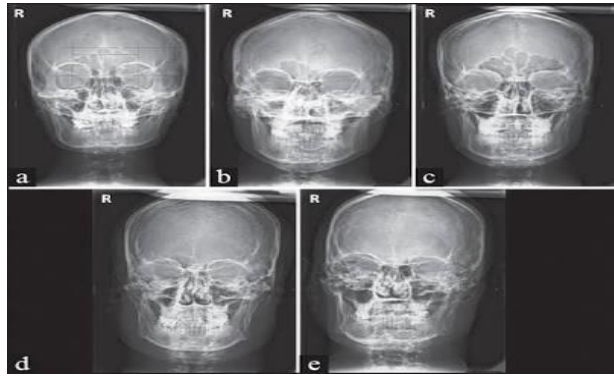
Nasal cavity looks clear.

Impression :

Maxillary frontal sinusitis.

Dr. P. Balamurugan

RADIOLOGIST



Op.No : 74147
Name : Mr.Kanagavel Age/Sex: 30/M
Impression : Frontal Sinusitis



Op.No : 52331
Name : Mrs.Radhika Age/Sex: 29/F
Impression : Frontal Sinusitis

DISCUSSION

“விரித்திடுத் வாத பித்த

சிலேட்டும் வியாதி மூன்றில்

வருத்திடும் சலதோ ஷத்தால்

வண்மை மூன்று ரைத்த தென்ன

தரித்திடும் மீரேழ் நூலின்

தண்ணி லெண் பத்தி ரண்டு

கருத்திடும் வாதக்கூறு

நோயெனக் கருதலாமே

வாதம், பித்தம், கபம் என்று மூன்றாக கூறப்பட்ட முக்குற்றங்களால் ஏற்படும் பிணிகளில் பீனிசமே வருத்தி எடுக்கும்.

Vatham is initiator of all forms of activity. It is important in the communication network of the body from sense organ to brain, tissue to tissue and cell to cell.

Any disturbance in these vital force will affect the function of the organ which leads to pathological changes occur.

Santhira Vartham is one of the 80 Vatha diseases. The signs and Symptoms of Santhira Vartham was taken from Yugi Vaithiya Chinthamani⁸⁰⁰.

Pathology of Santhira Vartham

Vathrogam is due to vitiation of vatham due to various factors such as dietary changes, seasonal, and climatical changes. They immediately disturb the functions of the affected site. In Santhira vartham the first affected site is upper respiratory system.

INTERPRETATION OF ETIOLOGY

I. AGE

Maximum number of cases about 57% were recorded in pitha kaalam.

II. DIET

Maximum number of cases recorded had history of increased intake of vatha and Kabham diet. (Rice, Tamarind , Spicy diet and ice creams)

III. HABITS

Maximum number of cases were recorded with irregular dietary habits and activities which caused as increase in vatha constituent responsible for the disease.

INTERPRETATION OF PATHOGENESIS:-

Increased vatha kuttram which inturn affect the praanan , abaanan,uthanan , viyaanan , koorman , kirukaran ,Devothathan in vatha sub type.

Increased pitha kuttram which inturn affect Anilam, Ranjagam Sathagam, Alosagam Prasagam along with kaba kuttram inturn affect Avlambagam, kilethagam and tharpagam.

In 14 reflexes it affects the Abaana vaayu,thummal, nithirai, vizhineer,Malam.

INTERPRETATION OF CLINICAL HISTORY AND EXAMINATION

i. AGE GROUP

☞ Among these 35 cases 57% of cases belongs to the age group between 31 – 50 years (Pitha Kaalam.)

ii. SEASONAL CHANGES

48% of cases in muthuvenil kaalam

45% of cases in kaar kaalam

8% of cases in koothir kaalam

7% of cases in Pinpani kaalam

It aggravated during Muthuvenil kaalam and kaar kaalam due to vettrunilai valarchi of vatham and kabam .

iii. SIGNS AND SYMTOMS

All the 35 cases were found to be presented with signs and symptoms as

100% of cases affected with Headache increased evening time and Heaviness of head.

48% of cases affected with loss of sense of smell, facial Pain

60% of cases affected with cough

100% of cases affected with aching pain in forehead

62% of cases affected Nasal block.

45% of cases affected with body pain

INTERPRETATION OF UYIR THAATHUKKAL

VATHAM

Praanan was affected in 35 % of cases.

Affected Praanan causes Nasal congestion and difficulty in breathing.

Abaanan was affected in 54% of cases. It causes constipation.

Viyaanan was affected in 100% of cases. It causes pain in the body and forehead.

Uthaanan was affected in 65% of cases. It causes sneezing and cough .

Naagan was affected in 14% of cases. It causes pain in the eye.

Koorman, was affected in 82% of cases. It causes pain in the forehead.

Kirukaran was affected in 80% of cases. It causes sneezing.

Devathathan was affected in 57% of cases. It causes heaviness of the body.

PITHAM

Anilam was affected in 74% of cases. It causes Loss of appetite.

Ranjagam was affected in 62% of cases. It causes palloriness of tongue and conjunctiva.

Sathagam was affected in 48% of cases. It causes difficult in doing routine works.

Alosagam was affected in 42% of cases. It causes eye sight affected.

KABHAM

Avalambagam was affected in 20% of cases . It causes cough .

Kilethagam was affected in 42% of cases.

Tharpagam was affected in 80% of cases. It causes pain in eye and watery discharge.

INTERPRETATION OF UDAL THATHUKKAL

Saaram was affected in 100% of cases

Seneer was affected in 100% of cases.

INTERPRETATION OF ENNVAGAI THERVUGAL

NAA

Basic pigmentation in the tongue indicate the vatha character presented in 10% of cases.

Fissures in the tongue denote the vatha character, was found in 25% of cases.

MOZHI

68% of cases with moderate pitch.

31% of cases with low pitch.

VIZHI

80% of cases with normal conjunctiva.

20% of cases with pallor conjunctiva.

SPARISM

65% of cases were presented with mitha veppam.

11% of cases were presented with vepam.

22 % cases were presented with Thatpam.

NAADI

Vathakabam naadi was noted in 71% of cases.

Pitha vatha naadi was noted in 8% of cases.

Kabha Vatham was noted in 20% of cases.

Naadi plays a significant role to diagnose the disease Santhira Vartham. It indicates affected kuttram of disease.

MALAM

91% of cases had yellowish brown stool.

8% of cases had brown stool.

MOOTHIRAM

NEERKURI

14% of cases had present with dark yellow

68% of cases had present with Light Yellow.

17% of cases had present with clear

The colour of urine indicates the derangement of vatha kuttram.

It indicates increased vatha and kabam humor in body.

The neer kuri plays an important role in diagnosing the disease **Santhira vartham**.

NEIKURI

48% of cases showed Aravu that is vatha neer.

22% of cases showed Aazhi that is pitha neer

28% of cases showed Muthu that is kabha neer

Neikuri denotes increased vatha humor in body.

INTERPRETATION OF THEGIYIN ILAKKANAM

74% of cases had vatha pitha thegi

9% of cases had pitha vatha thegi

It indicates pitha vatha thegi more susceptible to **Santhira vartham**.

INTERPRETATION OF IYMPULL IYAKKAVIDHI (PANCHAPATCHI)

40% of cases had Kozhli patchi

26% of cases had Mayil patchi.

25% of cases Aagayam was affected

34% of cases Kattru was affected

34% Visuddhi was affected

26% of cases Aakkinai was affected

68% of cases Vatham was affected

20% of cases Kabam was affected

It indicates **Aakkinai** and **Visuddhi aatharams** are mostly affected in Santhira Vartham.

INTERPRETATION OF MODERN PARAMETERS

Total WBC Count - normal

Differential count - Increased eosinophils

ESR elevated

Pathology of Santhira Vartham

“சுருபமாய் உடம் பெங்கும் வலியுமாகித்
தும்மியே முக்கடைத்து சுகந்தமற்று”

Acute infection of sinuses due to systemic effect of inflammatory mediator, which are the causes for pain all over the body due to inflammatory mediators like bradykinin.

Sneezing may also aid clearance by enhancing the venture effect. Irritation of the nasal mucosa causes sneezing.

Nasal obstruction- Any infection of the sinuses produces oedema of the nasal mucosa. Which obstructs the antro nasal duct and causes mucus to accumulate in the sinus and damaged to the cilia leads the failure of the movement of mucus towards the ostium. If any obstruction loss of smell senses occur.

“புருவமே மிகவலித்து நெற்றியோடு

புண்போலக் குடைந்திட்டு புளகமாகி”

Any infection or allergy of nasal mucous membrane is thickened as result of oedema and swelling of the mucous membrane in the frontal sinus the lining mucosa becomes grossly thickened with fluid collection in the frontal region.

Frontal sinus drains in the hiatus semi lunaris through the fronto nasalduct. The ostia is occluded due to inflammation and oedema. This can cause pain in the eye brows and aching pain in the frontal region.

“அருபமாய் யந்தியின் போது தோன்றிக்

ஆர்த்தராத்திரிமட்டு மலைச் சலாகி
சருபமாய் விடிகிற நேரத்திற்றானும்'
சாய்க்குமேமா சந்திரா வர்த்தமாமே”

Due to inflammation combination of low partial pressure of oxygen in the sinuses and arterial blood will decrease the mucocilliary transport. It is due to the inflammatory mediators.

As the maxillary ostium is very close to the roof of the sinus it is situated in a position unfavourable for the gravitational drainage, when the head is erect. So inadequate drainage occur in the maxillary sinus. This is also due to blockage of antro nasal duct. However when the antro nasal duct turns to gravitational position or lying position, the infected sinus secretion get drained gradually. This is possible during the course of night and thus the pain gradually relieved in the morning.

Thus frontal sinusitis has been attributed as relevant disease for Santhira Vartham and it is curable.

DIFFERENTIAL DIAGNOSIS

Differential Diagnosis

சூரியா வர்த்தம்

‘சூரியவாதந்தானே தும்மல் வலியுந் தலைகனப்பும்தும்
பாரிய விருமல் கண்ணீர் பறிந்துடல் கடுக்கு மெய்யுஞ்
சோறவே தினவுங் காதில் துடர்ந்திடும் நினைவு கெட்டுச்
சூரியன் காணில் நோகும்த்தியில் துலைந்தே நிற்கும்’

- Itching
- Sneezing
- Headache and Heaviness of head pain increases during daytime.

In Santhira Vartham all the symptoms are present except itching , heaviness of head pain increases during daytime.

ஒரு தலை வாதபேதம்

‘பகரான வொகு தலையைப் பாதி நொந்து

புகழி கொண்டு மெளலிதனைப் பிளந்தாற்போல

நிகரான கண்ணுநீர் பாய்ந்து காந்தி

நெடுமுச்சு விட்டுமே நினைந்து துன்பம்

திகரான சடந்தானுந் திடுக்குண்டாகிச்

சிணுக்கிரும லாகியே பசிகாணாது

வகரான வாதமாய் மயிர்க் கூச்சாகும்

வாதபேதத் தோர் தலைவலியுமாமே’

- Recurrent throbbing head ache affects on side of the head.
- Loss of appetite
- Deep breath
- Tearness of eyes
- Nervousness, rigor, cough

In Santhira Vartham, there is no throbbing pain in one side of the head and cough, Tearness of eyes.

‘நாசியிற் றசைவ ளர்ந்து நலிவுற வடைக்கு நாசி
மாசுசேர் சீநீர் வீழு மண்டையுங் கனத்து நொந்து
பேசரும் வலியுண்டாகும் பெருகுகண் கதுப்பு நோகும்
நாசிகா பீட மென்று நவின்றனர் கவைவல் லோரே’

- Polyp growth in nose
- Nasal obstruction
- Head ache
- Pain in the eye.

In Santhira vartham , all symptoms are present except polyp growth in nose.

SUMMARY

The aim of this study is to evaluate the significance of the

disease “**SANTHIRA VARTHAM** ” with help of siddha parameters Ennvagai thervu, Thegiyin Elakkanam and Iympull Iyakkavidhi (Panchapatchi)

According to Yugi Vaithya Siddhamani Santhira vartham is characterized by Body pain , headache which increases during night time and subsides at morning time, sneezing, nasal block, anosmia, heaviness of head.

The author has collected the review of literature for definition, etiology and classification from various text.

In this observational study 35 cases (OPD) were recruited as per the inclusion and exclusion criteria and the informed consent were obtained from the patient.

Case sheet proforma was maintained for 35 cases.

Laboratory investigations were carried out before the study which shows increased Eosinophils. ESR

Iympull Iyakkavidhi (Panchapatchi) were focused in the study.

Ennvagi Thervu and Thegiyin Elakkanam were focused in the study.

In neikkuri, vatha neikkuri was observed

Based on the above observation the

- Line of treatment
- Diet and restriction

To be followed on basis of mukkutram.

The disease Santhira Vartham was taken for my clinical study with reference in Yugi Vasithiya Sindhamani. The study on **Santhira vartham** was carried out in this dissertation giving importance to the changes in Udal thathukkal and Uyir thathukkal. The changes in the Udal thathukkal and Uyir thathukkal were assessed by Siddha parameters such as Ennvagai thervugal. For this study 35 cases were observed clinically in the out patient division. From this study, the following datas concluded as,

- Maximum incidence of age was between 31 - 50 years i.e pitha kaalam.
- The incidence of the disease was higher in muthuvenil kaalam and Kaar Kaalam due to vatham, kabham vitated in this period.
- The aetiological factors for **Santhira vartham** mainly due to seasonal variation and environmental changes and altered food habits and improper life style.

- All the 35 cases were found to be presented with headache and aching pain in forehead in 100% of cases . Sneezing were present in 60% of cases body pain in 45 % of cases. Head ache increases during evening time in 100% of cases. Nasal block were present in 62% of cases.

- Praanan, Abaanan, Viyaanan, Uthaanan, Samaanan, Naagan, Koorman, Kirukaran , Devaththan were affected in all cases.

- Anar, Ranjagam, Prasagam, Sathagam, Alosagam affected in all cases.

- Tharpagam, Kilethagam, Avalambagam affected in all cases

In Ennvagai thervu

Naa - 25% of cases have fissures in tongue.

		62% of cases have coated tongue.
Niram	-	57% of cases were black skinned.
Mozhi	-	68% of cases have moderate pitch
Vizhi	-	37% of cases have palloriness of conjunctiva
Naadi	-	71 % of cases have vathakabham.
Neerkuri	-	68% of cases have light yellow colour

urine

Neikuri	-	48% of cases shows Aravu.
Thegi	-	50% of cases shows pitha vatha thegi

PanchaPatchi

40% of cases Kozhli patchi was seen.

26% of cases Mayil patchi was seen.

25% of cases Aagayam bootham was affected

34% of cases Kattru bootham was affected

26% of cases Aakkinai aatharam was affected

34% Visuddhi aatharam was affected

68% of cases Vatham was affected

20% of cases Kabam was affected

It indicates Aakkinai and Visuddhi , aatharams are mostly affected in Santhira Vartham.

► Pathogenesis of **Santhira Vartham** was primarily due to derangement of kabham which then affect vali Azhal, Iyam in various degree.

► The symptoms of Santhira vartham may be correlated with frontal sinusitis in modern aspect.

‘ விரேசனத்தால் வாதம் தாழும்

வமனத்தால் பித்தம் தாழும்

நசிய அஞ்சனத்தால் கபம் தாழும்’

- In Santhira Vartham, kabham and vatham are altered.
- In order to decrease the both kutram pitham is administered.
- Ushna veriya oil is prescribed for external application.
- Kabha can be brought down by Nasiyam and Anjanam.
- Vatha can be brought down by Viresanam, for this laxatives and Mild purgatives can be given.
- So laxatives are administered on the first day before starting treatment.
- Warm fomentation on fore head, steam inhalation gives lot of relief from pain.
- Doing breathing exercises like pranayanam can be very effective and give relief from nasal block.
- Nasiyam on both nostrils gives relief from nasal block.
- Steam inhalation gives a best relief from nasal obstruction and nasal swelling.

During the course of treatment, the patient is advised to follow certain precautions regarding in diet and physical activities. This form of medical advice in siddha system of medicine is termed as pathiyam which is very important in siddha system of medicine.

Pathiyam

வாதத்தைப் போக்கும் மருந்துகளைக் கொண்டு எண்ணெய்க் குளியல் உடல்மேல் தேய்த்தல், வஸ்தி முறை எண்ணெய் முறை மருந்துகலந்த நீரில் மூழ்கியிருக்கச் செய்தல், கீழ்க்காற்றுபடாமலிருத்தல், நெருப்பால் சுடுதல் வாதத்தைப் போக்கும் மருந்துகளைக் கொண்டு பற்றுப்போடுதல், தரையில் படுக்கச் செய்தல், மருந்து கலந்த எண்ணெய் நிரம்பிய தொட்டியில் மூழ்கியிருக்கச் செய்தல், தலைமேல் மருந்துஎண்ணெயைத் தேக்கி வைக்கும் முறை மூக்கில் மருந்திடுதல் வெயிலில் சுற்றுதல் நெய் எண்ணெய் புளிப்பு, இனிப்பு உவர்ப்பு சுவைகள் கொண்ட பொருள்கள், புதிய எள் கோதுமை உளுந்து ஓராண்டுக்குமேல் பழமையான சம்பா அரிசி கொள்ளின் தெளிவு, கிராமங்களிலும் நீர்ப்பாங்கான இடங்களிலும் வாழும் விலங்கு மற்றும் பறவை இனங்களின் இறைச்சி, பொந்தில் வாழும் உயிரினங்களில் புலால் காட்டுப்பறவைகளின் இறைச்சி முருங்கை புடலை கத்தரி முதலிய காய்கள், வெள்ளைப்பூண்டு, சிற்றீச்சை, எலுமிச்சை இலந்தை திராட்சை ஆரஞ்சு இலுப்பை, புளி தேங்காய் எண்ணெய் பசையும் உஷ்ணத்தன்மையும் கொண்ட பொருள்கள் நன்மை பயக்கக் கூடியவை.

Apathiyam:

கவலை, கண்விழித்தல், மலம் சிறுநீர் இவற்றின் வேகங்களைத் தடுத்தல் வாந்தி எடுத்தல் உடற்பயிற்சி, பட்டினி கிடத்தல் கடலை, காட்டுப் பயிறு புல் அரிசி வகைகள் திணை, சாமை, மூங்கில் அரிசி, சோளம், காராமணி, பயிறு, வெல்லம், அகில் தாமரை மலர், பாக்கு, மொச்சை, காய்களில், விதைகளாகத் தோன்றும் உளுத்து முதலிய தானியங்கள், கீரை வகைகள், அத்திக்காய் பனிநீர், குளிர்ந்த நீர், ஆற்று நீர் நாவற்பழம், கழுதைப்பால், ஒன்றுக்கொன்று மாறான தன்மை கொண்ட பொருள்களைக் கலந்து பயன்படுத்துதல், உலர்ந்த இறைச்சி , தேன், கலவி, கசப்பு , கார்ப்பு, துவர்ப்பு சுவை கொண்ட பொருள்கள் யானை குதிரை முதலிய ஊர்திகளின் மேல் சவாரி இடைவிடாமல் அலைதல், எப்பொழுதும் படுத்திருத்தல் இரத்தத்தை வெளியேற்றும் சிகிச்சை முதலியன கூடாதவை.

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GOVT. SIDDHA MEDICAL COLLEGE AND HOSPITAL, PALAYAMKOTTAL.

DEPARTMENT OF PG NOI NAADAL

**ACLINICAL STUDY ON STANDARDIZATION OF SIDDHA DIAGNOSTIC
METHODOLOGY, LINE OF TREATMENT AND DIETARY REGIMEN**

FOR

SANTHIRA VARTHAM

(FRONTAL SINUSITIS)

FORM I

SCREENING AND SELECTION PROFORMA

1. O.P/I.P.No _____ 2. Date : _____

3. Bed No: _____ 4. S.No: _____

5. Name: _____

6. Age (years): 7. Gender: F M

8. Occupation: _____

9. Income : _____

10. Address: _____

11. Contact Nos : -----

12. E-mail : -----

CRITERIA FOR INCLUSION:

	YES	NO
• Age between 15 to 45 years	<input type="checkbox"/>	<input type="checkbox"/>
• Sex- Male and Female	<input type="checkbox"/>	<input type="checkbox"/>
• Fever	<input type="checkbox"/>	<input type="checkbox"/>
• Cough/ Sneezing	<input type="checkbox"/>	<input type="checkbox"/>
• Pain in the forehead	<input type="checkbox"/>	<input type="checkbox"/>
• Aggravating pain during night time, pain subsides at morning	<input type="checkbox"/>	<input type="checkbox"/>
• Patients who are willing to undergo radiological investigation and give sample (blood and Urine) has been taken.	<input type="checkbox"/>	<input type="checkbox"/>

Cases satisfying minimum four or five criteria can be included in the study. But preferably cases with 5th and 6th criteria are given more importance and taken in the study.

CRITERIA FOR EXCLUSION:

YES

NO

- Nasal Polyp

- Nasal Septal Deviation

- Tonsilitis

- Migraine

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FOR

SANTHIRA VARTHAM

(FRONTAL SINUSITIS)

FORM I-A

HISTORY PROFORMA

1. SI.No of the case: _____ Reg No: _____

2. Name: _____

3. Height: _____ cms Weight: _____ Kg

4. Age (years): _____ DOB

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5. Birth Time: _____

6. Zodiac Sign: _____

7. Birth Star: _____

8. Moon: _____

a) Crescent Moon b) Waning Moon c) Full Moon d) New Moon

9. Individual Patchi: _____

10. First visit of a patient:

a) Day _____ b) Date _____ c) Time _____

11. Educational Status:

1) Illiterate 2) Literate 3) Student 4) Graduate/ Post graduate

12. Nature of work:

1) Sedentary work

2) Field work with physical labour

3) Field work Executive

13. Complaints and Duration:

14. History of present illness:

15. History of Past illness:

	Yes	No
a. Diabetes mellitus	<input type="checkbox"/>	<input type="checkbox"/>
b. Hypertension	<input type="checkbox"/>	<input type="checkbox"/>
c. Any injury in nose	<input type="checkbox"/>	<input type="checkbox"/>
d. Allergy	<input type="checkbox"/>	<input type="checkbox"/>

16. Habits :

	Yes	No
1. Tea (No.of times / day)	<input type="checkbox"/>	<input type="checkbox"/>
2. Coffee (No.of times/day)	<input type="checkbox"/>	<input type="checkbox"/>
3. Milk	<input type="checkbox"/>	<input type="checkbox"/>
4. Beetle Nut Chewer	<input type="checkbox"/>	<input type="checkbox"/>
5.Smoking (No.of pockets/day)	<input type="checkbox"/>	<input type="checkbox"/>
6.Alcohol (Occasional/Reguiar/day)	<input type="checkbox"/>	<input type="checkbox"/>
7. Drug Addiction	<input type="checkbox"/>	<input type="checkbox"/>
8. Type of diet	V <input type="checkbox"/>	NV <input type="checkbox"/>
		M <input type="checkbox"/>

17. Personal history:

Marital status: Married Unmarried

Consanguineous marriage: Yes No

No. of children: Male: _____ Female: _____

18. Family history: YES NO
History of similar symptoms

16. GENERAL ETIOLOGY FOR "SANTHIRA VARTHAM"

	YES	NO
1. Excessive cold	<input type="checkbox"/>	<input type="checkbox"/>
2. Allergic products	<input type="checkbox"/>	<input type="checkbox"/>
3. Nasal polyp	<input type="checkbox"/>	<input type="checkbox"/>
4. Mucus buildup	<input type="checkbox"/>	<input type="checkbox"/>
5. Nasal trauma	<input type="checkbox"/>	<input type="checkbox"/>
6. Fungal infectio	<input type="checkbox"/>	<input type="checkbox"/>

17. CLINICAL SYMPTOMS OF "SANTHIRA VARTHAM"

	YES	NO
1. Pain in the forehead	<input type="checkbox"/>	<input type="checkbox"/>
2. Heaviness in the head	<input type="checkbox"/>	<input type="checkbox"/>
3. Fever	<input type="checkbox"/>	<input type="checkbox"/>
4. Cough/ Sneezing	<input type="checkbox"/>	<input type="checkbox"/>
5. Body pain	<input type="checkbox"/>	<input type="checkbox"/>
6. Aggravating pain during night time subsides at morning time	<input type="checkbox"/>	<input type="checkbox"/>
7. Loss of smell	<input type="checkbox"/>	<input type="checkbox"/>

ஐம்புள் நூல்வழி நோய்க்கணிப்பு படிவம்

பயனாளியின் பெயர் :

பயனாளி வந்த கிழமை :

பயனாளி வந்த நேரம் : பகல்

வந்த நேரத்தில் பிறை சுற்று : வளர் பிறை / தேய்பிறை

நோய்க்கணிப்பு

பயனாளி வந்த தேரத்தை வைத்து பஞ்சபூத தொழில் திறனை கணித்தல்

வளர் தேய்பிறை பகல்

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1. வளர் தேய்பிறை பகல்

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1.தொழில்திறன் வகைப்பாடு:

பறவைகளின் பூதயியல்பு:

வளர் தேய்பிறை

வல்லூறு	ஆந்தை	காகம்	கோழி	மயில்

திறன் குறைந்த பறவை:

சாவு	துயில்

பாதிக்கப்பட்ட பூதங்களின் ஆளுமை மண்டலம்: _____

பாதிக்கப்பட்ட மண்டலங்களில் பூத இயல்பு குறைவதால் வரும் நோய்:

திறன் குறைந்த பூத இயல்பு _____

திறன் குறைந்த பூதத்தால் பாதிக்கப்பட்ட மண்டலம்: _____

நோய்கணிப்பில் இறுதிநிலை

திறன் பாதிக்கப்பட்ட மண்டலத்தில: வரும் நோய்கள் _____

GOVT.SIDDHA MEDICAL COLLEGE AND HOSPITAL, PALAYAMKOTTAI.

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METHODOLOGY, LINE OF TREATMENT AND DIETARY REGIMEN**

FOR

“SANTHIRA VARTHAM”

(FRONTAL SINUSITIS)

FORM II

CLINICAL ASSESSMENT

1. Serial No: _____

Reg. No : _____

2. Name: _____

3. Date of birth:

--	--

D D

--	--

M M

--	--	--	--

Y E A R

4. Age: _____ years

5. Date: _____

GENERAL EXAMINATION:

1. Height: _____ cms.

2. Weight : _____ Kg.

3. BMI : _____ (Weight Kg/ Height m²)

3. Temperature: _____(°F)

4. Pulse rate: _____ /min.

5. Respiratory rate: _____ /min.

6. Blood pressure: _____ mmHg

7. Heart rate: _____ /min.

Present Absent

8. Pallor: _____

9. Jaundice: _____

10. Cyanosis: _____

11. Clubbing: _____

12. Jugular vein pulsation: _____

13. Pedal edema: _____

14. Lymphadenopathy:

VITAL ORGANS EXAMINATION

	Palpable	Not-Palpable
1. Liver	<input type="checkbox"/>	<input type="checkbox"/>
2. Spleen	<input type="checkbox"/>	<input type="checkbox"/>
3. Kidney	<input type="checkbox"/>	<input type="checkbox"/>
	Normal	Affected
4. Lungs	<input type="checkbox"/>	<input type="checkbox"/>
5. Heart	<input type="checkbox"/>	<input type="checkbox"/>
6. Stomach	<input type="checkbox"/>	<input type="checkbox"/>
7. Brain	<input type="checkbox"/>	<input type="checkbox"/>

SYSTEMIC EXAMINATION:

1. Gastrointestinal System _____
2. Respiratory System _____
3. Cardiovascular System _____
4. Central Nervous System _____
5. Urogenital System _____
6. Endocrine System _____

RESPIRATORY SYSTEM

	Yes	No
a. Inspection of nose		
Redness	<input type="checkbox"/>	<input type="checkbox"/>
Swelling	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

Nasal septal deviation

b. Palpation

Tenderness over	<input type="checkbox"/>	<input type="checkbox"/>
Frontal sinuses		
Epistaxis	<input type="checkbox"/>	<input type="checkbox"/>
Hoarsness of voice	<input type="checkbox"/>	<input type="checkbox"/>
Inflamation in nasal passage	<input type="checkbox"/>	<input type="checkbox"/>

SIDDHA SYSTEM OF EXAMINATION

[1] ENNVAGAI THERVU [EIGHT-FOLD EXAMINATION]

I. NAADI (KAI KURI) (RADIAL PULSE READING)

(a) Naadi Nithanam (Pulse Appraisal)

1. Kaalam (Pulse reading season)

- | | | | |
|-------------------------------------|--------------------------|--------------------------------------|--------------------------|
| 1. Kaarkaalam
(Rainy season) | <input type="checkbox"/> | 2. Koothirkaalam
(Autumn) | <input type="checkbox"/> |
| 3. Munpanikaalam
(Early winter) | <input type="checkbox"/> | 4. Pinpanikaalam
(Late winter) | <input type="checkbox"/> |
| 5. Ilavenirkaalam
(Early summer) | <input type="checkbox"/> | 6. Muthuvenirkaalam
(Late summer) | <input type="checkbox"/> |

2. Desam (Climate of the patient's habitat)

- | | | | | | |
|-------------------------|--------------------------|--------------------|--------------------------|------------------------------|--------------------------|
| 1. Kulir
(Temperate) | <input type="checkbox"/> | 2. Veppam
(Hot) | <input type="checkbox"/> | 3. Mithaveppam
(Moderate) | <input type="checkbox"/> |
|-------------------------|--------------------------|--------------------|--------------------------|------------------------------|--------------------------|

3. Vayathu (Age) 1. 1-33 yrs 2. 34-66 yrs 3. 67-100

4. UdalVanmai (General body condition by appearance)

- | | | | | | |
|------------|--------------------------|-----------|--------------------------|-----------|--------------------------|
| 1. Iyyalbu | <input type="checkbox"/> | 2. Valivu | <input type="checkbox"/> | 3. Melivu | <input type="checkbox"/> |
|------------|--------------------------|-----------|--------------------------|-----------|--------------------------|

5. NaadiyinVanmai (Expansile Nature)

- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| 1. Vanmai | <input type="checkbox"/> | 2. Menmai | <input type="checkbox"/> |
|-----------|--------------------------|-----------|--------------------------|

6. Panbu (Habit)

- | | | | | | |
|------------------------------|--------------------------|-------------------------------|--------------------------|-----------------------------|--------------------------|
| 1. Thannadai
(Playing in) | <input type="checkbox"/> | 2. Munnokku
(Advancing) | <input type="checkbox"/> | 3. Pinnokku
(Flinching) | <input type="checkbox"/> |
| 4. Pakkamnokku
(Swerving) | <input type="checkbox"/> | 5. Puranadai
(Playing out) | <input type="checkbox"/> | 6. Illaitthal
(Feeble) | <input type="checkbox"/> |
| 7. Kathithal
(Swelling) | <input type="checkbox"/> | 8. Kuthithal
(Jumping) | <input type="checkbox"/> | 9. Thullal
(Frisking) | <input type="checkbox"/> |
| 10. Azhutthal
(Ducking) | <input type="checkbox"/> | 11. Padutthal
(Lying) | <input type="checkbox"/> | 12. Kalatthal
(Blending) | <input type="checkbox"/> |
| 13. Suzhalal
(Revolving) | <input type="checkbox"/> | | | | |

(b) Naadinadai (Pulse Play)

- | | | | | | |
|---------------|--------------------------|---------------|--------------------------|-----------------|--------------------------|
| 1. Vali | <input type="checkbox"/> | 2. Vali Azhal | <input type="checkbox"/> | 3. Vali Iyyam | <input type="checkbox"/> |
| 4. Azhal | <input type="checkbox"/> | 5. Azhal Vali | <input type="checkbox"/> | 6. Azhal Iyyami | <input type="checkbox"/> |
| 7. Iyyam | <input type="checkbox"/> | 8. Iyya vali | <input type="checkbox"/> | 9. Iyya Azhal | <input type="checkbox"/> |
| 10. Mukkutram | <input type="checkbox"/> | | | | |

II.NAA (TONGUE)

1. MaaPadithal

Present Absent

A) Pattern of MaaPadithal Uniform Patchy

B) Colour of MaaPadithal _____

2. NaavinNiram 1.Karuppu 2.Manjal 3.Velluppu
(Colour) (Dark) (Yellow) (Pale)

4.any other _____

3. Suvai (Taste sensation)

Thanisuvai 1.Kaippu 2.Pulippu 3. Inippu
(Bitter) (Sour) (Sweet)

Thonthasuvai 4. Uppu 5. Kaarppu 6.Thuvarppu
(Salt) (Tingent) (Astringent)

4. Vedippu 1. Present 2. Absent _____
(Fissure)

III.NIRAM (COLOUR &COMPLEXION OF SKIN)

1. IyalbanaNiram(physiological)

1. Karuppu 2.Manjal 3.Velluppu
(Dark) (yellowish) (fair)

2. AsadharanaNirammaatram 1.Present 2.Absent
(Pathological)

Localised Generalised

3. Pathikapatta idathin niram: _____

IV. MOZHI (VOICE)

1. Sama oli 2. Urattha oli 3. Thazhantha oli
(Medium pitched) (High pitched) (Low pitched)

4.sound from lungs
(Wheezing)

(Sound is produced by the lungs when the patient is silent)

5.Nasal speech

V. VIZHI (EYES)

1. Niram (Venvizhi):

	Rt		Lt	
	Normal <input type="checkbox"/>	Abnormal <input type="checkbox"/>	Normal <input type="checkbox"/>	Abnormal <input type="checkbox"/>

1. Manjal

1. Manjal

2. Sivappu

2. Sivappu

3. Velluppu

3. Velluppu

4. Pazhuppu

4. Pazhuppu

5. Karuppu

5. Karuppu

Red Lines

Present

Absent

KeelImai Neeki Paarthal :

1. Sivapu

(Red)

2. Velluppu

(Pale)

3. Ilam Sivappu

(Pink)

4. Manjal

(Yellow)

2. Neerthuvam:

1. Normal

2. Increased

3. Reduced

(Moisture)

3. Erichchal

1. Present

2. Absent

(Burning sensation)

4. Peelaieruthal 1.Present 2. Absent

(Mucus excrements)

5. Change in vision: 1.Present 2. Absent _____

6. Protrusion of eye ball 1.Present 2. Absent _____

7. Any other eye disease: _____

VI. MEI KURI (PHYSICAL SIGNS):

INSPECTION:

1. Swelling 1.Present 2. Absent

1. Any Colour Change 1.Present 2. Absent

3. Viyarvai 1.Normal 2. Increased 3. Reduced

(Sweat)

PALPATION:

1.Thanmai 1.Veppam 2.Mitha Veppam 3.Thatpam

(Warmth)

(Mild)

(Cold)

2. Thoduvali 1.Present 2. Absent

(Tenderness)

3. PadhikapattaIdathil : 1. Erichal 2 .vazhi 3. Unarchiinmai
Unarvu (Burning sensation) (pain) (Loss of sensation)

4. Athigaunarchi
(Hypersensation) (Sensation)

VII. MALAM (STOOLS)

1. Ennikai (No of times passed): /day.

2. Alavu: a) Normal b) Increased c) Decreased
(Quantity)

3. Niram: 1. Karuppu 2.IlaManjal 3.Manjal
(Color) (Black) (Yellowish) (Brownish yellow)

4. Sivappu 5. Velluppu
(Reddish) (Pale)

4.Nature of stools: Bulky Leaned watery

5. Sikkal / Solid : 1. Present 2. Absent
(Constipation)

6. Sirutthal : 1. Present 2. Absent
(Poorly formed stools)

7. Kalichchal

1. Loose watery stools 1. Present 2. Absent

2. Contents of stool

a. Digested food 1. Present 2. Absent

b. Seetham 1. Present 2. Absent

(Watery and mucoid excrements)

c. Colour of Seetham 1. Venmai 2. Manjal

8. Thanmai : 1. Normal (Mitham) 2. Vemmai 3. Seetham

9. Stool passing with a) Mucous 1. Present 2. Absent

b) Blood 1. Present 2. Absent

10. History of habitual 1. Present 2. Absent

Constipation

VIII. MOOTHIRAM (URINE)

(a) NEER KURI (PHYSICAL CHARACTERISTICS)

1. Niram (colour) Normal Abnormal

 Milky purulent Orange

 Bright red Red Brown red or yellow

2. Manam (odour) Yes No

Blood odour

Ammonical

Fruity

Others _____

3. Edai (weight) : 100ml _____ gm

4. Specific gravity: N HIGH LOW

Normal (1.010-1.025)

5. pH : acidic basic

6. Alavu (volume)

Yes

No

Normal (1.2-1.5 lt/day)

:

Polyuria (>2lt/day)

:

Oliguria (<500ml/day)

:

Anuria

:

7. Nurai (froth)

:

Present

Absent

If froth present, colour of the froth : _____

8. Enjal (deposits)

:

Present

Absent

Clear

:

Cloudy

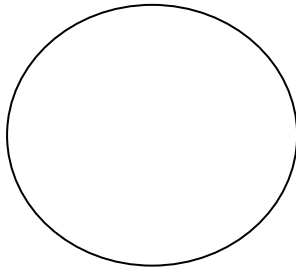
:

b) NEI KURI (oil spreading sign)

1. Aravam

2. Mothiram

Diagram (Serpentine fashion)



(Ring)

3. Muthu
(Pearl)

4. AravilMothiram
(ring In Serpentine)

5. AravilMuthu
(pearl in serpentine)

6. MothirathilMuthu
(pearl in Ring fashion)

7. MothirathilAravam
(Serpentine in ring fashion)

8. MuthilAravam
(Serpentine in peral fashion)

9. MuthilMothiram
(ring in pearl fashion)

10. Asathiyam
(Incurable)

11. Mellenaparaval
(Slow spreading)

12.others: _____

[2]. IYMPORIGAL /IYMPULANGAL (Penta sensors and its modalities)

1. Normal 2. Affected

1. Mei (skin)

2. Vaai (tongue)

3. Kann(eyes) _____

4. Mookku(nose) _____

5. Sevi (ears) _____

[3]. KANMENTHIRIYANGAL /KANMAVIDAYANGAL

1. Normal 2. Affected

1. Kai (hands) _____

2. Kaal(legs) _____

3. Vaai(mouth) _____

4. Eruvai (anal canal) _____

5. Karuvaai(birth canal) _____

[5]. YAKKAI (SOMATIC TYPES)

	Vatha Constitution		Pitha Constitution		Kaba Constitution	
Built and appearance	Lean and lanky, lengthy built		Moderate built		Short, uniform thickness, broad built.	
Skin - colour & Complexion	Dark and light admixed complexion. Dry skin		Red and Yellow. Wrinkles and shiny		Yellowish White. Fleshy, flappy and shiny	
Bones and Joints	Cracking sound of joints on walking with prominent joints		Thin covering of bones and joints by soft tissue		Plumpy joints and limbs	
Hair and Eyelashes	Split hair and dark eyelashes		Sparse hair with graying		Dark and Dense hair	

Appearance of Eyes	Lengthy Eyes		Easily suffusing eyes due to heat and alcohol		Sparkling eyes	
Vision	Long sight		Short sight		Clear sight	
Voice	Clear and high pitched voice		Clear and medium pitched Voice		Husky and unclear. Low pitched voice	
Tongue	Lengthy, sharp ended tongue with black patches		Medium and yellow or red coloured		Blunt, thick tongue with white coated	
Appetite	Scant appetite for cold food items		Increased appetite and intolerance to hunger, thirst , heat		Less appetite and tolerant to hunger, thirst, heat	
Taste	Desire for pungent, salt, sweet, heat		Desire for bitter, sweet, astringent		Desire for sour, bitter, astringent	
Sleep	Sleeping with half closed eyes		Medium sleep		Deep sleep	
Dreams	Flying dreams around the hills, sky. Walking around the dense forest.		Seeing like yellow colour flowers, fire, sun, thunder etc.		Seeing the cooling places like lotus in the pond,.	
Strength	Poor strength		Medium strength		Immense strength	
Character	Unstable mind, change of mood according to situation		Medium. Discipline, Good habits, Eagerness		Stable mind. Discipline and increased knowledge	
Knowledge	Oscillation mind		Brilliance		Genius	
Sexual activity	Loss of libido		Desire in sexual activity		Loss of libido	

RESULTANT SOMATIC TYPE: _____

[6] GUNAM

1. SathuvaGunam 2. RajoGunam 3. ThamoGunam

[7] KOSAM :

Normal

Affected

1. Annamayakosam _____

2. Praanamyakosam _____

3. Manomayakosam _____

4. Vingnanamayakosam _____

5. Aanandamayakosam _____

[8] UYIR THATHUKKAL

A. VALI

1. Normal

2. Affected

1. Uyirkaal _____

(Praanan)

2. Keel nokungkaal _____

(Abaanan)

3.Nadukkaal (Samaanan)	_____	<input type="checkbox"/>	<input type="checkbox"/>
4.Mel nokungkaal (Udhanan)	_____	<input type="checkbox"/>	<input type="checkbox"/>
5. Paravungkaal (Viyaanan)	_____	<input type="checkbox"/>	<input type="checkbox"/>
6. Naahan (Higherinteiectual function)	_____	<input type="checkbox"/>	<input type="checkbox"/>
7. Koorman (airway of yawning)	_____	<input type="checkbox"/>	<input type="checkbox"/>
8. Kirukaran (Air of salivation/nasal secretion)	_____	<input type="checkbox"/>	<input type="checkbox"/>
9. Devathathan (Air of laziness)	_____	<input type="checkbox"/>	<input type="checkbox"/>
10. Dhananjeyan (Absence of praanan this air that Acts on death)	_____	<input type="checkbox"/>	<input type="checkbox"/>

B. AZHAL

1. Normal

2. Affected

1. Analapittham	<input type="checkbox"/>	<input type="checkbox"/>	_____
-----------------	--------------------------	--------------------------	-------

(Gastric juice)

2. Praasaka pittham

(Bile)

3. Ranjaka pittham

(Haemoglobin)

4. Aalosaka pittham

(Aqueous Humour)

5. Saathakapittham

(Life energy)

C. IYYAM

1. Normal

2. Affected

1. Avalambagam

(Serum)

2. Kilethagam

(saliva)

3. Pothagam

(lymph)

4. Tharpagam

(cerebrospinal fluid)

5. Santhigam

(synovial fluid)

[9] UDAL THATHUKKAL:

SAARAM

INCREASED SAARAM (CHYLE)

DECREASED SAARAM(CHYLE)

Loss of appetite	<input type="checkbox"/>	Loss weight	<input type="checkbox"/>
Excessive salivation	<input type="checkbox"/>	Tiredness	<input type="checkbox"/>
Loss of perseverance	<input type="checkbox"/>	Dryness of the skin	<input type="checkbox"/>
Excessive heaviness	<input type="checkbox"/>	Diminished activity of the sense organs	<input type="checkbox"/>
White musculature			
Cough, dyspnea, excessive sleep	<input type="checkbox"/>		
Weakness in all joints of the body	<input type="checkbox"/>		
SAARAM: INCREASED	<input type="checkbox"/>	DECREASED	<input type="checkbox"/>
		NORMAL	<input type="checkbox"/>

B. CENNEER:

INCREASED CENNEER(BLOOD)	DECREASED CENNEER(BLOOD)
--------------------------	--------------------------

Boils in different parts of the body	<input type="checkbox"/>	Anemia	<input type="checkbox"/>
Anorexia	<input type="checkbox"/>	Tiredness	<input type="checkbox"/>
Mental disorder	<input type="checkbox"/>	Neuritis	<input type="checkbox"/>
Splenomegaly	<input type="checkbox"/>	Lassitude	<input type="checkbox"/>
Colic pain	<input type="checkbox"/>	Pallor of the body	<input type="checkbox"/>
Increased pressure	<input type="checkbox"/>		
Reddish eye and skin	<input type="checkbox"/>		
Jaundice	<input type="checkbox"/>		
Haematuria	<input type="checkbox"/>		

CENNEER: INCREASED DECREASED NORMAL

C]. OON

INCREASED OON (MUSLE)	DECREASED OON (MUSLE)
Cervical lymphadenitis <input type="checkbox"/>	Impairment of sense organs <input type="checkbox"/>
Vernical ulcer <input type="checkbox"/>	Joint pain <input type="checkbox"/>
Tumour in face ,abdomen, thigh, genitalia <input type="checkbox"/>	Muscles of jaw, gluteus gets wrind <input type="checkbox"/>
Hyper muscular in the cervical region <input type="checkbox"/>	Shortening of male genitalia

OON: INCREASED DECREASED NORMAL

D. KOZHUPPU

INCREASED KOZHUPPU	DECREASED KOZHUPPU
--------------------	--------------------

(ADIPOSE TISSUE)	(ADIPOSE TISSUE)
Cervical lymph adenitis <input type="checkbox"/>	Pain and weakness <input type="checkbox"/>
Venereal ulcer <input type="checkbox"/>	in the hip region
Swelling in face, abdomen, thigh, genitalia <input type="checkbox"/>	Disease of the spleen <input type="checkbox"/>
Hyper muscular in the cervical region <input type="checkbox"/>	Emastication
Dyspnoea on mild exhaustion <input type="checkbox"/>	
Tiredness sagging muscles in the gluteus,abdomen,thigh and breast <input type="checkbox"/>	

KOZHUPPU: INCREASED DECREASED NORMAL

E. ENBU

INCREASED ENBU (BONE)	DECREASED ENBU (BONE)
-----------------------	-----------------------

Excess growth in bones and teeth	<input type="checkbox"/>	Joint pain	<input type="checkbox"/>
		Loosening of teeth	<input type="checkbox"/>
		Splitting of nails and hair	<input type="checkbox"/>
		Falling of hair	<input type="checkbox"/>

ENBU: INCREASED DECREASED NORMAL

F. MOOLAI

INCREASED MOOLAI (BONE MARROW)	DECREASED MOOLAI (BONE MARROW)
Heaviness of the body <input type="checkbox"/>	Osteoporosis <input type="checkbox"/>
Swollen eyes <input type="checkbox"/>	Blackout of eyes <input type="checkbox"/>
Swollen phalanges chubby fingers <input type="checkbox"/>	
Oliguria <input type="checkbox"/>	
Non healing ulcer <input type="checkbox"/>	

MOOLAI: INCREASED DECREASED NORMAL

G. SUKKILAM/SURONITHAM

<p>INCREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)</p>	<p>DECREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)</p>
<p>Infatuation and lust towards women / men <input type="checkbox"/></p> <p>Urinary calculi <input type="checkbox"/></p>	<p>Failure in reproduction <input type="checkbox"/></p> <p>Pain in the genitalia <input type="checkbox"/></p>
<p>INCREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)</p>	<p>DECREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)</p>
<p>Infatuation and lust towards women / men <input type="checkbox"/></p> <p>Urinary calculi <input type="checkbox"/></p>	<p>Failure in reproduction <input type="checkbox"/></p> <p>Pain in the genitalia <input type="checkbox"/></p>

SUKKILAM/SURONITHAM:

INCREASED DECREASED NORMAL

[10] MUKKUTRA MIGU GUNAM

I. Vali Migu Gunam**1. Presen****2. Absent**

1. Emaciation	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Complexion – blackish	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Desire to take hot food	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Shivering of body	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Abdominal distension	<input type="checkbox"/>	<input type="checkbox"/>	_____
6. Constipation	<input type="checkbox"/>	<input type="checkbox"/>	_____
7. Insomnia	<input type="checkbox"/>	<input type="checkbox"/>	_____
8. Insomnia	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	_____
9. Weakness	<input type="checkbox"/>	<input type="checkbox"/>	_____
10. Defect of sense organs	<input type="checkbox"/>	<input type="checkbox"/>	_____
11. Giddiness	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Lake of interest	<input type="checkbox"/>	<input type="checkbox"/>	_____

II. Pitham Migu Gunam**1. Present****2. Absent**

- | | | | |
|---|--------------------------|--------------------------|-------|
| 1. Yellowish discolouration
Of skin | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 2. Yellowish discolouration
Of the eye | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 3. Yellow coloured urine | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 4. Yellowishness of faeces | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5. Increased appetite | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6. Increased thirst | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 7. Burning sensation over
the body | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 8. Sleep disturbance | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

III. Kapham migu gunam**1. Present****2. Absent**

- | | | | |
|----------------------------------|--------------------------|--------------------------|-------|
| 1. Increased salivary secretion | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 2. Reduced activeness | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 3. Heaviness of the body | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 4. Body colour – fair complexion | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

5. Chillness of the body _____
6. Reduced appetite _____
7. Eraippu _____
8. Increased sleep _____

[11]. NOIUTRA KALAM

1. Kaarkaalam 2.Koothirkaalam
 (Aug17-Oct17) (Oct18-Dec15)
3. Munpanikaalam 4.Pinpanikaalam
 (Dec16-Feb12) (Feb13-Apr13)
5. Ilavanirkaalam 6.Muthuvenirkaalam
 (Apr14-June14) (June15-Aug16)

[12]. NOI UTRA NILAM

1. Kurunji 2. Mullai 3Marutham
 (Hilly terrain) (Forest range) (Plains)
4. Neithal 5. Paalai
 (Coastal belt) (Desert)

DEPARTMENT OFPG NOINAADAL

**ACLINICAL STUDY ON STANDARDIZATION OF SIDDHA DIAGNOSTIC
METHODOLOGY, LINE OF TREATMENT AND DIETARY REGIMEN**

FOR

“SANTHIRA VARTHAM”

(FRONTAL SINUSITIS)

FORM-III

LABORATORY INVESTIGATIONS

1. O.P No: _____ Lab.No _____ Serial No _____ Reg. No: _____

2. Name: _____

3. Date of birth:

--	--

--	--

--	--	--	--

D D M M Y EAR

4. Age: _____ years

5. Date of assessment: _____

Blood

6. TC : _____ Cells/cu mm

7. DC :

P _____% L _____% E _____% M _____% B _____%

8.Hb: _____ gms%

9. ESR : at 30 minutes _____ mm at 60 minutes _____ mm

10. Blood Sugar: (R) _____ mgs%

11. Serum Cholesterol : _____ mgs %

Urine Examination

12. Sugar: _____

13. Albumin : _____

14. Deposits : _____

15. CT / MRI :

16. X- RAY :

Date:

Signature of the Doctor

DEPARTMENT OF PG NOI NAADAL

**A CLINICAL STUDY ON STANDARDIZATION OF SIDDHA DIAGNOSTIC
METHODOLOGY, LINE OF**

TREATMENT AND DIETARY REGIMEN

FOR

“SANTHIRA VARTHAM”

(FRONTAL SINUSITIS)

Register No: 321315007(2013-2016),

FORM IV A

INFORMED WRITTEN CONSENT FORM

Iexercising my free power of choice, hereby give my consent to be included as a subject in the diagnostic trial entitled A study on “SanthiraVartham”. I will be required to undergo all routine examinations. I may be asked to give urine and blood samples during the study.

I have been informed about the study to my satisfaction by the attending investigator and the purpose of this trial and the nature of study and the laboratory investigations. I also give my consent to publish my urine sample photographs in scientific conferences and reputed scientific journals for the betterment of clinical research.

I am also aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

Signature /thumb impression of the patient:

Date :

Name of the patient :

Signature of the investigator :

Date :

Head of the Department :

பட்டமேற்படிப்புநோய்நாடல் துறை
“சந்திராவர்த்தம்”- நோய் கணிப்புமுறைமற்றும்
குறிகுணங்களைபற்றிய ஓர் ஆய்வு
பதிவுஎண்: 321315004 (2013– 2016)
ஒப்புதல் படிவம்

ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் இந்தஆய்வைகுறித்தஅனைத்துவிபரங்களையும் நோயாளிக்குபுரியும் வகையில்
எடுத்துரைத்தேன் எனஉறுதியளிக்கிறேன்.

தேதி:

கையொப்பம்:

இடம்:

பெயர்:

நோயாளியின் ஒப்புதல்

நான் ----- என்னுடைய சுதந்திரமாக தேர்வு செய்யும் உரிமையைக் கொண்டு இங்கு தலைப்பிடப்பட்ட “சந்திராவர்த்தம்” நோயை கணிப்பதற்கான மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

என்னிடம் இந்த மருத்துவ ஆய்வின் காரணத்தையும், மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றி திருப்தி அளிக்கும் வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் இந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல், எப்பொழுது வேண்டுமானாலும் இந்த ஆய்விலிருந்து என்னை விடுவித்து கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

தேதி:

பெயர்:

**GOVT SIDDHA MEDICAL COLLEGE AND HOSPITAL,
PALAYAMKOTTAI.**

DEPARTMENT OF PG NOI NAADAL

**A CLINICAL STUDY ON STANDARDIZATION OF SIDDHA DIAGNOSTIC
METHODOLOGY, LINE OF TREATMENT AND DIETARY REGIMEN**

FOR

SANTHIRA VARTHAM

(FRONTAL SINUSITIS)

FORM - IV-E

PATIENT INFORMATION SHEET

PURPOSE OF RESEARCH AND BENEFITS:

The diagnostic research study in which your participation is proposed to assess the diagnostic methods in Siddha methodology in “**SANTHIRA VARTHAM**” patients. It is expected that you would benefit from this study. Knowledge gained from this study would be of benefit to patients suffering from such conditions for the diagnosis and prognosis.

STUDY PROCEDURE:

You will be interviewed and examined as OP and IP patients at the study centre. At the first visit the physician will conduct a brief physical examination and assess the condition followed by Ennvagaitervu and routine blood and urine analysis. After matching the inclusion criteria you will be included in this study and you will be examined on the basis of Ennvagaitervu and ThegaIlakkanam.

POSSIBLE RISK:

During this study there may be a minimum pain to you while drawing blood sample.

CONFIDENTIALITY:

Your medical records will be treated with confidentiality and will be revealed only to other doctors / scientists. The results of this study may be published in a scientific journal, but you will not be identified by your name.

YOUR PARTICIPATION AND YOUR RIGHTS:

Your participation in this study is voluntary and you may be withdrawn from this study anytime without having to give reasons for the same. You will be informed about the findings that occur during the study. If you do agree to take part in this study, your health record will need to be made available to the investigators. If you don't wish to participate at any stage, the level of care you receive will in no way be affected.

The Ethics committee cleared the study for undertaking at OPD and IPD, GOVERNMENT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI. Should any question arise with regards to this study you contact following person.

Investigator : Dr. A. PRIYANGA,
Department of PG NoiNaadal,
Govt. Siddha Medical College and Hospital,
Palayamkottai - 627002.
Email:dr.priyangaarunachalam@gmail.com
Mobile no :9791699439

அரசு சித்த மருத்துவ கல்லூரி பாளையங்கோட்டை
பட்ட மேற்படிப்பு நோய் நாடல் துறை

நோயாளியின் தகவல் படிவம்

ஆய்வின் நோக்கமும் பயனும்:

தாங்கள் பங்கெடுத்துக் கொள்ளும் இவ்வாய்வு சித்த மருத்துவ முறையில் நோயை கணிப்பதற்கான ஓர் ஆய்வு முறை. இவ்வாய்வு தங்களின் நோய் கணிப்பை பற்றியும் நாளுக்கு நாள் இருக்கும் நோயின் தன்மை பற்றியும் அறிய உதவும்.

ஆய்வுமுறை:

தாங்கள் நேர்காணல் மற்றும் பரிசோதனைகளின் மூலம் உள்நோயாளி, வெளிநோயாளி பிரிவில் ஆய்வு செய்யப்படுவீர்கள். முதல் நேர்காணலின் போது

ஆய்வாளரால் உடல் பரிசோதனை, நாடி, நீர், மலம், மற்றும் இரத்த பரிசோதனை செய்து குறிப்பிட்ட குறிகுணங்கள் இருப்பின் இவ்வாய்விற்காக எடுத்துக் கொள்ளப்படுவீர்கள்.

நேரும் உபாதைகள்:

இவ்வாய்வில் இரத்த பரிசோதனைக்காக இரத்தம் எடுக்கும் போது சிறிதுவலி ஏற்படலாம்.

நம்பகத்தன்மை:

தங்களின் மருத்துவ ஆவணங்கள் அனைத்தும் மருத்துவர் ஆய்வாளர் அல்லாத பிறரிடம் தெரிவிக்கப்படமாட்டாது.

நோயாளியின் பங்களிப்பும் உரிமைகளும்:

இவ்வாய்வில் தங்களின் பங்களிப்பு தன்னிச்சையானது. இவ்வாய்வில் தாங்கள் ஒத்துழைக்க இயலவில்லையெனில் எப்பொழுது வேண்டுமானாலும் காரணம் எதுவும் கூறாமல் விலகிக்கொள்ளலாம். இவ்வாய்வின் போது அறியப்படும் தகவல்கள் தங்களுக்கு தெரிவிக்கப்படும்.

நோயாளியின் ஒப்பதலுக்கிணங்க நோய் கணிப்புவிவரங்களை ஆய்வாளர் பயன்படுத்திக் கொள்வார். நோயாளி ஆய்வினிடையே ஒத்துழைக்கமறுத்தாலும், எந்த நிலையிலும் நோயாளியை கவனிக்கும் விதம் பாதிக்கப்படமாட்டாது. நிறுவன நெறிமுறை குழுமம் மேற்கண்ட ஆய்வினை மேற்கொள்ள ஒப்புதல் அளித்துள்ளது. ஆய்வு குறித்த சந்தேகங்கள் இருப்பின் கீழ்க்கண்ட நபரை தொடர்பு கொள்ளவும்.

பட்டமேற்படிப்பாளர் :

மரு.அ.பிரியங்கா

அரசுசித்தமருத்துவக் கல்லூரி,
பாளையங்கோட்டை.

மின் அஞ்சல் : dr.priyangaarunachalam@gmail.com

அலைபேசிஎண்: 9791699439

