

**A STUDY ON**  
**SALAPEENISAM**

*Dissertation Submitted To*

**THE TAMIL NADU Dr.M.G.R Medical University**

**Chennai – 32**

*In Partial fulfillment for The Award of Degree of*

**DOCTOR OF MEDICINE (SIDDHA)**

**(Branch – V, NOI NAADAL)**



**DEPARTMENT OF NOI NAADAL**

**Government Siddha Medical College**

**Palayamkottai – 627 002**

**March - 2010**

## ACKNOWLEDGEMENT

I am extremely grateful to **God** who empowered me with his blessings and gift of life.

I would like to offer my reverence to my beloved parents, wife and sister who are an epitome of love, sacrifice, encouragement and inspiration.

I owe my special gratitude to the **Vice Chancellor**, The Tamil Nadu Dr. M. G. R. Medical University, Chennai for permitting me to undertake this dissertation work.

I desire to give my sincere thanks to **Dr. Soundara Rajan M.D.(S)**., Principal and **Dr. Chandra Mohan Doss M.D. (S)**., Vice Principal Government Siddha Medical College, Palayamkottai for patronizing the work by providing all the necessary facilities.

I pay my tribute to sincerest respect to **Dr.R.Devarajan, M.D.(S)**., Head of the Noi Naadal Post Graduate Department, Government Siddha Medical College, Palayamkottai for his valuable suggestions and guidance in the completion of this disseration work.

I desire to give my sincere thanks to **Dr.A.Vasuki Devi, M.D.(S)**., Asst. Lecturer, Post Graduate Noi Naadal Department, for her valuable guidance and constant encouragement during the study. Without her constant and authentic support, this study would not have seen the light of day.

I express my whole hearted thanks to **Dr.S.K.SASI, M.D.(S.)**, Asst. Lecturer, Post Graduate Noi Naadal Department for having guided me in numberless way and furnished me with valuable suggestions to give the benefit of her knowledge. Without her constant and authentic support, this study would not have seen the light of day.

I would like to take this opportunity to tender my most cordial thanks to **Dr. M.Ravi Chandran M.B.B.S. M.D.**, Professor, Modern Medicine, Government Siddha Medical College, Palayamkottai, for his valuable guidance in modern aspect of approach to this study.

I owe my profound thanks to **Dr. Suresh Kumar M.S., D.L.O., ENT Surgeon**, who furnished me with valuable suggestions in the clinical aspect of the study.

I express my sincere thanks to **Dr. V.S. Padma M.B.B.S., DMRD.**, Radiologist, for her contribution in the completion of work.

I express my thanks to **Mrs. T. Poongodi M.A., B.Lib.**, Government Siddha Medical College, Palayamkottai for her co-operation in referring the Library books.

Last but by no means least I exoress my gratitude to **Broad Band Net Cafe (BBNC)** in bringing out this excellent form of dissertation work.

## INTRODUCTION

Siddha system of medicine is indigenous medicine. This system has been developed purely by the contribution of Siddhars on their own line of thinking and achievements in the field of their research.

The word Siddha has derived from the word Siddhi which literally means attaining perfection in life.

This system of medicine is founded by Siddhars on the basic principles of nature and its elements after careful and thorough study of the human systems. Siddha system has holistic view on patient.

Siddha is perhaps the earliest medical science that laid stress on positive health, a harmonious blending of physical, mental, social, moral and spiritual welfare of an individual.

This system has its own well developed chemistry and their tireless striving in the direction of the development of alchemy, has resulted in the genesis of thousands of mineral and metallic preparations.

Universe is made up of five elements (viz) Mann, Neer, Thee, Vayu and Aagayam. Like Universe, Body is also made up of five elements. These five elements are basic fundamentals of our body.

Seasonal variations and environmental pollutions tell on our body. Because any change in the universe will be reflected in our body.

Mind at rest is a temple of joy - an emphatic yes. But it is rather surprising that in the world of today, there seems to be no individual who is blessed with peace of mind.

Leave alone human mental health, the person's physical health is completely shattered by his worry or anxiety or tension of however, one may like to connote it. This deterioration in physical health is termed Disease.

Siddhars toiled to restore primarily his mental peace and thus to make him healthy. For Mental health everyone should follow Attangha Yogam. Attangha Yogam are mentioned in Tamil 3000 as follows,

“இயம நியமமே எண்ணிலா ஆதனம்  
நயமுறு பிராணா யாமம் பிரத் தியாககரஞ்  
சயமிகு தாரணை தியானஞ் சமரதி  
அயமுறும் அட்டாங்க மாவது மரமே”

- தமிழ் 3000.

According to Siddha Medicine, there is close and intimate connection between the mind and the body. If any one of the mind or body alters from its normal functions, other one will affect automatically.

So mind and body health are maintained in balanced level which is very essential to protect our body and mind from disease. This is the motivation of our Siddha System of Medicine.

## SIDDHA PHYSIOLOGY

### SIDDHARS

A set of people with tremendous power in themselves who were called as Siddhars having perpetual power developed by their mental concentration. They postulated a definite and distinct hypothetical theory for the physiology, pathology and treatment of diseases.

### SIDDHA LITERATURES

Tamil literatures are really a boon to our Siddha medicine, because finished, on - going and forth coming researches are all based upon these literatures.

Siddha literatures can give more information about multifaceted siddha system of medicine. The importance of reading siddha literatures have been revealed by the following poetry lines.

“சீராக் குளவி சிறுபுழுவைக் கெண்டப்பால்  
வேறாமொரு கூட்டில் விட்டேதன் - பேறா  
முருவதனைத்தான் நோக்கவுற்ற சீர்போலக்  
கருத நூலாலாகுங் கற்று”

- கண்ணுசாமியம்.

The transformation of wasp from the worm which was taken by another wasp to another nest due to its constant thinking. Likewise reading literatures and constant thinking about the same will certainly result in beneficial effect.

Even though it is told commonly, it is very much need to Siddha physicians indeed.

## **SIDDHA PHYSICIANS**

Siddha physicians should have multifarious knowledge about astrology, planetary positions and movements, numerology, scientific respiratory practices, alchemy, saint Agathiyar's medical texts, texts of mantra, kanmakandam. It is given in the following lines from 18 Siddhars Naadi Nool.

“சேர்திடம் பஞ்ச பட்சி  
துலங்கிய சரநூல் மனர்க்கம்  
கேரதறு வகர வித்தை  
குருமுனி ஓது பாடல்  
தீதிலாக் கக்கி ஷங்கள்  
செப்பிய கன்ம கண்டம்  
ர்தெலங் கற்று ணர்ந்தோர்  
இவர்களே வைத்ய ராவர்”

- பதினெண் சித்தர் நூல்.

Our body has three parts.

1. Subtle physical body (Nun udal)
2. Gross physical body (Paru udal)
3. Casual body (Kaarana udal).

### **1. Subtle physical body**

It consists of Gnanenthriyam	-	5
Kanmenthrium	-	5
Anthakaranam	-	4
Uyirkkaal	-	1.

Thus totaling fifteen in the body.

### **2. Gross physical body**

It built out of Pancha bootham.

### **3. Casual body**

The detached nature of the above said two bodies constitute this type.

The subtle physical body is immediately behind the gross physical body and is closely connected with it.

Man is a product of nature. Man harbours within himself Divine; without embraces the world. The soul is also a link between man's past life and future life.

Man develops three distinct personalities namely, the mind, the vital or life force and the body.

Through the mind he thinks and wills; through the vital or life force he executes his thought and will; through the physical body he expresses what he thinks and wills.

The mind and vital life force are hidden in the gross physical body and evolve gradually. Death means the gross physical body without the subtle physical body.

Vali, Azhal, Iyam are the three humours which are the life constituents of the human body. But still, there's predominant Vali, below the umbilicus, predominant Azhal in the abdomen and thorax regions and predominant Iyam in the head and neck region.

## **VALI**

Vali is responsible for the Creation of our body.

Vali dwells in the following places; Umbilicus, Idagalai, Abaanan, Faecal matters, Abdomen, Anus, Bones, Hip joints, Skin, Joints, Hair follicles and Muscles.

## **KINDS OF VALI**

It has got ten different forms and actions.

1. Uyirkkaal - It is essential for respiration.
2. Keelnokkukkaal - It contracts the anus. It is responsible for excretion of urine and faeces. It helps to take the essence of the digested food to the different parts of the body.
3. Melnokkukkaal - It starts from the Udharaakkini and takes the essence of food and stations it at appropriate places.

4. Paravukhaal - It lies in all joints (both movable and immovable joints). It activates voluntary and involuntary movements of the body and thus makes them to extend or flex. It appreciates the sense of touch.
5. Nadukhaal - This is responsible for the balance of the other vayus. It equalizes the Arusuvai, Water and Food. It helps in assimilation.
6. Vaanthikkaal - It is responsible for higher intellectual functions. It causes closing and opening of the eyelids and goose flesh.
7. Vizhikkaal - It causes winking of the eyelids, yawning, closure of mouth and lacrimation. It helps to visualize things.
8. Thummikkaal - It lies in the tongue and causes nasal and salivary secretions. It is responsible for sneezing, cough and hunger.
9. Kottavikkaal - Lethargy, tiredness and human passions are attributed to this. It stays at the kutham (anus) and kuyyam (penis or vagina)
10. Veengukkaal - It functions from the nose. It departs from the body after third day of death by head explode.

## **AZHAL**

Azhal is responsible for the protection of our body.

Azhal sustains in the Pingalai, Praanan, Urinary bladder, and Heart.

## **KINDS OF AZHAL**

It is of five types depending upon the locations and the functions.

1. Aakkanal - It lies between the stomach and the intestines. It causes digestion.
2. Vanna yeri - It lies in the stomach and gives red colour to the chyme and produces blood.
3. Aattralangi - It lies in the heart. It has intelligence, knowledge and it finishes favourable works.
4. Nokkazhal - It lies in the eyes and causes the faculty of vision. It helps of visualize things.
5. Ollolithhee - It gives colour, complexion and brightness to the skin.

## **IYAM**

Iyam is responsible for the destruction of our body.

Samaanan, Suzhimunai, Head, Tongue, Uvula, Eyes, Nose, Bone marrow, Joints, Blood, Fat, Sperm and Colon are the seats of the Iyam.

## **KINDS OF IYAM**

1. Ali Iyam - It lies in the lungs and helps in respiration. This is vital among all types of Iyam, because it controls the other Iyam and maintains equilibrium.
2. Neerppi Iyam - It lies in the stomach. It mixes the consumed food and water. It promotes the digestive process.
3. Suvaikaan Iyam - It lies in the tongue and helps to appreciate the taste of the consuming food.
4. Niraivu Iyam - Sustaining in the head, this gives refrigerant effect to cool the eyes and other sense organs.
5. Ontri Iyam - Sustaining in the joints, this makes them move freely and easily.

## **96 THATHUVAM**

In Universe each and every atom consists of 96 thathuvam. 96 thathuvam control and act the Uyir in powerful manner.

### **Panchabootham - 5**

1. Mann - All organisms and materials are formed and are well growed.
2. Neer - It gives chillness, and softness. It unites all things.
3. Thee - It gives heat, sharpness, dryness and brightness. It makes all things colourfully.
4. Vayu - It gives tiredness to the body.
5. Vinn - It gives space to all other boothams.

### **Pori - 5**

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 - 5**

1. Sound - Aagayam
2. Touch - Vaayu
3. Light - Thee
4. Taste - Neer
5. Smell - Mann

### **Kanmenthirium - 5**

1. Mouth - Vinn
2. Leg - Vayu
3. Hand - Thee
4. Anus - Neer
5. Sex organs - Mann

### **Kanmavidayam -5**

1. Vasanam - speaking
2. Kamanam - walking
3. Thanam - giving
4. Visarkam - defeacation
5. Anandam - reproduction

### **Anthakaranam - 4**

1. Manam - It thinks based upon delight and regret
2. Puththi - It analyses based upon Nal vinai and Thee vinai
3. Aganthai - Inspiration
4. Siddham - Determination and Achievement.

### **Arivu - 1 – Wisdom**

### **Naadi - 10**

1. Idakalai - It starts from right big toe runs opposite side to the left nostril. It controls the left side of human body.

- 2. Pinkalai - It starts from left big toe runs opposite side to the right nostril. It controls the right side of human body.
- 3. Suzhumunai - It is situated between idakalai and pinkalai.
- 4. Siguvai - It acts on nerve of the right eye.
- 5. Purudan - It acts on nerve of the left eye.
- 6. Kanthari - It acts on nerve of the right ear.
- 7. Aththi - It acts on nerve of the left ear.
- 8. Alampudai - It acts on nerve of the tongue.
- 9. Sankini - It acts on nerve of the reproductive organs.
- 10. Gugu - It acts on nerve of the rectum.

### **Vayu -10**

- 1. Piranan - Uyirkaal
- 2. Abaanan - Keel varambu thozhil vali (Lower motor)
- 3. Uthanan - Mael varambu thozhil vali (upper motor)
- 4. Viyanan - Niravukaal (paravukaal).
- 5. Samanan - Oli vali.
- 6. Nagan - Vizhi vali.
- 7. Koorman - Kottavi vali
- 8. Kirukara - Thummal vali.
- 9. Devathathan - Imai vali
- 10. Thanajeyan - Veengu vali.

### **Aasayam - 5**

1. Amarvasayam - Stomach
2. Pahirvasayam - Liver and intestines
3. Salavasayam - Urinary system
4. Malavasayam - Rectum and anus
5. Sukkilavasayam - Genital organs

### **Kosam - 5**

1. Annamaya kosam - It consists of body with 7 Udal thathukkal.
2. Piranamaya kosam - Praanan + Kanmenthirium.
3. Manomaya kosam - Manam + Gnanenthirium.
4. Vingnanamaya kosam - Puththi + Gnanenthirium.
5. Aanandhamaya kosam - Praanan + Suzhuththi.

### **Aatharam - 6**

1. Moolatharam - Between the anus and external genitalia
2. Swathitanam - It lies 2 inches above Moolatharam
3. Manipooragam - It lies 8 inches above Swathitanam
4. Anaagatham - It lies 10 inches above Manipooragam
5. Vishuthi - It lies 10 inches above Anagatham
6. Aakkinai - It lies 12 inches above Vishuthi

### **Mandalam - 3**

1. Thee mandalam - Inbetween Moolatharam and Swathitanam
2. Gnayiru Mandalam - Inbetween Manipooragam and Anagatham
3. Thingal Mandalam - Inbetween Vishuthi and Aakkinai

### **Malam - 3**

1. Aanavam – Stage of selfishness
2. Maayai – Stage of illusion
3. Kaamiyam – Fruits of deed

### **Thodam - 3**

1. Vadham - Derangement of Vayu
2. Pitham - Derangement of Thee
3. Kabam - Derangement of Neer

### **Edanai - 3**

1. Porul patru – Material bindings
2. Puthalvar patru – Off spring bindings
3. Ulaga patru – Worldly bindings

### **Gunam - 3**

1. Sathuva gunam – Godliness in all things.

2. Raasatha gunam – Manifestation of passion,  
pride,courage,zeal,jealousy,  
knowledge, etc..
3. Thaamatha gunam – Badness in all aspect i.e., opp to  
sathuva gunam.

### **Vinai - 2**

1. Nal vinai - Good deed.
2. Thee vinai - Bad deed.

### **Ragam - 8**

1. Kaamam - Desire.
2. Krotham - Hatred.
3. Lobam - Strongy.
4. Moham - Lusk.
5. Matham - Pride.
6. Marcharyam - Internal comfort.
7. Idumbai - Mockery.
8. Agankaaram - Ego.

### **Avaththai – 5**

1. Ninaivu - Wakefulness
2. Kanavu - Dream.
3. Urakkam - Sleep

4. Paerurakkam - Stage of stupor.  
5. Uyirppadakkam - Stage of samathi.

“முப்பது முப்பது முப்பத்த றுவரும்  
செப்பு மதிலுடைக் கோவிலுள் வரழ்பவர்  
செப்புமதிலுடைக் கோவில் சிதைந்தபின்  
ஓப்பிலனைவரும் ஓடெடுத்தாரே”

- வேதாந்த தத்துவக் கட்டளை.

96 thathuvam are omni present. Man having 96 thathuvam is like a  
Divine in the temple.

If temple is collapsed, 96 thathuvam willn't be stable there.

### **Udal Thathukkal - 7**

Udal thathukkal control the normal functions of the body.  
Increasing or decreasing of the Udal thathukkal can affect the body. So  
maintenance of Udal thathukkal in their normal level are very important  
to maintain the normal body.

- |                        |   |                     |
|------------------------|---|---------------------|
| 1. Saaram              | - | Chyle.              |
| 2. Senneer             | - | Blood.              |
| 3. Oon                 | - | Muscle.             |
| 4. Kozhuppu            | - | Fat.                |
| 5. Enbu                | - | Bone.               |
| 6. Moolai              | - | Bone marrow, brain. |
| 7. Sukkilam/Suronitham | - | Sperm/ ovum.        |

### **Malam - 3**

Malam means waste products of the body.

1. Motion
2. Urine
3. Sweating

### **Udal Vanmai -3**

1. Eyarkai vanmai - It is formed from Mukkunam naturally.
2. Kaala vanmai - It is formed by different age periods and seasons.
3. Seyarkai vanmai - Body is protected in healthy level by diet, good habits and medicine.

### **Vegangal - 14 (Natural Urges -14)**

1. Vadham - Downward force.
2. Thummal - Sneezing.
3. Siruneer - Micturation
4. Malam - Defaecation.
5. Kottavi - Yawning.
6. Pasi - Hunger.
7. Neer vetkai - Thirst.
8. Kasam - Cough.
9. Elaippu - Exhaustiveness.

- 10.Nithirai - Sleep.
- 11.Vaanthi - Vomiting.
- 12.Kanneer - Lacrimation.
- 13.Sukkilam/Suronitham - Genital secretion.
- 14.Suvaasam - Breathing.

#### **Udal Akkini - 4**

- 1. Samanakkini - It is called naturely situated samanavayu. It is responsible for proper digestion.
- 2. Mandhakkini - Samanavayu combined with kabam to form mandhakkini. Food is poorly digested and process of digestion takes long time.
- 3. Deekshanakkini - The combined form of samanavayu and pitham called deekshanakkini. This condition causing excessive digestive fire burning large amount of food in a lesser duration of time.
- 4. Vishamaakkini - Alteration of samanavayu from its natural place is called vishamaakini. It causes irreguler digestion and it may change in food poisonous.

## Suvai - 6

Suvai is appreciated by tongue. Each suvai consists of 2 bootham.

1. Inippu - Mann + Neer
2. Pulippu - Mann + Thee
3. Uppu - Neer + Thee
4. Kaippu - Vali + Vinn
5. Kaarppu - Vali + Thee
6. Thuvarppu - Mann + Vali

## Seasons

Seasons are formed by rotation and revolution of earth.

Ancient Tamils had their own divisions of the year into different seasons (Perumpozhudhu) and the day into parts ( Sirupozhudhu )

### Division of the Year (Perumpozhudhu)

Revolution of the Earth causes seasonal changes.

The year is divided into six seasons consisting of two months each.

1. Kaar kaalam - Aavani, Purattasi
2. Koothir kaalam - Iypasi, Kaarthigai
3. Munpani kaalam - Markazhi, Thai
4. Pinpanikaalam - Maasi, Panguni
5. Ilavenir kaalam - Chiththirai, Vaikasi
6. Muthuvenir kaalam - Aani, Aadi

## **Divisions of the Day ( Sirupozhudhu )**

Rotation of the Earth causes day. The day is divided into six parts and they are,

Vaikarai	-	Dawn
Kaalai	-	Morning
Yaerppaadu	-	Forenoon
Nannpagal	-	Noon
Maalai	-	Evening
Yaamam	-	Night

## **The Formation of Ayanam**

The beginning of the year from the Tamil month Thai has two divisions; so named as Ayanam; namely Uththarayanam and Dhatshinayanam.

The Sun taking northward course is called Uththarayanam and the Sun taking southward course is called Dhatshinayanam.

## **Urampokki Kaalam**

In Uththarayanam, excessive heat and dryness are present. This can decrease the strength of the entire living organism. This period is called as Urampokki kaalam.

This consists of Pinpani kaalam, Ilavenir kaalam and Muthuvenir kaalam.

## **Aakka Kaalam**

In Dhatshinayanam, humidity is present due to rain. So all organisms are having strength. This is called as Aakka kaalam.

This consists of Kaar kaalam, Koothir kaalam and Munpani kaalam.

# **SIDDHA PATHOLOGY**

## **NOI NAADAL**

Noi naadal is the study of disease including diagnostic parameters through

1. Meikuri
2. Naa
3. Niram
4. Mozhi
5. Vizhi
6. Malam
7. Moothiram
8. Naadi

The concept of disease is as old as life. Since the beginning of mankind, there has been desire as well as need to know more about the causes and mechanisms of disease.

The answers to these questions have evolved over the centuries - from supernatural beliefs to the present state of our knowledge of modern pathology.

## **DISEASE**

Disease means any deviation or interruption from the normal functions of body. Another interpretation about disease is what existing in the mind, will experiencing in the body.

Siddha system approaches the disease by the basis of Vali, Azhal, Iyam. In healthy individual the ratio of Vali, Azhal, Iyam is 1:1/2: 1/4. Any imbalance in this ratio causes disease. The enjoyment of life is associated with pleasure. Disease is opposed to this sense of pleasure.

Diseases are of two kinds,

1. Pertaining to the body
2. Pertaining to the mind.

The principle of Siddha system seems to answer the onset of the disease.

## **CAUSES FOR DISEASE**

Occurrence of disease in the body is due to,

1. Derangement of Uyir thathukkal
2. Alterations in Udal thathukkal
3. Seasonal variations
4. Changes in food habits
5. Constraint of 14 Natural urges.

## **1. DERANGEMENT OF UYIR THATHUKKAL**

Uyir thathukkal are basic constituents of the body. Changes in Uyir thathukkal are called Mukkutram which is assessed by Naadi. Eight types of parameter and it is confirmed through Naadi.

### **Abnormal Functions of the Vali**

1. Body ache and pain
2. Nervous debility
3. Tremor, Tremulousness
4. Dryness
5. Weight loss
6. Constipation, Concentrated urination
7. Weakness of functional organs and loss of functions
8. Goose flesh
9. Stiffness of upper and lower limbs
10. The skin, eyes, urine and faeces are changed into black colour.

### **Abnormal Functions of the Azhal**

1. Increased hunger
2. Increased thirst
3. Burning sensation in the body
4. Decreased sleep
5. Yellowish discolouration of the skin, eyes, urine and faeces.

## **Abnormal Functions of the Iyam**

1. Reduced appetite
2. Increased salivation
3. Loss of Perseverance
4. Heaviness of the body
5. Chillness of the body
6. Pallor
7. Increased sleep
8. Flatulence
9. Cough
10. Weakness in all joints of the body

## **2. ALTERATIONS IN UDAL THATHUKKAL**

The human body is made of seven basic physical constituents. These constituents should be in harmony and normality. Any variation in them will lead to their functional deviations.

### **The Variations of the Udal Thathukkal**

#### **1. Saaram**

Increased Saaram leads to diseases of increased Iyam like reduced appetite.

Decreased Saaram leads to dryness of the skin, tiredness, and diminished activity of the sense organs.

## **2. Senneer**

Increased Senneer causes boils in different parts of the body, reduced appetite, and reddish eye and skin.

Decreased Senneer leads to tiredness, nervous debility, pallor, and desire to take sour and chill foods.

## **3.Oon**

Oon in excess causes kandamaalai, kiranthi and hypermuscular in the neck.

Decreased Oon leads to impairment of sense organs, joint pain and jaw, thigh get shortened.

## **4. Kozhuppu**

The signs of increased Kozhuppu are identical to that of increased Oon associated with tiredness.

Decreased Kozhuppu leads to pain in the hip region, and weight loss.

## **5. Enbu**

Excess of Enbu causes growth in the bones and teeth.

Decreased Enbu causes the pain in joints, loosening of teeth, splitting and falling of hair and nails.

## **6. Moolai**

Increased Moolai causes heaviness, swollen eyes, swollen phalanges, diminution of urine, and non healing ulcers.

Decreased Moolai causes sunken eyes.

## 7. Sukkilam

Excess Sukkilam causes love and lust towards women, and urinary calculi.

Decreased Sukkilam causes failure in reproduction, and pain in the genitalia.

### SEASONAL VARIATIONS

Seasonal variations which affect the normal constituents of the body and these cause diseases.

Thannilai Valarchchi means Mukkutram are increasing from their normal level.

Piranilai Valarchchi means increased Mukkutram spread in to other places.

Thannilai Adaithal means Mukkutram are stable in their own places.

**Table - 1**

**Seasonal Variations of Uyir Thathukkal**

<b>S.No.</b>	<b>Mukkutram</b>	<b>Thannilai valarchchi</b>	<b>Piranilai Valarchchi</b>	<b>Thannilai Adaithal</b>
1.	Vali	Muthuvenir kaalam	Kaar kaalam	Koothir kaalam
2.	Azhal	Kaar kaalam	Koothir kaalam	Munpani kaalam
3.	Iyam	Pinpani kaalam	Ilavenir kaalam	Muthuvenir kaalam

#### **4. CHANGES IN FOOD HABITS**

Food is the basic and essential requirement for keeping the body and its parts, to grow well and do their work properly for a long time. That is, the long life with healthy body and mind, depends upon one's food.

According to tradition, consuming food twice a day is good. If he takes food for more than three times a day, he will become sick and will be inflicted with innumerable diseases.

When, one is in a state of distressed mind, anger or hunger, the heat of the body will become more and at that state he should consume liquid food. If he takes solid food under such conditions, it will cause improper digestion and leads to disease.

During eating, one should take the sweet taste at first then he should take pungent, saline tastes with vegetables. Astringent taste, sour - curds and pickles will be consumed at last. This method of taking the six tastes will give the pleasure of eating.

Any alterations in taking six tastes will cause diseases.

The following foods are unsuitable and they may cause diseases of the physical constituents, which lead to indigestion and diseases of the stomach.

1. The food that causes abominate feeling or flatulence.
2. The food that has been charred or scorched by fire.

3. Food is not cooked suitably or hard foods, over dried, very cold food.
4. Foods cooked without properly removing the foreign bodies like small stones, sand, grass or husk, worms, hair etc.,
5. Dried cooked rice or cooked rice kept in water for a long time.
6. Reheated the already prepared foods.
7. Food that prepared with a lesser quantity of vegetables.
8. Food that is very hot and contains more salt.

Food that consume at irregular timings or at irregular intervals between the meals may cause severe diseases. And if one consumes the food beyond the level of his digestive fire, he will get innumerable diseases.

The humours will alter due to this improper and irregular food.

### **CONSTRAINT OF 14 NATURAL URGES**

14 Natural urges are the indications of our body functions and these should not be obstructed forcibly.

#### **1. Abaanan (Flatus air)**

If one resists the flatus air completely or partially, he will inflict with the diseases of the chest, flatulence, constipation, and pricking sensation through out the body.

## **2. Sneezing**

Kirukaran vayu which lodges with nose and is responsible for sneezing. Restriction of sneezing causes headache, and pain in the sense organs.

## **3. Urine**

If one does not pass urine regularly, it causes obstruction in the urethral passage, ulceration in the urinary tract, joint pain and distension of the lower abdomen.

## **4. Faeces**

Abana vayu is responsible for defaecation. If it is obstructed, its increased quantum pushes the stools. It also causes headache, pain in the thigh, constipation, discomfort and inability.

## **5. Yawning**

If it is prevented it leads to poor digestion, tiredness and wilt of face.

## **6. Hunger 7. Thirsty**

If hunger and thirst are not quenched, these lead to impairment of the functions of vital organs, tiredness and joint pain.

## **8. Cough**

If cough is controlled, it leads to violent cough, bad odour in the breath, heart diseases, abdominal pain and tiredness.

**9. Rest (Tiredness)**

If one does not take rest properly, tiredness causes faintness and chills.

**10. Sleep**

If one does not sleep well daily, he may get headache, redness of eyes, impaired speech and hearing.

**11. Vomiting**

If vomiting is prevented forcibly, it leads to fever, itching, pallor, eye diseases and cough.

**12. Tears**

Constraint of tears causes eye diseases, ulcer in the head, and heart disease.

**13. Semen**

If semen is controlled, it leads to fever, diminution of urine, joint pain, and chest pain.

**14. Breathing**

Constraint of proper breathing leads to cough, flatulence and fever.

## DIAGNOSTIC TOOLS IN SIDDHA SYSTEM

Siddha system has a unique diagnostic method to identify the diseases and their causes.

### Envagai Thervu

“மெய்க்குறி நிரம் தொனி விழிநா இருமலம் கைக்குறி”

- தேரையர்.

#### 1. Mei kuri

By Meikuri, the following symptoms are observed. The temperature of the skin (heat or cold), sweating, numbness, fissures, thickening of hairs, hair falling, hair erection, ulcers, swelling, weight loss and weight gain.

#### 2.Naa

Tongue colour (black, red, yellow, white), coating of tongue, excessive salivation, dryness, ulcers, nature of gums, teeth, taste, mouth deviation, speech are noted.

#### 3.Niram

Body colour (black, yellow, white, red, blue), flush, pallor, black colour in eyes and teeth are observed.

#### 4.Mozhi

Pitch of voice (high, low, normal), hoarseness of voice, fluency, intelligence, articulation, character, breathlessness are observed.

## **5.Vizhi**

Eyes easily reflect the pathological changes of the body. Size and shape, colour (red, yellow, pallor, blue, muddy), lacrimation, dryness, swelling of eyelids, ulceration, visual field, sharpness of vision, colour of vision, inflammation (ulcer in conjunctiva, cornea, pupil) are keenly observed. 96 eye diseases are noted.

## **6.Malam**

Colour (yellow, red, black, white, green), froth, solid or semisolid or liquid, quantity, odour are noted.

## **7.Moothiram**

Urine is observed under 2 headings

1. Neer kuri
2. Nei kuri

### **7.1. Neer kuri**

#### **Collection of Urine for Testing**

Before the collection of urine for testing, one should take supper consisting of all the six tastes at the regular time based on one's digestive fire. After a sound overnight sleep, urine should be collected in a closed glass ware and the test should be done before 90 minutes from dawn. This rule is relaxable in severe cases.

#### **General Features of Urine**

- Niram (Colour)
- Manam (Odour )

- Nurai (Froth )
- Edai (Specific gravity )
- Enjal (Quantity)

## **7.2 . Nei kuri**

A drop of oil is dropped at the centre of upper surface of urine bowl without any shaking. It should be ensured that the direct sunlight does not fall on it, but bright light is necessary for observation. And it is not disturbed by the wind. The changes of the oil drop in urine suggest the diagnosis and condition of the patient.

### **General Nature of Urine in Oil Examination**

If the oil drop takes the shape of a snake (Aravu), it indicates Vali disease. If it spreads like a ring (Aazhi) it indicates Azhal disease. If it stands like a pearl (Muthu) it indicates Iya disease. If the oil drop sinks in the urine, it indicates Iya disease.

If any two features of the three humours are seen together in the urine it suggests derangement of particular two humours. If the oil drop spreads fast, it will indicate Asaathiayam. Ex. Aravil aazhi indicates vali azhal.

## **8. Naadi**

Naadi is very important tool. Diagnosis of the disease by assessing naadi gives a best way to treat the disease. Vali naadi is felt in tip of the index finger. Azhal naadi is felt in tip of the middle finger. Iya naadi is felt in tip of the ring finger.

### **Manikkadai Nool**

Manikkadai nool is another important diagnostic tool. It is a measurement which is done 4 inches from the wrist by non extended thread. The measurement denotes the signs and symptoms of the disease. In severe diseases, it indicates fatal conditions.

## AIM AND OBJECTIVES

According to DHANVANTHIRI VAITHIYAM - PART I, SALA PEENISAM is one of the disease which occur in para nasal sinuses of the skull. It affects at any age group ( children, middle age and elderly people) cause severe embrassment both physically and mentally.

I select sala peenisam as my dissertation topic because people are affected by the disease very often even respectable or irrespectable of climate.

The main aim of the present study is to define the aetiology, pathology, sytmatology and diagnostic method of sala peenisam and formulating them after a detailed study into acceptable form that will be applicable and scientifically approachable in this modern world.

To realise this aim, the following objectives can be drawn.

1. It is the most objective of present study to explore udal thathuvam (Siddha physiology)
2. To study clinical course of disease sala peenisam and its aetiology, signs and symptoms etc.. of the disease.
3. To find out the change that occur in udal thathukkal.
4. To study the pathology of sala peenisam with modern aspects.

5. To have complete study of disease sala peenisam under the topic three humours(kuttram), senses(pori pulangal), body constituents(udal thathukkal), eight types of examination(envagai thervugal), etc.. in order to evaluate the pathology of sala peenisam.
6. To have detailed investigation.
7. To utilise the modern diagnostic tools to confirm the diagnosis.

## ELUCIDATION ABOUT SALA PEENISAM

ACCORDING TO THANVANTHIRI VAITHIYAM PART-I,

IN SIRA ROGA NITHANAM

கலந்திடு சிரசிலேறி கழிக்குநீர் போகாதாகித்  
துலங்கிய நெஞ்சில் வீழ்ந்து சுரமுட னிருமலுண்டா  
மலங்கவே தும்மு மூக்கில் வழுவழுத்தோடுந் தண்ணீர்  
நலங்கிளர் சல பீனிசமிதுவென நாட்டுவாமே

-பாடல் எண் 8

\*T.V.சாம்பசிவம் பிள்ளை அகராதி

\*\*மதுரை தமிழ் அகராதி

### கலந்திடு

கலத்தல்

### சிரசிலேறி

\*விடம், பித்தம், உஷ்ணம், முதலியவை தலைக் கொள்ளுதல்.

\*Affection of the head through poisons, heat, etc..

### கழிக்கு

\*\*மிகுதி, தள்ளும்படியானது, கழிதல், நீங்குகை, மிச்சம், மீதி.

\*Discharge, excess, surplus matter, refuse, faecal matter or other excretions and secretions from the body.

### நீர்

\*\*தண்ணீர், நீர்மை.

\*Water, urine, nature, disposition

## துலங்கிய

\*தேய்த்தல், சுத்தி செய்தல், விளக்கல்.

\*Causing to shine, rubbing, cleansing.

## துலக்கம்

\*விளக்கம், பிரகாசம்,

\*\*ஒளி செய்தல், பிரகாசித்தல்.

\*Clearness, brilliancy.

## நெஞ்சு

\*மனம், மார்பு.

\*\*நெஞ்சகம், தொண்டை, மார்பு.

\*Chest, mind, heart

## வீழ்ந்து (வீழ்த்தல்)

\*நோயால் விழச் செய்தல்.

\*\*விழுவித்தல், வீணாக கழிதல்.

\*Causing to fall as from disease or illness.

## வீழ்வு

\*\*விழுதல், பாய்ச்சல்.

## சுரம்

\*அறுசுவை

உணவுகளினாலும்

உடம்பையடுத்து

உட்கொதிப்பினாலும்

ருதுகால

பேதங்களினாலும்

தகாத

நடத்தைகளினாலும்

மற்ற

இரகக்

கோளாறு,

விஷச்செர்க்கை,

மனோவியாகுலம் முதலிய காரணங்களினாலும் வாத, பித்த, சிலேட்டுமங்கள தனித்தனியாவது ஒருமித்தாவது இரைப்பையில் இருக்கும் அக்கினியை வெளிப்படுத்தி சீதக்கட்டுகள் உள்ளவிடத்தே இளக்கி உப்ப செய்து பின்பு செரியாமையாயிருக்கும் அன்னரசத்தை அனுசரித்து அவ்விடம் நாடோறும் அன்னரச நரம்புகளின் துவாரங்களையும் உரோமத் துவாரங்களையும் மறைத்து பின்பு நாபிதானத்தில் சேர்ந்து சடராக்கினியைத் தாண்டி அத்துடன் கலந்து உடம்பு முழுவதும் பரவி அதிகமான சூட்டை உண்டாகும் இதனால் உடம்பு முழுவதும் வலி, வியர்வை, கைகால் சோர்வு, தாகம், தலைவலி, கண், உள்ளங்கை எரிச்சல் முதலிய குணங்கள் உண்டாகும்.

**\*\*காய்ச்சல்.**

\*According to Indian Medicine, the dearrangement of three humours in the system either singly or in conjunction with others effect the stomach causing indigestion and dislodge the gastric fire which finds its way into the indigestion setting up inflammation of the mucous walls. The gastric heat evolved enters the naval region developing the presence of some poison in the blood under the influence of which the tissues are

more rapidly consumed, with the result that created in large amount and spreads through the whole organism.

It is due to one of the many causes such as errors in diet especially tainted food, internal heat, sudden change of seasons or other atmospheric disturbances, untoward actions, malignant influences of inauspicious stars or planets agitation of mind from emotional feelings, etc...

### இருமல்

\*தமிழ் நூலின்படி இது சாதாரணமாய் புகை அல்லது தூசு வாயின் வழியாயும் மூக்கின் வழியாயும் உட்புகுதலால் ஏற்படும் சத்தம் மற்றும் சண்டையில், களைப்பு, உலர்ந்த பண்டங்களைப் புசித்தல், உணவு தொண்டையில் விக்கிக் கொள்ளுதல், மலத்தை அடக்குதல் முதலிய காரணங்களினாலும் இவ்விருமல் உண்டாகலாம்.

மேற்கண்ட காரணங்களினால் நெஞ்சிலும், குரல்வளையிலும் தங்கி நிற்கும் உதானவாயுவானது கேடடைவதால் இவ்வழியாகப் போகும் காற்றுத் தடைபட்டு இவ்வொலியாகிய இருமலை உண்டாகும்

அன்றியும் சுவாசக்கருவிகளுக்கு ஏற்படும் இழிவுகளினாலும் முத்தோஷங்களின் கோளாறுகளினாலும் கூட இது ஏற்படலாம் இத்தகைய இருமலுக்கு தகுந்தபடி சிகிச்சை செய்யாவிடில் சயரோகமுண்டாவதற்கு வழி ஏற்படுமெனக் கருதப்படும்.

\*According to Tamil Medicine, this is the sound produced ordinarily by smoke or dust entering the mouth and the nostrils. It also

arises from quarelling or fighting from great fatigue, from dry food entering the air passages or from resisting the calls of nature.

These causes dearrange the vital air in the chest and the trachea by which the air, which passes through the air passages in the mouth produces a peculiar noise.

The diseases may likewise be produced by the rupture of the respiratory organs and by the dearranged humours, All these varieties of cough pass into consumption, if neglected.

### **மலங்கிய**

\*நுரை

\*foam, froth.

### **மலங்குதல்**

\*\*மலங்கல், கலங்குதல்.

### **தும்மு**

\*தும்முதல்.

\*sneezing.

### **தும்மல்**

\*தமிழ் வைத்தியப்படி கபத்தோடு சேர்ந்த வாயுவானது மூக்கினுள்ள சவ்வு பாகத்திற்கு முணுமுணுப்பை யுண்டாக்கி சத்ததோடு வெளிப்படும் இதுவே தும்மல் எனப்படும். சலதோஷம், பீனசம், கபால நீர்க்கோவை முதலிய காரணங்களினாலும், மூக்கினுள்

திரி அல்லது கயிறு அல்லது வேறு காரணமான வஸ்துக்களை இடுவதினாலும் உண்டாகலாம்.

\*In Tamil Medicine, it is considered as a disease in which the vayu changed with kapham pushes out of the nostrils forcibly and spasmodically accompanied by loud reports or sounds owing to the fact that the membrane of the nasal passage is inflamed or irritated. This is known as sneezing. This violent audible expiration marked by a kind of convulsive effort may be due to cold, nasal catarrh, cold in the head, coryza, rhinitis, etc or it may be caused through trickling sensation produced by insertion of twisted piece of cloth or thread into the nostrils or to the action of any pungent smell. [stermetatory].

**மூக்கில்**

\*மூக்கு

\*Nose.

**வழுவழுத்தோடு**

**வழுவழுக்கு**

\*வழுவழுப்பு.

\*\*வழுக்கல், மழமழத்தல், உறு, கொழுகொழப்பு, வழுக்கும்

தன்மை,

மென்மை, பளபளப்பு.

\* Mucous substance, unctuous.

## தண்ணீர்

\*குளிர்ந்த நீர்

\*\*குளிர்ந்த நீர், அப்பு, புனல், நீரம்.

\*Water, cold water.

## நலங்கிளர்

அழுக்காதல், வதங்குதல்.

## சல பீனிசம்

\*நாசி நீர் வடிந்து மழை காலத்தில் தும்மல், கழுத்து வலி, பிடரியும் முகமும் ஊரல்.

\*Catarrh of the nose due to the vitiated bile and excess of venereal head finding its way into the head. It is associated with the following symptoms viz free running from the nose, constant sneezing, itching in the nape of the neck and face, heaviness of the head and eyes etc... Nasal catarrh, it may also be caused by exposure to dew and rain.

## பீனிசம்

\*சிரசில் கனலெழுந்து சூலையால் ரோகம் அதிகரித்து சீழ் போலும் சிராய் போலும் காணப்படும் ஓர் மூக்கு வியாதி. இது பனிக் காற்றில் திரிவதாலும், குளிர்ந்த நீரில் மூழ்குவதாலும், மிதமிஞ்சிய போகம் செய்வதாலும், மிகு நித்திரை, மூக்கில் தூசியடைதல் முதலிய காரணங்களினால் உண்டாகும்.

\*Mucous running off through the nostrils due to an inflammation or ulceration in the head or to cold affection the nose or excessive

indulgence in sexual intercourse, heating of head entrance of the minute particles of dust or smoke into the nostrils, excessive application of heat or cold, voluntary retention of stools and urine, diseases of the nose.

### **நீர்ப் பீனிசம்**

\*Neer peenisam fluid runs down from the nose and during the rainy season, sneezing, pain in the nape.

### **நாட்டுவாமே**

### **நாட்டுதல்**

\*\*தாபித்தல் நடத்தல் நிறுத்தல்

”கலந்திடு சிரசிலேறி கழிக்கு நீர்ப் பேரகாதாகி”

Elevated vitapitham( heat) accompanied with accumulated vayu mixes and raises to the head and excess of water produced is retained. (Usually the normal secretion of water is gradually discharged. In Peenisam, the excessive secretion is cooled and retained)

” துலங்கிய நெஞ்சில் வீழ்ந்து சுரமுடனிருமலுண்டா”

This altered humours enters the clear chest (upper respiratory tract) whereby it harms the upper respiratory tract and causes fever and cough. Cough appears as the result of uthanavayu alteration in the respiratory tract. Fever appears due to alteration of three humours.

”மலங்கவே தும்மு மூக்கில் வழுவுமுத்தோடு தண்ணீர்”

When excess Kabam combines with Vayu tries to eliminate the excess Kabam, so sneezing occurs ( By Vegas). Due to heat the retained discharge become increased in its consistency.

”நலங்கிளர் சல பீனிசமிதுவென நூட்டுவாமே”

Then the author described that the SALA PEENISAM is caused by increased vita pitham by action of vayu enters the head, combines thus causing the symptoms of peenisam. Kabam combines with vayu, irritating the mucous membrane of the nose cause sneezing, inflammed nostril leads to mucus watery discharge. Finally all three humours and uthanavayu alters and affects the upper respiratory tract causing fever and cough.

## REVIEW OF LITERATURES

Based on the physical and mental disabilities of human being, ancient siddha literatures classify 4448 diseases. In this classification, 1008 diseases come under the head and neck region. Among them, the diseases of nasal origin are 86. “**sala peenisam**” is one among them.

According to “**Pararasa Sekaram**”, it has been illustrated that,

”பகரு நாலாயிரத்து நானூற்று நூற்பத் தெட்டும்

புகலுறுப் பெண்ணான் கோரு பொருத்திடும் பெண்ணைய் கேள்

சிகையறு சிரத்தில் ரோகஞ் செப்பிலாயிரத் தெட்டாகும்

வகையறு பேச்சத் தீய மசாத்தியம் வழத்த லாமே

நூல் வல்லோ ருரைத்தா ராயுள் வேதத்தி னுவலுமறு

ஏவலாந் குழலி னாய்கே னியம்பிய நூசிதன்னிற்

சாலநோ யெண்பத்தாறு சாற்றிய விழியு ரோகம்

மேலுந்தொண்ணூற்றாறென்ன விரித்துரை விளம்பினாரே.”

- பரரசசேகரம்(சிரரோக நிதானம்)

Before reviewing the specific signs and symptoms of the dissertation topic “**Sala peenisam**” other information regarding definition, aetiology, general signs and symptoms, pathology and naadi of peenisam have been dealt with, since they are common for all types of peenisam.

## SYNONYMS

- Neerkovai
- Mookkuneer paichal
- Mokkaippu.

## DEFINITION :

Peenisam is a disease characterized by redness of the nasal mucous membrane, sneezing, redness of the eyes with lacrimation, watery nasal discharge, headache, frequent discharge of mucus, pus and blood.

- Siddha maruthuvam, Noi nadal noi muthal nadal (part-II)

## AGASTHIYAR GUNAVAGADAM

”தெரிந்து கொள்வாய் நீக்கோவை ரோகந்தன்னை  
திறமகச் சொல்லுகின்றேன் நன்றாய்க் கேளு  
அறிந்து கொள்வாய் தேகத்தின் சவ்விலேனும்  
ஆக்கையின் தோலடியிலிருக்கும் சவ்விலேனும்  
பரந்து நீர் இரத்தநீர் சேர்வதாலே  
பாநிலது நீக்கோவை யென்று பேராய்த்  
துரந்துமே வெளியாகத் தோற்ற லாலே  
தோல்லுலகில் அநேகவிதப் பேருமச்சே  
ஆச்சப்பா சிரசில் தான் நீரே கண்டால்  
அப்பனே அதற்கு சலமஸ்தக மென்பார்  
பேச்சப்பா மார்பில் நீரேற்றும் கண்டால்  
புகழான உரோசல ரோகமென் பார்”

- அகஸ்தியர் குணவாகடம்

Here neerkovai is generally defined as the fluid collection in the membranes of the body or under the skin. It is further named according to the localization. Fluid collection in the head is known as Salamasthagam.

### **ATHMA RATCHAMIRTHAM**

”சிரசில் கனலெழுந்து சூலையால் ரோகம்

அதிகரித்து சீழ்போலும் சிராய் போலும்

காணப்படும் ஒருவித மூக்கு வியாதி”

- ஆத்ம ரட்சாமிர்தம்

According to “Athma ratchamirtham”, heat is increased and this affects the head, resulting in pain which aggravates the disease and causes purulent discharge.

### **T.V. SAMBASIVAM PILLAI MARUTHUVA AGARATHI:**

மூலத்தில் கனலேறி கபாலத்தில் நீரையேற்றி ஒரு நாசியை அடைத்து மற்றொரு நாசியில் நீர் வடிந்து அடிக்கடி தும்மலுடன் பிடரி தலையை கனக்கச் செய்யும். கபாலம் வறண்டு நீர் திரண்டு நாற்றமடித்து உடல் வெதும்பி நாவில் ருசியும் மூக்கில் மணமும் அற்று சிரசில் நீர் இறங்கி துன்புறுத்தும் ஓர் வியாதி.

## **AETIOLOGY:**

### **1.SIDDHA MARUTHUVAM,ARUVAI MARUTHUVAM, AND NOI**

#### **NADAL NOI MUTHAL NADAL PART-II:**

1. Exposure to dust and fumes.
2. Exposure to chill atmosphere
3. Exposure to irritating and aromatic substances.
4. Drinking very cold water
5. Eating cold food materials.
6. Drinking contaminated water.
7. At times when the body is heat a sudden shower in cold water.
8. Supression of vomiting and tears.
9. Excessive sleep or sleeplessness.
- 10.In association with venereal diseases
- 11.In yogic practice when body heat is elevated and transmitted from moolatharam to head.

#### **II.T.V.SAMBASIVAM PILLAI MARUTHUVA AGARATHI:**

According to T.V.Sambasivam pillai maruthuva agarathi, the aetiological causes are as follows.

1. Excessive sexual indulgence
2. When body heat is transmitted to head in an ascending manner.
3. Excessive application of heat or cold
4. Voluntary retention of stools and urine
5. Entry of minute dust particles or smoke, which irritate the nasal mucus membrane
6. Diseases of the nose.

### III. JEEVA RATCHAMIRTHAM(NASIGA ROGA BETHAM):

1. Exposure to chill atmosphere
2. Nasal blockage by dust
3. Excessive sleep or sleeplessness.
4. Speaking loudly.
5. Taking bath in cold water daily.
6. Suppression of tears.
7. Lying in an uneven bed.
8. Excessive sexual indulgence.

### IV. AGASTHIYAR GURUNAADI – 27:

”பீனிசந்தான் வரலாறு சொல்லக் கேண்மின்  
பேதமுடன் கனலெழும்பி வாயுவுஞ் சேர்ந்து  
ஊனுருகி மண்டையிடை தொகுக்கப் பட்டு  
உறுதியுடன் வாயுவங்கே யுறுத்துப் பின்னும்  
நீனமுட னோடும் நீர் சீழ் ரத்தம்  
பிடித்து வருங்காது மூக்கினோடு  
தேனருவி வந்தது போல் செங்கல் சிறாயுஞ்  
சேர்ந்து விழும் பீனிசத்தின் செய்கையாமே”.

- அகஸ்தியர் குருநாடி

As per the poem the elevated heat accompanied with vayu emaciates the body, accumulating in the head and creating all the specific symptoms of peenisam.

## V. AGASTHIYAR GUNAVAGADAM:

”எல்லையுள்ள பீனிசத்தின் நோயைக் கேளாய்  
எப்போதும் சலதோடம் வருவ தாலும்  
தொல்லை செய்யும் மேக ரோகத்தி னாலும்  
தோன்றினதோர் தேகத்தின் தன்மை யாலும்  
அல்லல் செய்ய இந்தநோய் பிறக்குதய்யர்”

- அகஸ்தியர் குணவாகடம்

Recurrent attacks of rhinitis venereal disease and according to the nature of the body are said to be the reasons for the occurrence of peenisam.

## VI. THERAIYAR SEKARAPPA

”பீனிசமன பிணிக்கண மெல்லா  
மன திறத்தை யறைந்தது போக  
வானமிலாம லுரைத்த மருந்தை  
நானவில் கின்றேன் னானிலமீதே  
எண்டின முற்ற விரண்டு தரந்தான்  
பண்டுள தாகுமற் பங்கினத் தானந்  
திண்டிற வேகாடு செய்திற லற்றான்  
மண்டை வறண்டு மலிந்திடு நோயே  
நோய்க ளெலாமிது நோயென வாடும்  
பேயன வாடிய பீனிச நோய்கள்  
சீயறல் சோணிதஞ் சிட்டிவை நான்கு  
மோய்தர மூக்கை யொறுக்குமி தையர்”.

If oil bath not taken twice in eight days regularly, it leads to dryness of the head causing purulent, watery or blood discharge and nasal blockage.

”காய்த விலாப்தகை கண்ட சலத்தை  
யோத விலாதிடை யுண்ட சலத்தால்  
வேம விலாப் பிணி வேதனை யாக்கிப்  
பேதல தாகிய பீனிச மாமே”

- தேரையர் சேகரப்பா

Drinking unboiled and contaminated water causes peenisam.

#### VII. NEER PAICHAL ROGA NITHANAM:

”வெட்டையும் விஷபித்தங்கள் மிகுந்து சிரத்திலேறி  
நட்டமாய் மூக்கினூடே நழுவி நீர்வடிந்தே மீறும்  
பட்டமாய் தலை கனக்கும் பார்த்தறி தும்மலுண்டாம்  
இட்டமாய் மழையில் தேய்ந்தால் இறங்கும் நீரதிகமாமே”.

- நீர்ப் பாய்ச்சல் ரோகநிதானம்

வெட்டை நோயும் விஷ பித்தமும் மிகும்போது அவை சிரசிலேறி  
அங்கு பாதிப்பை உண்டாக்கி பீனிச நோயை தோற்றுவிக்கும்.

According to “Neer paichal roga nithanam”, venereal disorders  
predispose to peenisam.

#### VIII. SIDDHA MARUTHUVANGA CHURUKKAM:

”விழியினில் நீரடக்கில்  
விதமன யிருத்து ரோகம்  
வழிபடு பீந சங்கள்

வந்திடும் நேத்திர ரோகம்  
அழுகிடும் சிரசில் ரோகம்.”

- சித்த மருத்துவாங்க சுருக்கம்

According to “**siddha maruthuvanga churukkam**”, suppression of tears will cause peenisam.

#### **IX. AGASTHIYAR KANMA KANDAM – 300**

”பகறிய பீனசங் சளிணத்தோடு  
நிகில்லா வொருதலை நோய் மண்டை குத்தும்  
நிசமாக வந்த கன்மம் நிசமாய் கேளு  
தகரவே காயடித்த லிலை பறித்தல்  
தளிர் கொழுந்து தழை முறித்தல் பட்டை வெட்டல்  
நிகில்லா பூப்பறித்தல் வேர் கொடிகள் வெட்டல்  
நினைவு கெட்டுச் சீவசெந்து தனையடித்தலாலே”

- அகஸ்தியர் கன்ம காண்டம் - 300

According to “**Agasthiyar kanma kandam**”, peenisam is considered as a kanma disease. Plucking leaves, fruits, young shoots, flowers, cutting barks, roots, twigs and hurting the animals, all these activities will cause peenisam.

#### **X. ROGA NIRNAYA SARAM – ROGA NITHANAM:**

1. Excessive sexual indulgence.
2. Continuous sleep
3. Chill weather.

## **PRODROMAL SYMPTOMS:**

1. Itching and burning sensation in the nose results in rubbing the tip of the nose, which becomes markedly red, tense and tender.
2. Profuse watery discharge from the nose.
3. Redness and lacrimation of the eyes.
4. Nasal speech.
5. Itching and blockage of ears
6. Heaviness of the head.
7. Difficulty in breathing.

- **Siddha maruthuvam , Noi Nadal Noi muthal nadal (part – II)**

## **CLINICAL FEATURES:**

### **I.AGASTHIYAR – 2000**

”கண்ட மேல் முகங்கண் காது கரகரத் தூர்வ தேபோல்  
துண்ட மேற் தினைவு பற்றியச் சொறிந்துதான் சலமும் வீழ்ந்து  
மண்டையுங் கனத்து நொந்து வலியிக வுளதே யாகில்  
பண்டுசேர் மூக்கினீரின் பாய்ச்சலென் றுரைக்க லாமே”

- **அகஸ்தியர் - 2000**

1. Irritation of the throat, face and ears.
2. Nasal itching with watery nasal discharge.
3. Heaviness of the head.
4. Headache.

## II. NEER PAICHAL ROGA NITHANAM:

”நாற்றமும் வலியும் தும்மல் நரசியுள்ளரிப்பும் காந்தல்  
மாற்றமாம் தினவுங் கொண்டு மண்டைவலியுடன் நீரும்பாயும்  
சீற்றதும் அடிக்கடிக்கு சில்லென அடைத்து காட்டும்  
பாந்தறி மூக்கில் நீரின் பாய்ச்சலு மிதுதானென்றே”.

- நீர்பாய்ச்சல் ரோக நிதானம்

1. Nasal itching and burning sensation of the nose
2. Bad odour in the mouth
3. Watery nasal discharge
4. Headache
5. Nasal blockage
6. sneezing

“நாசியில் மாறிமாறி நன்றதாய் அடைத்து நீரும்  
கூசிடும் முத்துப்போலே குமுறியே வடிந்து நாறும்  
ஊசி போல்குத்தும் கண்ணுள் உடன்பீளை மிகவேசாடும்  
காசினி மீதில் தும்மல் சளிவிழும் மூக்கில் நீரே”

- நீர்பாய்ச்சல் ரோக நிதானம்

1. Nasal blockage.
2. Recurrent watery nasal discharge
3. Pricking sensation in the ears
4. Sneezing leads to nasal discharge.

### III. NAGA MUNIVAR THALAI NOI MARUTHUVAM:

”தலைமிக வலிக்கும் நாகி சனிவிழு மொருவுண்டாகும்  
நலிவுறு தும்மலுண்டாம் நாக்செலில் வரளு நாகி  
மலைவுறத் திரண்டு வீழும் வாயுமே நாளற்றமுண்டாம்  
பெலமுற மூக்கடைக்கும் பீனிசமென்று தேரே”.

தலையுங் கனத்து வலிகொண்டு சனிபோ னாகாற் றிரண்டுவிழும்  
அலையு மொடப்போ லொருகாலு மறுதிப் படவே மறறது  
நிலையுங் கெடாது பரிகார நியதிப் படவே செய்துவரில்  
தொலையுஞ் சொன்னோம் பீனிசமுஞ் சொல்லுங் கபால வரட்சியுமே”

- நாகமுனிவர் தலைநோய் மருத்துவம்

1. Severe headache.
2. Mucous discharge.
3. Sneezing.
4. Dryness of the nostrils.
5. Offensive odour of the mouth
6. Nasal blockage

### IV.GUNAVAGADAM:

”தலையும் வலித்து ஒருனாசிச் சனியும் விழுந்து ஓடுபட்டு  
மலையு னாதள் எச்சென்றாள் வறண்டே யிறுக்கித்திரண்டு விழும்  
உலையு மிகவும் நாளற்றமுமாம் மூடே தண்ணீர் விழுந்திருக்கும்  
பலமுஞ் சென்று மூக்கடைக்கில் பீனிசமென்பார் பெரியோரே”.

- குணவாகடம்

1. Headache
2. Mucous discharge
3. After few days purulent discharge with bad odour
4. General blockage.

”கண்டமேல் முழுந்தாள் காது கரகரத் தூர்வ தேபோல்  
துண்டமே தும்ம லுண்டாய் சொரிந்துதான் சலமும் வீழ்ந்து  
மண்டையுங் கனத்து நொந்து வலியுமே மிகவு மாகில்  
பண்டுசேர் மூக்கு நீரின் பாய்ச்சலா மென்னலாமே”

- குணவாகடம்

1. Itching above the neck region and ears.
2. Sneezing.
3. Profuse watery nasal Discharge.
4. Heaviness of the head.
5. Headache.

#### **V. MADHAVA NITHANAM:**

1. Nasal obstruction.
2. Loss of smell.
3. Nasal discharge.
4. Loss of taste.

#### **VI. ATHMA RATCHAMIRTHAM:**

1. Nasal blockage and nasal discharge
2. Recurrent sneezing.

3. Heaviness of the head, headache.
4. Fever
5. Tastelessness.
6. Loss of smell.

## **VII. JEEVA RATCHAMIRTHAM – NASIGA ROGA BETHAM:**

1. Difficulty in breathing.
2. Increased sneezing
3. Nasal voice.
4. Bad odour in the nose
5. Headache.

This disease is also known as Jalathosam, Thalai Neeratram, Neerkovai. If it can be expelled out it is known as munneerkovai and if the same is unexpelled and swallowed it is called pinneerkovai.

## **VIII. AGASTHIYAR GUNAVAGADAM:**

”எல்வையுள்ள பீனிசத்தின் நோயைக் கேளாய்  
எப்போதும் சலதோடம் வருவ தாலும்  
தொல்லை செய்யும்மேக ரோகத்தி னாலும்  
தொன்னினதோர் திரேகத்தின. தன்மை யாலும்  
அல்லல் செய்ய இந்தநோய் பிறக்கு தய்யா  
அப்போது நரசிதனில்சொல்லக் கேளு  
சில்லியஞ்செய் சலதோட மாகத் தோன்றி  
சனியூருஞ் சவ்வப்போ தடித்துப் போமே  
தடித்துமே மூக்கடைப்பு மிகவுங் கண்டு

சதியான பீனிசம் போல் முதலில் தோன்றி  
 நெடித்துமே நெத்திதனில் வேதனையுங் கண்டு  
 நெடிதான இருமலுடன் துர்ப்பலமு முண்டாம்  
 துடிப்புடனே சனிதானும் அதிகரித்து  
 துந்நாற்ற முடன்சனியும் எப்போதுங் கண்டு  
 தடித்தமுடன் சனிஐயா சீயைப் போலே  
 தான் மாறிப் போகுமடா தரணி யோர்க்கே  
 தரணி தனில் சிலேட்டு மத்தின்  
 தானுரு கிரணமாகிப் புண்ணே யானால்  
 முரடிதனில் சனியுடனே இரத்தங் காணும்  
 முக்கியமாய்ச் சனியுறைந்து அடிக்கடி வீழும்  
 பரணியுள்ள போஜனத்தி லிஷ்ட மின்றி  
 பன்மையுள்ள திரேகந்தான் சடைவுண்டாகி  
 விரணமுள்ள திரேகத்தில் மேகநீருண் டாகில்  
 விக்கினமாய் முக்கின்தண்டில் துவாரமுண் டாமே  
 உண்டாகும் வேளைதனில் முக்கி லய்யா  
 உறுதியுள்ள சன்னெலும்பு ரணமே யாகி  
 துண்டு துண்டாய் வெளியே வரும் போது கண்டால்  
 தொல்லுலகில் தீராப்பீனிச மீதுவேயென் பார்  
 கண்டிதமாய் மற்றதொரு பீனிசங்க ளெல்லாம்  
 கடிதாகச் சிலநாள் முக்குநீர் வடிந்து காட்டும்  
 துண்டீக ரோகத்தைத் தீர்க்க வேண்டி  
 சூட்சமமொன்று சொல்லுகிறேன் துலங்கக் கேளே".

- அகஸ்தியர் குணவாகடம்

Recurrent attack of rhinitis, venereal diseases and nature of the body are also said to be the reasons for the occurrence of peenisam.

The changes in the nostrils are,

1. Thickening of the mucous membrane
2. Nasal blockage
3. Frontal head ache
4. Cough with body weakness
5. Increased mucosal discharge which is followed by foul smelling purulent discharge.
6. If ulceration takes place, the discharge will be blood stained
7. Frequent thickened nasal discharge
8. Loss of interest in food leads to debility
9. If it is accompanied by mega rogham, it will cause hole in the nasal bone. In this condition the ulcerated nasal bone gets discharged as small bony pieces which denotes the incurable stage of peenisam.

The other types of peenisam with nasal discharge can be cured with appropriate medicines.

#### **IX. YUGI VAIDHYA CHINTHAMANI PERUNOOL-800**

In yugi vaidhya chinthamani perunool – 800, the aetiology, classification and symptoms of many disease are mentioned in a detailed manner. But the disease peenisam is not given separately. But under 84 types of vatha diseases the symptoms like peenisam are given under the

classifications,

1. வாத தலைநோக்காடு
2. பித்த தலைநோக்காடு
3. கப தலைநோக்காடு
4. கிருமி கந்த தலைநோக்காடு

Among these four diseases the symptoms under pitha thalai nokkadu is related with the symptoms of peenisam when properly matched.

”வண்மையாய் நிற்கின்ற மூக்கு தானும்  
வடிந்துமே நீர்பாய்ந்து தலை கனத்து  
வெண்மையாய் வாய்நீர்தான். மிகவுழறி  
திண்மையாய் செவிதனிலே குத்தலுண்டாய்ச்  
மீறியே உண்ணாக்கைப் பற்றி நொந்து  
சிரக்தான் பரமாய் மிகக் கனக்கும்  
கண்மையாக் கண்ணோடு புருவங் குத்தும்  
கனமன பித்தத்தின் தலை நோக்காடு”.

- யுகி வைத்திய சிந்தாமணி பெருநூல் - 800

1. Watery nasal discharge.
2. Headache
3. Excessive salivation
4. Pain in the ears.
5. Heaviness of the head and pain in the eyes and over the eye brows.

## **CLASSIFICATIONS OF PEENISAM:**

### **I.ACCORDING TO SIDDHA MARUTHUVAM AND NOI NADAL**

#### **NOI MUTHAL NADAL:**

Peenisam has been classified into nine types. They are,

1. Vali peenisam.
2. Azhal peenisam.
3. Iya peenisam.
- 4. Neer peenisam.**
5. Kuruthi peenisam
6. Seezh peenisam.
7. Siraai peenisam
8. Mulai peenisam
9. Kazhuthu peenisam

### **II.ACCORDING TO ATHMARATCHAMIRTHA VAIDHYA SARA**

#### **SANGIRAGAM:**

1. Vatha peenisam
2. Pitha peenisam
3. Silethuma peenisam
- 4. Neer peenisam**
5. Seezh peenisam.
6. Uthira peenisam
7. Moolai peenisam
8. Kanda peenisam
9. Siraai peenisam.

### III. ACCORDING TO JEEVA RATCHAMIRTHAM:

Peenisam has been classified into 18 types under the heading.

“**Nasiga roga betham**” the classification are,

1. Vatha peenisa Rogam
2. Pitha peenisa Rogam
3. Silethuma peenisa Rogam
4. Three dosha peenisa Rogam
5. Raktha peenisa Rogam
6. Thusta peenisa Rogam
7. Anthithummam peenisa Rogam
8. Nasiga Shosa Rogam
9. Nasiga Naga Rogam
10. Kirana Bhega Rogam
11. Nasika Sirava Rogam
12. Apeenisa Rogam
13. Nasika theebigai Rogam
14. Boodhi Nasiga Rogam
15. Bhuya Sira Nasiga Rogam
16. Nasika Pudaga Rogam
17. Nasa rasa Rogam
18. Nasikarputha Rogam.

#### **IV.ACCORDING TO T.V.SAMBASIVAM PILLAI MARUTHUVA**

##### **AGARATHI:**

Peenisam has been classified into seven types. The classification are,

1. Vatha peenisam
2. Pitha peenisam
3. Silethuma peenisam
- 4. Neer peenisam**
5. Seezh peenisam.
6. Raktha peenisam.
7. Siraai peenisam

#### **V. ACCORDING TO THANVANTHIRI VAITHIYAM:**

Peenisam has been classified into ten types. The classification are,

1. Vatha peenisam
2. Pitha peenisam
3. Kaba peenisam
4. Vatha Pitha peenisam
5. Vatha Kaba peenisam
6. Pitha Kaba peenisam
7. Mukkutra peenisam
- 8. Sala Peenisam**
9. Raktha peenisam
10. Varatchi peenisam

## VI. ACCORDING TO SIDDHAR ARUVAI MARUTHUVAM

Peenisam has been classified into four types only. The classification are,

1. Neer Peenisam.
2. Kuruthi peenisam
3. Seezh peenisam
4. Siraai peenisam

### Naadi Nadai of Sala Peenisam

I. According to Pari Poorana Naadi,

“விரணமுடன் புண் புரைக்கு வாதபித்தம்  
விதியறியாப் பீனிசந்தான் பித்த சேத்துமம்”

II. According to Sathaga Naadi,

“பண்பான பித்ததில் சேத்தும நாடிப்  
பரிசித்தர லத்திகர மிளைப்பு ஈளை  
கண்காது நயன மலம் நீறு மஞ்சள்  
கனவயிறு பொருமல் மஞ்சள்நோய் கண்ணோவு  
உண்போது மறுத்தல் ரத்த விப்புரதி தானும்  
உளைமாந்தை பீனிசமும் ரத்த வீக்கம்  
நண்பான காமாலை சோகை வெப்பு  
நணுகி வந்த பலபிணியுங் காணுந்தானே”

III. “ஒடுக்கமாஞ் சிலேற்ப நாடி

யொழுங் கொடு பதறி றின்றால்  
நடுக்கமாய்ப் பீனிசங்கள்  
நாசி நீர்ப் பாய்ச்சலாகும்”

## DETAILED PATHOLOGICAL VIEW OF THE DISSERTATION TOPIC

In this dew drop of research work on the topic SALA PEENISAM the author try to explain the pathological view through Siddha aspect which helps in the diagnosis of the disease.

According to Noi Naadal Noi Mudhal Naadal Thiratu,

”நோய்நாடி நோய்முத னாடி யது தணிக்கும்  
வாய்நாடி வாய்ப்பச் செயல்”

-திருக்குறள்

The three vital humours which maintain the body is vatham, pitham and kapham. If any one or two or all the humours are altered due to food and habits, climate, etc.. this results in diseased condition.

The most important duty of the Doctor is to find out the altered humour which cause the disease and the root cause of the alteration and also the remedy for the altered humours.

”உற்றா னைவும் பிணியளவுங் காலமுங்  
கற்றான் கருதிச் செயல்”

-திருக்குறள்

The Doctor has to find out that

1. How the humours are altered and its extent.
2. Development of the disease.
3. Duration of the disease.
4. Treatment of the disease.

## CHANGES IN UYIR THATHUKKAL

**Table - 2 Pitham**

<b>Increased Pitham</b>	<b>Changes observed</b>
Anar pitham	Indigestion, reduced appetite
Aalosagam	Lacrymation of eyes.
Ranjagam	Pallor, tiredness
Saathagam	Lack of desired function
Prasagam	Redness

**Table - 3 Iyam**

<b>Increased Iyam</b>	<b>Changes observed</b>
Avalambagam	Dyspnoea, cough, sneezing
Kiletham	Indigestion, reduced appetite
Pothagam	Coated tongue, Poor appreciation of taste
Sandhigam	Pain in joints
Tharpagam	Lacrimation of eyes due to irritation

**Table - 4 Vali**

<b>Decreased Vali</b>	<b>Changes observed</b>
Piranan	Dyspnoea
Abanan	Constipation
Uthanan	Indigestion, cough, sneezing
Viyanan	Indigestion, pain and tenderness in the sinus areas
Samanan	Balancing function of other vayu is disturbed, indigestion
Koorman	Lacrymation of eyes
Kirukaran	Muco purulent discharge from nose, sneezing, cough
Devathathan	Tiredness

**Table - 5 CHANGES IN UDAL THATHUKKAL**

<b>Decreased udal thathukkal</b>	<b>Changes observed</b>
Saaram	Generlised weakness of both body and mind
Senneer	Pallor, sluggishness
Oon	Lethargy of five sense organs, pain in joints
Kozhuppu	Damage of nasal mucosal layers
Enbu	Pain in joints, hair fall
Moolai	Tiredness, lacrymal irritation
Sukilam/ Suronitham	Loss of libido, pre mature ejaculation, menstrual disturbances



Sala peenisam occurs due to the etiological factors such as

- 1) Exposure to dust and fumes
- 2) Exposure to chill atmosphere
- 3) Exposure to irritating and aromatic substances
- 4) Drinking very cold water
- 5) Eating very cold food materials
- 6) Drinking contaminated water

Siddhars, they have given the symptoms of sala peenisam in their own style of poems and the author takes effort to compare the symptoms as said in modern aspect.

According to **THANVANTHIRI VAITHIYAM PART- I, in Sira roga nithanam,**

”கலந்திடு சிரசிலேறி கழிக்குநீர் போகாதாகித்  
துலங்கிய நெஞ்சில் வீழ்ந்து சுரமுட னிருமலுண்டா  
மலங்கவே தும்மு மூக்கில் வழுவழுத்தோடுந் தண்ணீர்  
நலங்கிளர் சல பீனிச மிதுவென நாட்டுவாமே”

பாடல் எண் - 8

”கலந்திடு சிரசிலேறி கழிக்குநீர் போகாதாகித்”

Elevated vitapitham( heat) accompanied with accumulated vayu mixes and raises to the head and excess of water produced is retained.

(Usually the normal secretion of water is gradually discharged. In Peenisam, the excessive secretion is cooled and retained)

The mucosa of the sinus shows inflammatory changes. The cilia get damaged by the infection with resultant inadequate drainage of the sinus cavity, particularly the maxillary sinus where the ostium is situated high up in the medial wall. The retained secretions there by lead into re-infection.

”துலங்கிய நெஞ்சில் வீழ்ந்து சுரமுட னிருமலுண்டா”

This altered humours enters the clear chest (upper respiratory tract) ( Piranamaya kosam) whereby it harms the upper respiratory tract and causes fever and cough. Cough appears as the result of uthanavayu alteration in the respiratory tract. Fever due to alteration of three humour

Due to secondary bacterial infection following the re-infection rhino viral inflammation of the pharynx is common. Laryngitis is common in upper respiratory tract with or without rhinitis. The infection causes acute inflammation with edema and an exudate predominantly of neutrophils. The exudate leaks into the inflamed sinus, which become filled with pus. The pressure in the sinus rises and the sinus becomes painful and tender. Often fever, cough, headache and malaise accompany the infection.

**“மலங்கவே தும்மு முக்கில் வழுவழுத்தோடுந் தண்ணீர்”**

When excess Kabam combines with Vayu tries to eliminate the excess Kabam, so sneezing occurs ( By Vegas). Due to heat the retained discharge become increased in its consistency.

During the initial acute stage, the nasal mucosa is thickened edematous and red. The nasal cavities are narrowed and turbinates are enlarged. Secondary bacterial infections enhances the inflammatory reactions and produces an essentially mucopurulent or sometimes frankly suppurative exudate. Due to nasal mucosal disturbances sneezing occurs.

**“நலங்கிளர் சல பீனிசமிதுவென ஞாட்டுவாமே”**

Then the author described that the SALA PEENISAM is caused by increased vita pitham by action of vayu enters the head, combines thus causing the symptoms of peenisam. Kabam combines with vayu, irritating the mucous membrane of the nose cause Sneezing, inflamed nostril leads to Mucus watery discharge. Finally all three humours and uthanavayu alters and affects the upper respiratory tract causing fever and cough.

# **ANATOMY OF RHINOSINUSITIS**

## **DEVELOPMENT OF NOSE AND PNS**

At about the fourth week of foetal life 2 epithelial thickenings known as nasal placodes develop on the head. These nasal placodes get depressed due to proliferation of surrounding mesoderm and form olfactory pits. The raised areas of mesoderm are known as medial and lateral nasal folds.

### **Development of the para nasal sinuses**

Three ectodermal elevations appear in the primitive nasal cavity on its lateral surface. The mesenchyma migrates into these elevations which form the turbinates. The development of nasal sinuses from 3 months to 11 Years.

The sinuses develop in late embryonic life and some develop during the early postnatal life and appear as extensions of mucosal pouches into the surrounding bone.

The maxillary sinus develops as a mucosal depression below the middle turbinate, which invades the maxilla. It's growth is complete by about nine years of age.

The sphenoid sinus is present at birth but reaches adult size of puberty.

The frontal and ethmoidal sinuses are represented by diverticula at birth. The frontal sinus develops as an extension of the mucosal pouch

that forms the anterior ethmoid cells. The sinus invades the frontal bone by the first year of life and reaches the adult size at puberty. The ethmoid cells develop from grooves between ethmoturbinates.

## **ANATOMY**

The nose is divided into 2 main parts, the external nose and the nasal cavity.

### **External Nose**

The external nose has a skeletal framework that is partly bones and partly cartilaginous. The bones are the nasal bones which form the bridge of the nose, and the frontal processes of the maxillae. The cartilages are the superior and inferior nasal cartilages, the septal cartilage and some small cartilages, the septal. The skin over the ext. nose is supplied by extranasal, infratrochlear and infra orbital nerves.

## **NASAL CAVITY**

Its extends from the external noses (nostrils) the posterior nasal apertures and is subdivided into right and left halves by the nasal septum.

Each half has a roof and floor, medial and lateral walls. Each half measures about 5 cm in height 7 cm in length and 1.5 cm in width near the floor. The width near the roof is only 1 - 2 mm.

The roof is about 7 cm long and 2 mm wide. It slopes downwards, both in front and behind. The middle horizontal part is formed by the cribriform plate of the ethmoid. The anterior slope is formed by the nasal

part of the frontal bone, and the nasal cartilages. The posterior slope is formed by the inferior surface of the body of the sphenoid bone.

The floor is about 5 cm long and 1.5 cm wide. It is formed by the palatine process of the maxilla and form side to side and is slightly higher anteriorly than posteriorly.

### **Nasal Septum**

It is median osteocartilagenous partition between the 2 halves of the nasal cavity. On each side it is covered by mucous membrane and forms the medial wall of both nasal cavities.

(a) A bony part is formed almost entirely by (1) the vomer and (2) the perpendicular plate of the ethmoid. However its margins receive contributions from the sphenoid and the nasal crests of the nasal palatine and maxillary bones.

(b) The cartilagenous part is formed by

1. The septal cartilage and
2. The septal processes of the inferior nasal cartilages.

(c) The cuticular part (lower end) is formed by fibro - fatty tissue covered by skin. The lower margin of the septum is called the columella.

The nasal septum is rarely strictly median. It's central part is usually deflected to one or the other side. The deflection is produced by overgrowth of one or more of the constituent parts.

## **PARANASAL SINUSES**

These are air filled spaces present within some bones around the nasal cavities. The sinuses, are frontal maxillary, sphenoidal and ethmoidal. All of them open into the nasal cavity through its lateral wall. The function of the sinuses is doubtful. They possibly make the skull lighter and add resonance to the voice. In infections of the sinuses (sinusitis) the voice is altered.

The sinuses are rudimentary, or even absent at birth. They enlarge rapidly during the ages of 6 to 7 years (time of eruption of permanent health) and then after puberty. From birth to adult life the growth of the sinuses is due to enlargement of the bones, in old age it is due to resorption of the surrounding cancellous bone.

### **Frontal sinus**

It lies in the frontal bone deep to the superciliary arch. It extends upwards above the medial end of the eyebrow, and backwards into the medial part of the roof of the orbit.

It opens into the middle meatus of nose at the anterior end of the hiatus semilunaris either through the infundibulum or through the frontonasal diet.

The right and left sinuses are usually unequal in size and rarely one or both may be absent. Their average height width and anteroposterior

depth are each about 2.5 cm. The sinuses are better developed in males than in females.

### **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 the maxilla.

It opens into the middle meatus of the nose in the lower part of the hiatus semilunaris. A second opening is often present at the posterior end of the hiatus Both opening are nearer the roof than the floor of the sinus.

In an isolated maxilla the opening (hiatus)of the maxillary sinus is large. However, in the intact skull the size of the opening is reduced to 3 or 4mm as it is overlapped by the following

- a. From above, by the uncinat process of the ethmoid and the descending part of the lacrimal bone.
- b. From below, by the interior nasal concha and
- c. From behind by the perpendicular plate of the palatine bone.

It's further reduced in size by the thick mucosa of the nose. The size of the sinus is variable Average measurements are

Height - 3.5 cm

Width - 2.5 cm and

depth - 3.5 cm

Its roof is formed by the floor of orbit, and is traversed by the infra-orbital nerve. The floor is formed by the alveolar process of the maxilla, and lies about 1cm below the level of the floor of the nose. The level corresponds to the level of the lower border of the ala of the nose. 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. The canine tooth may project into the anterolateral wall.

### **Sphenoid sinus**

The right and left sphenoidal sinuses lie within the body of the sphenoid bone. They are separated by a septum. The 2 sinuses are usually unequal in size. Each sinus opens into the sphenoidal recess of the corresponding half of the nasal cavity.

Each sinus is related superiorly to the optic chiasma and the hypophysis cerebri, and laterally to the internal carotid artery and the cavernous sinus.

### **Ethmoidal sinus**

These are numerous small inter communicating spaces which lie within the labyrinth of the ethmoid bone. They are completed from above by the orbital plate of the frontal bone. From behind by the sphenoidal conchae and the orbital process of the palatine bone, and anteriorly by the

lacrimal bone, the sinuses are divided into anterior, middle and posterior groups.

The anterior ethmoidal sinus is made up of up to 11 air cells. It opens into the anterior part of the hiatus semilunaris of the nose. It's supplied by the anterior ethmoidal nerve and vessels. It's lymphatics drain into the submandibular nodes.

### **SINUSITIS**

The paranasal sinuses become fully developed in adolescence. They are lined by mucous - secreting ciliated columnar epithelium and are normally sterile, the surface mucus being continually cleared by the concerned action of the cilia.

Paranasal sinuses (frontal, maxillary, sphenoidal and ethmoidal) communicate with the nasal cavity and they are susceptible to the spread of infection from the nasopharynx.

Infection of a sinus (or) inflammation of the mucosal lining of sinus cavity is known as **sinusitis**. It causes headache and persistent, thick purulent discharge from the nose. Diagnosis is associated by transillumination and radiography. A diseased sinus is opaque.

### **COMMON SYMPTOMS OF PNS DISEASES:**

The following combination depending upon the disease process. The symptoms of sinusitis frequently follow a common cold or other upper respiratory tract infection.

The patient may indicate an uncomfortable feeling of fullness or pain in the paranasal or supra orbital regions of the face or may experience frontal headache.

### **Pan sinusitis**

Sinusitis is usually the maxillary sinus which gets involved. However inflammation of other sinuses is not uncommon. Inflammation process occurs in more than one sinus is called multi sinusitis. Sometimes all the sinuses are involved resulting in Pansinusitis.

### **CLASSIFICATION**

[1] Acute

[2] Chronic

### **ACUTE SINUSITIS**

Acute sinusitis is generally a complication of acute (or) allergic rhinitis and rarely secondary to dental sepsis. The ostium are occluded due to inflammation and oedema and the sinuses are fill.

It's a bacterial infection that occurs commonly in the population complicating about 1 in 200 upper respiratory tract infection. The initiating infection is thought to be most frequently viral "common cold" and other respiratory viruses having been recovered from aspirates of the maxillary sinus.

It's supported that viral replication in the mucosal lining of the sinus disrupts its normal defensive mechanisms resulting in the

accumulation of a mucous exudate that then becomes secondarily infected by bacterial pathogens.

The mucosal swelling that is associated with allergic rhinitis and nasal polyp formation may also produce conditions favourable to bacterial infection, as may dental sepsis affecting upper molars and premolars, the roots of which penetrate the maxillary sinuses.

Mucocele is filling up of the sinus with mucus while empyema of the sinus occurs due to incomplete resolution of acute inflammation from damage to the mucous membrane, sinusitis may rarely spread to produce osteomyelitis and inter cranial infection.

### **Clinical features**

Acute severe pain across the infected sinuses involvement, the most important feature being pain. The pain may increase in bending forwards. Often the pain is nonspecific and the whole face aches. Localised tenderness may indicate the group of sinuses involved.

### **Other features**

Nasal blockage, the sense of smell goes & a general feeling of fullness in the face results. Excessive mucopurulent nasal discharge. copious nasal catarrh is produced.

## **Signs of Acute sinusitis**

Usually no external signs are present except in fulminating cases, when these may be redness and oedema of the soft tissue of the face over the sinus involved.

Tenderness on applying pressure over the sinus indicates underlying inflammation.

Anterior rhinoscopy reveals generalised congestion of the nasal mucosa, and localised oedematous mucosa in the neighbourhood of the ostium of the sinus.

Presence of mucopus in the nose is suggestive of sinus infection and its position determines the sinus involved.

## **Types**

### **Maxillary Sinusitis**

The maxillary sinus is most commonly involved. It may be infected from the nose or from a carious tooth. Drainage of the sinus is difficult because its ostium lies at a higher level than its floor.

Another factor is that cilia in the living mucosa are destroyed, by chronic infection. Hence the sinus is drained surgically by making an artificial opening near the floor in one of the following two ways.

- 1) Antrum puncture-can be done by breaking the lateral wall of the interior meatus.

2) An opening can be made at the canine fossa through the vestibule of the mouth, deep to the upper lip (Caldwell-Luc operation).

Pain of maxillary sinusitis is more in the region of upper jaws, teeth, cheeks, below the eyes or along the distribution of the superior orbital nerve.

Pain is aggravated on stooping or coughing. It may be experienced in temple area usually dull aching.

### **Frontal Sinusitis**

Head-ache of frontal sinusitis is usually localised in frontal area, Superciliary area & looking down at the feet is not comfortable for the patient.

It's more when the pt wakes up in the morning head-ache lasts for few minutes/ hour and then gradually disappears.

This is so because during sleep the secretions are accumulated in the sinus. When pt wakes up in the morning retained secretions try to drain through the fronto-nasal duct.

Malaise and Bodyaches are the predominant features of sphenoidal sinusitis.

The patient may experience headache on the vertex or occiput. It's relatively uncommon It's less specific than the other sinuses.

It may produce pain over the trigeminal distribution because of the close proximity of these nerves, The purulent post - nasal discharge is predominant feature. Vertigo may be present.

### **Acute Rhino sinusitis**

Childrens are commonly affected. Incidences rise transiently when they change schools as they are exposed to a host of new viruses.

Aetiology : Poor resistance (Extreme fatigue, exposure to cold, poor nutrition, ch., nasal sepsis and obstruction)

Virus - 5 groups (Influenza, picorna (Echo, rhino), syncytial, parainfluenza and adeno) spread by droplet and dust.

Inc. period : 1 - 3 days

Symptoms : Severity of a cold, with transient mucosal ischaemia followed by swelling, hyperaemia and postural rhinorrhoea which changes to mucopurulent

### **Examination :- (Processes)**

Examination of the PNS may be done as follows

- Examination of Nose and Face
- Anterior rhinoscopy
- Post rhinoscopy
- Sinus tenderness
- Cold Spatula test

- Transillumination test
- Examination of both ears, pharynx, larynx and neck.

### **Inspection and Palpation**

- This is done to detect any deformity, asymmetry or swelling of the nose and face.
- Depression or deviation of the nasal bridge due to injury or disease may be present
- A sinus in the midline of the nasal dorsum is usually congenital rarely a sebaceous horn may be present.
- Gentle palpation of nose work may detect crepitus fractured nasal bones.
- Dislocated anterior end of the septum may be projecting into the vestibule. The nose must also be observed by standing above and behind the Patient.
- The nose is examined in a good light and any scars are noted (Hidden scars).
- DNS, a canal dislocation of the cartilagenous septum is looked for and the intercanthal distance and interpupillary distance may be clinically judged.
- The cosmetic “appropriateness” of the face is noted.

- The ears, the mouth and throat must also be examined for evidence of involvement in any nasal condition
- Good illumination is necessary to inspect the nasal cavities
  - (ie) Ant. rhinoscopy.

### **Radiological Exam**

The PNS may be demonstrated by a plain radiograph (lateral) and antero posterior view, and occipito mental view like wise.

### **Plain X-Rays**

Plain X-Rays of the nasal bones may be required after injury. The film is taken with the patient's head in the lateral position. This view projects the nose and adjacent areas of the face. The shadow of the nasal cartilage may also appear.

In the superoinferior view, the patient holds a dental occlusal film in between the teeth. The rays pass from above through the root of the nose to the centre of the film.

### **Views for the paranasal sinuses**

1. Occipitomenal view (Water's view)
2. Occipito frontal view (Cold well view)
3. X-ray the base of the skull (Submentovertical view)
4. Lat view
5. Lat oblique view for ethmoids

It the disease involves the ethmoids, a special lateral oblique view provides an idea about the ethmoidal air cells, relatively free of superimposition by other structures.

On plain radiography the normal sinuses appear as air-filled translucent cavities, opacity of the sinuses can be caused by fluid, thickened mucosa or tumours. Bony erosion can occur because of osteomyelitis or mucoceles.

### **Oblique view**

These are occasionally helpful to ethmoidal contrast radiography of the nose, sinuses and nasopharynx.

### **OTHER EXAMINATION**

- Tomography of PNS
- Angiography
- MRI ( Nuclear magnetic resonance imager )

### **ALLERGY TESTING**

Nasal allergy occurs as a result of affected reactivity of the nasal mucosa to an antigen (allergen). The typical allergens are pollens, house dust and house mite and animal epithelia. Allergy can occur due to variety of substances and changes affect the mucosa of the nose paranasal sinuses and sometimes the mucosa of lower respiratory tract also.

Histamine released stimulates the receptors in the nasal mucosa, thereby producing edema and rhinorrhoea.

### **Investigations**

A detailed history is helpful in pinpointing the causative substance.

Blood picture (Eosinophilia) and Nasal smears reveal increase in eosinophils.

Skin tests with various allergens are carried out to identify the underlying causative agent.

Sometimes provocative tests by the allergens are done to note the response.

### **Physiology of the Nose and PNS**

The nose performs 3 functions. It's a respiratory passage. It's also the organ of smell. These receptors for smell are placed in the upper one third of the nasal cavity. This part is lined by olfactory mucosa. The rest of the nasal cavity is lined by respiratory mucosa. The respiratory mucosa is highly vascular and warms the inspired air.

### **Functions of Paranasal sinuses**

The Paranasal sinuses are thought to serve the following functions.

1. Warming and moistening of inspired air may be partly done by the large mucosal surfaces of these adjacent sinuses

2. The air filled sinus carries probably add resonance to the laryngeal voice.
3. The temperature buffers: It's regarded that these chambers probably protect the contents of orbits and cranial fossae from the infranasal temperature variations.
4. Probably, sinus formation in the cranial bones helps in reducing the weight of the facial bones.
5. 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.

6. They act as shock buffers.

# **PHYSIOLOGY OF RHINOSINUSITIS**

## **PHYSIOLOGY OF SMELL**

The sense of smell in human beings is generally less acute than in other animals. All odourous materials give off chemical particles which are carried into the nose with the inhaled air and stimulate the nerve cells of the olfactory region when dissolved in mucous.

The air entering the nose is heated and convection currents can eddies of inspired air from the main stream to the roof of the nose. "Sniffing" concentrates more particles, more quickly in the roof of the nose.

This increases the number of olfactory receptor cells, stimulated and thus the perception of the smell. The sense of smell may affect the appetite. If the odours are pleasant, the appetite may improve and viseversa. The sense of smell may create long lasting memories,especially to distinctive odours.

Adaptation-when an individual is continuously exposed to an odour, perception of the odour quickly decides and eventually ceases. This loss of perception only affect that specific odour and adaptation. Probably occurs both in the cerebrum and in the nerve endings in the nose.

## **INVESTIGATIONS FOR ACUTE SINUSITIS**

### **1. Radiology of Para nasal Sinus:**

It is the most sensitive and specific test. Show haziness of the affected sinus or all sinus. In cases of empyema fluid can be seen in the maxillary sinus.

### **2. C.T.SCAN:**

When indicated is even more sensitive in detecting sinusitis.

3. Transillumination Test is helpful in maxillary and frontal sinusitis.

### **4. Anterior rhinoscopy:**

The nasal mucosa is congested and there may be trickle of pus under the middle turbinate and in the post-nasal space.

5. Nasal swab culture.

6. Serum immunoglobins - IgG., IgA, IgM, Sub.classes.

7. Antibody titres

## **INVESTIGATIONS FOR CHRONIC SINUSITIS**

1. **RADIOLOGICAL EXAMINATION** of para nasal sinuses shows

some of the following features,

1. Mucosal thickening of the lining mucosa.
2. Opacity (or) Uniform haziness of the maxillary sinus.
3. Polypoid hypertrophy of lining mucosa
4. Osteitis (or) Osteosclerosis.

### **2. ANTERIOR RHINOSCOPY:**

Will reveal dull colour of nasal mucosa. Trickle of pus is seen under the middle meatus, if the anterior group of sinuses are involved. The anterior end of the middle turbinate may be oedematous and turgescient. In such case application of 4% Xylocaine will reduce the swelling and trickle of pus will be seen better.

### **3. POSTERIOR RHINOSCOPY:**

Will show pus in the middle meatus in maxillary sinusitis and in the sphenoidal recess in sphenoidal sinusitis.

### **4. TRANSILLUMINATION TEST:**

Is seldom practised now-a-days.

### **5. NASAL SWAB**

Shows increased eosinophil count in allergy variety, bacteriology shows Streptococcus commonly and also pneumococci

## **Physiology of the Nose and PNS**

The nose performs 3 functions. It's a respiratory passage. It's also the organ of smell. This receptors for smell are placed in the upper one third of the nasal cavity. This part is lined by olfactory mucosa. The rest of the nasal cavity is lined by respiratory mucosa. The respiratory mucosa is highly vascular and warms the inspired air.

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5. 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.
6. They act as shock buffers.

## **PATHOLOGY OF RHINOSINUSITIS**

### **ALLERGIC RHINOSINUSITIS:**

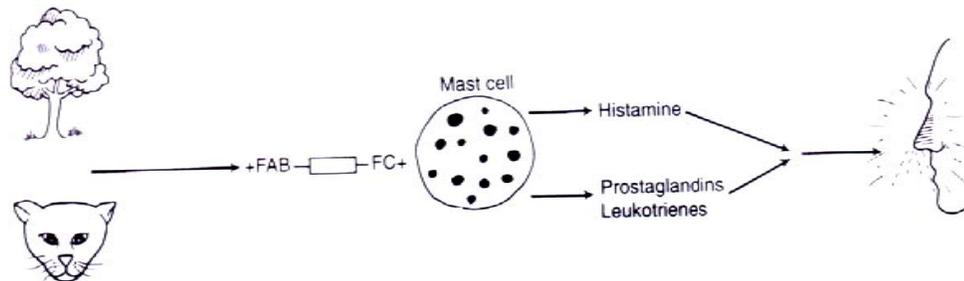
Allergic rhinosinusitis is common. The antigens that affect the nose are generally windborne. Eg.. grass and tree pollen, house dustmite, human dander,etc...

In the type 1 IgE mediated reaction, Immunoglobulin E (IgE) is produced from plasma cells which in turn regulated by T lymphocytes. IgE has a crystalline fraction which binds to mast cells and an antigen binding portion(Fab) which is free. When combined to an antigenic substance, the Fab portion triggers mast cell degranulation. The substances released include histamine, slow reacting substance of anaphylaxis (SRS-A), leucotrienes and prostagladins. These substances result in the production of mucosal oedema and profuse nasal secretion.

Non-organic substances also produce an allergic response. Non-specific irritants, such as cigarette smoke and dust cause the release of vasoactive substances but the response is not IgE mediated. Sometimes the response may due to physical factors ( temperature changes) alone and so is closely related to vasomotor rhinitis.

This is a disorder of the autonomic nervous system and it is the para sympathetic side that predominates. The nasal mucosa becomes oedematous and hypersecretes in response to an environmental change.

Overstimulation of the parasympathetic system leads to a blocked and running nose ( honeymoon nose).



The IgE mediated hypersensitivity reaction. The antigen binds with immunoglobulin E which then attaches to the mast cell. Mast cell degranulation causes the 'hay fever' type symptoms.

Stages in the development of sinus infection

## **INFECTIVE RHINOSINUSITIS**

The best known example of infective rhinosinusitis is the common cold. A large number of viruses have been implicated (influenza, picorna, respiratory syncytial viruses and adeno viruses). Infection is transmitted by droplet spread. The condition resolves or a secondary bacterial infection supervenes. Haemophilus influenza and Strep pneumoniae are the commonest offenders.

Infective rhinosinusitis is characterised by a hypersecreting and hypertrophic nasal mucosa. When bacterial infection is present the secretion becomes muco-purulent. Pus reduces the activity of cilia and this leads to stasis of secretions within the nose and sinuses.

Infection of the sinuses usually results from nasal infection although occasionally the maxillary sinus becomes infected directly from a dental abscess.

## **EVALUATION OF THE DISSERTATION TOPIC**

### **MATERIALS AND METHODS**

The clinical study on Sala peenisam was carried out at the Post Graduate Noi Naadal out patient Department of Government Siddha Medical College Hospital, Palayamkottai.

#### **Case selection and Supervision**

I have selected cases of similar symptoms of sala peenisam from the Post Graduate out patient department of Government Siddha Medical College, Palayamkottai. From which 20 typical cases of sala peenisam were selected and were followed by the author whose work was under the close supervision of the professor and lecturer of the Post Graduate Noi Naadal Department.

### **EVALUTION OF CLINICAL PARAMETERS**

The clinical symptoms such as

- Heaviness of head.
- Running nose.
- Sneezing.
- Fever.
- Cough.
- Nasal blockage.

were taken as criteria for selection of patients.

## **History taking**

1. Diet habits.
2. Occupation.
3. Personal habits.
4. Socio- economic status.
5. Family history.

### Clinical diagnosis through Siddha parameters

Patients are investigated on the basis of the following Siddha diagnostic tools, Poriyaal therthal, Pulanaal arithal, Vinathal, Ennvagai thervugal, Mukkutra nilaigal and Udal thathukkal which are adopted to assess the humoural pathology.

## **The Clinical Parameters**

For further detailed study, Modern investigatory parameters were used. The following laboratory investigations were done in these cases.

## **Haematology**

1. Total count of W.B.C.
2. Differential count of W.B.C.
3. Haemoglobin
4. Erythrocyte Sedimentation Rate

## **Bio-Chemistry**

1. Blood Sugar
2. Blood Urea
3. Serum creatinine

## **Urine Analysis**

1. Albumin
2. Sugar
3. Deposits
4. Crystals
5. Casts

## **MOTION**

1. Ova
2. Cyst
3. Occult blood

## **OTHER INVESTIGATIONS**

X-Ray skull- PNS view.

## **OBSERVATION AND RESULTS**

Results were observed with respect of the following aspects.

1. Age distribution
2. Sex
3. Occupation
4. Seasonal variation
5. Socio- economic status
6. Habits
7. Mukkutram
8. Udal thathukkal
9. Ennvagai thervu
10. Clinical features
11. Laboratory investigations

## RESULTS AND OBSERVATIONS

**Table - 7**

### Age

S.No	Age	No of cases affected	Percentage
1	<33 yr	17	85
2	33-66 yr	3	15

Out of 20 cases 85% of cases belonging to first age group.

**Table - 8**

### Sex

S.No	Sex	No of cases affected	Percentage
1	Male	8	40
2	Female	12	60

Among 20 cases 60 % were female and 40 % were male.

**Table - 9**

**Occupation**

<b>S.No</b>	<b>Type of occupation</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Student	9	45
2	Software Engineer	4	20
3	Office work	3	15
4	Manual Labour	3	15
5	House Wife	1	5

Out of 20 cases, 45 % were students.

**Table - 10**

**Socio economic status**

<b>S No</b>	<b>Class</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	High class	4	20
2	Middle class	12	60
3	Below poverty line	4	20

Out of 20 cases, 60 % cases belongs to middle class.

**Table - 11**

**Diet habits**

<b>S.No</b>	<b>Diet</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Vegetarian	4	20
2	Non-Vegetarian	16	80

Out of 20 cases, 80% of cases were taking non-vegetarian diet.

**Table -12**

**Personal habits**

<b>S.No</b>	<b>Habits</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Intake of cold food products	15	75
2	Alcohol	2	10
3	Smoking	2	10
4	Yoga	1	5

75% of cases were having the habit of intake of cold food products.

**Table - 13**

**Kaalam (Life span)**

<b>S.No</b>	<b>Kaalam</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Kaba kaalam <33yrs 4m	17	85
2	Pitha kaalam 33yr5m- 66yr 8m	3	15

Out of 20 cases 75% of cases were under kabha kaalam of their life span.

**Table - 14**

**Symptoms**

<b>S.No</b>	<b>Clinical features</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Heaviness of head	20	100
2	Fever	20	100
3	Cough	20	100
4	Sneezing	20	100
5	Nasal discharge	20	100
6	Upper respiratory infection	20	100

The clinical features of sala peenisam were positive in 100 % of cases.

**Table - 15**

**Seasonal variation**

<b>S.No</b>	<b>Paruva kaalam</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Koothir kaalam	14	70
2	Munpani kaalam	6	30

Out of 20 cases, 70 % of cases are reported in koothir kaalam and 30 % of cases are reported in munpani kaalam.

**Table - 16**

**Thinai( Geological distribution)**

<b>S.No</b>	<b>Thinai</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Marutham	18	90
2	Neidhal	2	10

90% of cases were reported in Marutha Nilam.

**Table - 17**

**Altered characters of Azhal**

<b>S No</b>	<b>Azhal</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Paasagam	20	100
2	Ranjagam	13	65
3	Saathagam	20	100
4	Aalosagam	13	65
5	Praasagam	14	70

Out of 20 cases Paasagam and Saathagam was affected in 100 % of cases, Praasagam was affected in 70 % of cases, Ranjagam and Aalosogam was affected in 65% of cases.

**Table - 18**

**Altered characters of Iyam**

<b>S No</b>	<b>Iyam</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Avalambagam	20	100
2	Kiletham	20	100
3	Potham	17	85
4	Tharpagam	17	85
5	Sandhigam	14	70

Out of 20 cases, Avalambagam and Kiletham was affected in 100 % of cases, Pothagam and Tharpagam was affected in 85 % of cases and Sandhigam were affected in 70 % of cases.

**Table -19**

**Altered characters of Vali**

<b>S No</b>	<b>Vali</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Piranan	20	100
2	Abaanan	3	15
3	Uthanan	20	100
4	Viyanan	20	100
5	Samanan	20	100
6	Naagan	–	–
7	Koorman	16	80
8	Kirukaran	20	100
9	Devathathan	20	100
10	Thanajeyan	–	–

Out of 20 cases, Piranan, Viyanan, Uthanan, Samanan, Kirukaran and Devethathan were affected in 100 % of cases, Abaanan was affected in 15 of cases and Koorman was affected in 80 % of cases.

**Table - 20**

**Manikkadai nool**

<b>S No</b>	<b>Viral kadai alavu</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	9 ¼	4	20
2	8 ¾	4	20
3	8 ¼	12	60

Out of 20 cases in 60 % of cases the Manikkadai alavu was 8 ¼ viralkadai.

**Table - 21**

**Ennvagai thervugal**

<b>S No</b>	<b>Thervu</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Naa	20	100
2	Niram	12	60
3	Mozhi	12	60
4	Vizhi	14	70
5	Sparisam	20	100
6	Malam	4	20
7	Moothiram	20	100
8	Naadi	20	100

Out of 20 cases, Naa, Sparisam, Moothiram and Naadi were affected in 100 % of cases. Vizhi was affected in 70 % of cases.

**Table - 22**

**Neikuri**

<b>S No</b>	<b>Spreading of oil</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Pearl	16	80
2	Pearl, Mellena paraval	4	20

Out of 20 cases, 16 cases showed features of Kabha neer and in 4 cases the oil drop initially formed a pearl shape and then spreaded slowly.

**Table - 23**

**Udal thathukkal**

<b>S No</b>	<b>Decreased Udal Thathukkal</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Saaram	20	100
2	Senneer	20	100
3	Oon	20	100
4	Kozhuppu	20	100
5	Enbu	20	100
6	Moolai	20	100
7	Sukkilam/ Sronitham	5	25

Out of 20 cases, Saaram, senneer, Oon, Kozuhppu, Moolai, Enbu were affected in 100 % of cases, and Sukilam/Sronitham was affected in 25% of cases.

**Table - 24**

**Kosam**

<b>S No</b>	<b>Kosam</b>	<b>No of cases affected</b>	<b>Percentage</b>
1	Annamaya kosam	12	60
2	Praanamaya kosam	20	100
3	Manomaya kosam	10	50
4	Vingnanamaya kosam	–	–
5	Aanandhamaya kosam	5	25

In 100 % of cases, Pranamaya kosam was affected. Annamaya kosam was affected in 60 % of cases.

**Table - 25**

**X-RAY SKULL- PNS View**

<b>S No</b>	<b>Case No</b>	<b>OP No</b>	<b>Impression</b>
1	1	63694	Frontal sinusitis
2	2	64757	Frontal sinusitis
3	6	65023	Frontal sinusitis
4	8	65515	Maxillary sinusitis
5	10	65121	Frontal sinusitis
6	12	66257	Frontal and maxillary sinusitis
7	14	66604	Frontal sinusitis
8	15	68292	Frontal sinusitis
9	18	65024	Maxillary sinusitis
10	19	66345	Frontal sinusitis









## **DISCUSSION**

The author has chosen the topic “Sala Peenism” mentioned in Dhanvanthiri Vaithiyam Volume - I under sira roga Nithanam for the dissertation work.

### **INTERPRETATION OF CLINICAL PARAMETERS:**

#### **Age :**

Young aged people (85%) were affected more commonly

#### **Sex:**

Females were affected more commonly (60%). This may be due to their altered life style which increases the iya kutram.

#### **Occupation:**

45% of patients were in student age group were affected more commonly

#### **Socio economic status:**

60% of cases were belongs to middle class.

#### **Diet habits:**

Non vegetarians (90%) were affected more commonly

#### **Seasonal variation:**

The disease is aggravated during koothir and munpani kaalam due to dearrangement of Kabha and Azhal humour.

**Thinai:**

90% of cases were reported from marutha nilam and 10% belongs to neithal nilam

**Kaalam( Life Span)**

Out of 20% cases 70% cases were in pitha kaalam

**INTERPRETATION OF CLINICAL FEATURES:**

Symptoms of sala peenism

The symptoms of sala peenism were found to be present in 100% of cases.

**INTERPRETATION OF SIDDHA PARAMETERS:****Uyir Thathukkal:**

Vali:

Piranan, Uthanan, Viyanan, Samanan, Kirukaran and Devathathan were affected in 100 % of cases.

Azhal:

Paasagam and Saathagam were affected in 100 % of cases.

Iyam:

Avalambagam and Kiletham were affected in 100 % of cases.

Udal thathukkal:

Saaram, Senneer, Oon, Enbu, Kozhuppu and Moolai were affected in 100 % of cases.

Ennvagai Thervugal:

Naa, Sparisam, Moothiram and Naadi were affected in 100 % Of cases.

### **INTERPRETATION OF MODERN PARAMETERS:**

#### ***Manual Examination :***

- Tenderness in the para nasal sinuses
- Fever

#### ***Laboratory investigations:***

##### **Blood:**

Cases were reported with increased Polymorphs and Eosinophils  
few were found to have increased Erythrocyte sedimentation rate.

##### **X-ray:**

All cases were reported mostly with frontal sinusitis

## HIGHLIGHTS OF DISSERTATION TOPIC

“Sala peenisam” comes under sira roga nithanam in Thanvanthiri vaithiyam volume - I. which is characterized by

- Heaviness in head
- Mucopurulent discharge from the nose
- Fever
- Cough
- Sneezing

In this disease Sala Peenisam changes in Iyam humour aggravated by heat, then Azhal and Vali humour are affected in the following features from the research work.

- Exposure to dust and fumes
- Drinking contaminated and very cold water
- At times when the body is heat a sudden shower in cold water
- Exposure to chill atmosphere
- Changes regarding with altered climatic conditions

These factors leads to aggravation of kabam which is raised by heat accompanied with vayu humour, which leads to alteration of kabam due to vatha pitham which is raised with vayu

The naadi of the patient was mostly found to be pitha kabam, and nei kuri was pearl shaped ( kaba neer ) which added more knowledge to author about sala peenism in the involvement of kabam and azhal humour.

The modern parameters also gave the moral support for the diagnosis of sala peenism

# NOI KANIPPU VIVAATHAM- DIFFERENTIAL DIAGNOSIS

## நாசிகாபீடம்

நன்றிது கன்ன பீட நாளிலே கதுப்படைத்துக்  
குன்றிபோன் மூளை தன்னிற் குற்றமே பற்றி நின்று  
குன்றியே நாசியாலே கனக்கவே சீ கள் வீழ்ந்து  
போன்றிட செய்யுமென்று புலவர்வா கடஞ் செய்தாரே  
நாசியிற் றசை வளர்ந்து நலிவுற வடைக்கு நாசி  
மாகசேர் சீநீர் வீழ மண்டையுங் கனத்து நொந்து  
பேசரும் வலியுண்டாகும் பெருகு கண் கதுப்பு நோகும்  
நாசிகாபீடமென்று நவின்றனர் கலை வல்லோரே

-நாகமுனிவர்

- Nasal obstruction
- Pus discharge from the nose
- Heaviness of the head
- Mass protruding through nostrils

Although the symptoms nasal obstruction, heaviness of the head are present, muco purulent discharge, fever, cough, sneezing are absent which are present in sala peenisam.

## மூக்கு நீர்ப்பாய்ச்சல்

கண்ட மேன் முகங்கண் கரது கரகரத்தூர்வதே போல்  
துண்ட மேற்றினவு பற்றிச் சொறிந்துதான் சலமும் வீழ்ந்து  
மண்டையுங் கனத்து நொந்து வலியிக வுளதே யாகில்  
பண்டுசேர் மூக்கினீரின் பாய்ச்சலென் றுரைக்கலாமே

-நாகமுனிவர்

- Itching over the face, ears and eyes.
- Running nose.
- Heaviness of the head.
- Itching in the nose.

Although the symptoms, heaviness of the head, muco purulent discharge are present, fever, sneezing, cough are absent which are present in sala peenisam.

**Table - 30**

<b>Vivathathu kuria Noigal</b>	<b>Common symptoms</b>	<b>Absent</b>
<b>Symptoms</b>		
Mooku Neer paichal	Rhinitis Heaviness Pain in the cheek	Fever, Cough, Sneezing
Nassiga beedam	Pain in the cheek and chin Mucopurulent discharge Heaviness	Fever Cough Sneezing

## CONCLUSION

The author with gratitude tried to identify sala peenism with modern science because identification of disease and its pathogenesis are requisite for medical practice. A detailed history taking clinical examination as per siddha guidelines are necessary to arrive at precise diagnosis.

The study of sala peenism was carried out in the dissertation giving importance to the characteristics of the disease like.

- Heaviness in the head
- Facial pain / pressure/ fullness
- Nasal muco prulent discharge
- Fever
- Cough
- Sneezing

Diagnosis is carried out by detailed history taking, classical clinical examination of siddha system, changes in several physical constituents of three humours.

Naadi	-	Pitha Kabam
Neikuri	-	Kabha Neer(Pearl Shape)
Manikadai Nool,	-	8 ¼ Viral kadai Alavu

This study on sala peenisam may be correlated with Rhino sinusitis which had given relevance to modern clinical entity.

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**Table - 27 INTERPRETATION OF UDALTHAADHUKKAL**

<b>S.NO</b>	<b>Op No</b>	<b>Age</b>	<b>Sex</b>	<b>SAARAM</b>	<b>SENEER</b>	<b>OON</b>	<b>KOZHUPPU</b>	<b>ENBU</b>	<b>MOOLAI</b>	<b>SUKKILAM/ SRONITHAM</b>
1	63694	27	F	A	A	A	A	A	A	NA
2	64757	25	F	A	A	A	A	A	A	NA
3	64921	21	F	A	A	A	A	A	A	NA
4	64899	33	F	A	A	A	A	A	A	A
5	65024	40	M	A	A	A	A	A	A	A
6	65023	17	F	A	A	A	A	A	A	NA
7	65572	25	M	A	A	A	A	A	A	NA
8	65515	25	F	A	A	A	A	A	A	NA
9	65509	25	F	A	A	A	A	A	A	NA
10	65121	28	F	A	A	A	A	A	A	NA
11	66158	40	F	A	A	A	A	A	A	NA
12	66257	24	M	A	A	A	A	A	A	NA
13	66345	27	F	A	A	A	A	A	A	A
14	66604	24	M	A	A	A	A	A	A	NA
15	67889	23	M	A	A	A	A	A	A	NA
16	67890	29	F	A	A	A	A	A	A	A
17	68293	35	M	A	A	A	A	A	A	A
18	68292	24	F	A	A	A	A	A	A	NA
19	66958	24	M	A	A	A	A	A	A	NA
20	67000	22	F	A	A	A	A	A	A	NA

**A - Affected**

**NA - Not affected**

**Table - 29 Laboratory Investigations**

Case No	O.P. No	Blood					ESR		Hb gms/dl	Bio Chemical			Stools Examination		
		Tc cells cumm	DC Cells					1/2 hr mm		1 hr mm	Sugar mgs%	Urea mgs%	Serum Cho Mgs%	Ova/cyst	Occult blood
			P%	L%	E%	B%	M%								
1	63694	9,000	60	32	6	1	1	3	6	9	82	22	150	Nil	Nil
2	64757	9,200	59	39	2	-	-	20	45	9.8	86	26.8	165	Nil	Nil
3	64921	8,200	58	38	4	-	-	2	4	10	105	25	172	Nil	Nil
4	64899	9,700	52	47	-	1	-	2	5	10.7	99	20	189	Nil	Nil
5	65024	9,200	68	30	2	-	-	2	4	13.6	115	20	195	Nil	Nil
6	65023	8,400	48	45	4	2	1	4	8	9.3	101	20.5	157	Nil	Nil
7	65572	8,900	58	40	2	-	-	2	4	12.5	95	22	160	Nil	Nil
8	65515	7,800	47	46	6	-	1	3	5	11.4	120	29	140	Nil	Nil
9	65509	8,100	60	40	-	-	-	3	8	9.5	89	21	192	Nil	Nil
10	65121	9,300	56	42	2	-	-	2	5	9.8	115	24	184	Nil	Nil
11	66158	7,000	58	38	4	-	-	4	9	10.6	120	26	197	Nil	Nil
12	66257	8,600	70	30	-	-	-	30	75	13.5	103	23	164	Nil	Nil
13	66345	9,100	60	34	4	-	2	3	6	10.7	114	20	177	Nil	Nil
14	66604	8,700	63	31	6	-	-	10	24	12.9	112	21	186	Nil	Nil
15	67889	6,700	52	46	1	-	1	3	7	13.5	97	23.3	141	Nil	Nil
16	67890	8,200	59	39	2	-	-	2	4	9.8	82	25	196	Nil	Nil
17	68293	7,300	61	37	2	-	-	2	5	14.1	108	27	179	Nil	Nil
18	68292	6,900	50	47	1	2	-	2	6	9.7	110	27	168	Nil	Nil
19	66958	8,900	52	44	4	-	-	2	4	13.4	97	23.5	163	Nil	Nil
20	67000	5,900	68	30	2	-	-	2	5	10.1	108.3	20	178	Nil	Nil

**P.G. - NOI NAADAL DEPARTMENT**  
**GOVT. SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.**

**A Study to Diagnose “SALA PEENISAM ”through Siddha**  
**Diagnostic Methodology**

**PROFORMA**

1.O.P.No \_\_\_\_\_ 2. I.P. NO \_\_\_\_\_ 3. Bed No: \_\_\_\_\_ 4. S. No:\_\_\_\_\_5.Date: \_\_\_\_\_

6. Name: \_\_\_\_\_ 7. Age (Years):   8. Sex:

9. Occupation: \_\_\_\_\_ 10. Income \_\_\_\_\_\month

11. Address: .....  
.....

**Signature of department faculty**

**12. Complaints and duration:**

.....  
.....  
.....

**13. History of present illness:**

.....  
.....  
.....

**14. Past history:**

.....  
.....  
.....

**15. Family History:**

.....  
.....  
.....

**16. Personal History:**

.....  
.....

<b>Habits</b>		<b>1.Yes</b>		<b>2.No</b>	
17. Betelnut chewer :		<input type="checkbox"/>		<input type="checkbox"/>	
18. Tea :		<input type="checkbox"/>		<input type="checkbox"/>	
19. Coffee :		<input type="checkbox"/>		<input type="checkbox"/>	
20. Smoking :		<input type="checkbox"/>		<input type="checkbox"/>	
21. Alcohol :		<input type="checkbox"/>		<input type="checkbox"/>	
22. Yoga :		<input type="checkbox"/>		<input type="checkbox"/>	
23. Food habits :	V	<input type="checkbox"/>	NV	<input type="checkbox"/>	

**General etiology for SALA PEENISAM**

	<b>1.Yes</b>		<b>2.No</b>	
24. Excessive intake of cold water :	<input type="checkbox"/>		<input type="checkbox"/>	
25. Excessive intake of cold food products :	<input type="checkbox"/>		<input type="checkbox"/>	
26. Exposure to cold climate :	<input type="checkbox"/>		<input type="checkbox"/>	
27. Inhalation of allergens :	<input type="checkbox"/>		<input type="checkbox"/>	
28. Seasonal variation :	<input type="checkbox"/>		<input type="checkbox"/>	
29. Medication side effects :	<input type="checkbox"/>		<input type="checkbox"/>	
30. Impracticance of yoga :	<input type="checkbox"/>		<input type="checkbox"/>	

## Clinical Symptoms of SALA PEENISAM:

	1.Present	2.Absent	
186. Head ache	<input type="checkbox"/>	<input type="checkbox"/>	_____
187. Running nose	<input type="checkbox"/>	<input type="checkbox"/>	_____
188. Nasal blockage	<input type="checkbox"/>	<input type="checkbox"/>	_____
189. Cough	<input type="checkbox"/>	<input type="checkbox"/>	_____
190. Sneezing	<input type="checkbox"/>	<input type="checkbox"/>	_____
191. Fever	<input type="checkbox"/>	<input type="checkbox"/>	_____

## GENERAL EXAMINATION

31.Weight	:	<input type="text"/> <input type="text"/> <input type="text"/>	(kg)
32. Temperature	:	<input type="text"/> <input type="text"/> <input type="text"/>	(°F)
33.Pulse rate	:	<input type="text"/> <input type="text"/> <input type="text"/>	_____/minute
34.Heart rate	:	<input type="text"/> <input type="text"/> <input type="text"/>	_____/minute
35.Respiratory rate/minute	:	<input type="text"/> <input type="text"/> <input type="text"/>	_____/minute
36.Blood pressure	:	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> (mm/Hg)

		1.Present	2.Absent	
37.Pallor	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
38.Jaundice	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
39.Cyanosis	:	<input type="checkbox"/>	<input type="checkbox"/>	_____

- |                             |   |                          |                          |       |
|-----------------------------|---|--------------------------|--------------------------|-------|
| 40.Lymphadenopathy          | : | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 41.Pedal edema              | : | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 42.Clubbing                 | : | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 43.Jugular venous pulsation | : | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

**VITAL ORGANS EXAMINATION**

- |            |  | <b>1.Normal</b>          | <b>2.Affected</b>        |       |
|------------|--|--------------------------|--------------------------|-------|
| 44.Stomach |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 45.Liver   |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 46.Spleen  |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 47.Lungs   |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 48.Heart   |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 49.Kidney  |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 50.Brain   |  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

**SIDDHA SYSTEM OF EXAMINATION**

**IYMPORIGAL / IYMPULANGAL**

- |     |                | <b>1.Normal</b>          | <b>2.Affected</b>        |       |
|-----|----------------|--------------------------|--------------------------|-------|
| 54. | Mei/Ooru       | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 55. | Vaai/Suvai     | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 56. | Kan/Oli        | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 57. | Mookku/Naatram | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 58. | Sevi/Osai      | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

## KANMENTHIRIYANGAL / KANMAVIDAYANGAL

		1.Normal	2.Affected	
59.	Kai/Thaanam	<input type="checkbox"/>	<input type="checkbox"/>	_____
60.	Kaal/Kamanam	<input type="checkbox"/>	<input type="checkbox"/>	_____
61.	Vaai/Vasanam	<input type="checkbox"/>	<input type="checkbox"/>	_____
62.	Eruvaai/Visarkam	<input type="checkbox"/>	<input type="checkbox"/>	_____
63.	Karuvaai/Aanantham	<input type="checkbox"/>	<input type="checkbox"/>	_____

### 64. YAAKKAI

1.Vali	<input type="checkbox"/>	2. Azhal	<input type="checkbox"/>	3.Iyam	<input type="checkbox"/>
4. Valiazhal	<input type="checkbox"/>	5. Valiyam	<input type="checkbox"/>	6. Azhalvali	<input type="checkbox"/>
7. Azhaliyam	<input type="checkbox"/>	8. Iyavali	<input type="checkbox"/>	9. Iyaazhal	<input type="checkbox"/>

### 65. GUNAM

1. Sathuva Gunam	<input type="checkbox"/>	2. Rasatha Gunam	<input type="checkbox"/>
3. Thamasa Gunam	<input type="checkbox"/>		

## UYIR THATHUKKAL

### I. Vali

	1. Normal	2. Affected	
66. Uyirkkaal (Praanan)	<input type="checkbox"/>	<input type="checkbox"/>	_____
67. Keelnokkukkaal (Abaanan)	<input type="checkbox"/>	<input type="checkbox"/>	_____
68. Nadukkaal (Samaanan)	<input type="checkbox"/>	<input type="checkbox"/>	_____
69. Melmökkukkaal (Udhaanan)	<input type="checkbox"/>	<input type="checkbox"/>	_____
70. Paravukaal (Viyaanan)	<input type="checkbox"/>	<input type="checkbox"/>	_____

- |                                |                          |                          |       |
|--------------------------------|--------------------------|--------------------------|-------|
| 71. Vaanthikaal (Naahan)       | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 72. Vizhikkaal (Koorman)       | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 73. Thummikkaal (Kirukaran)    | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 74. Kottavikkaal (Devathathan) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 75. Veengukkaal (Dhananjeyan)  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

## II. Azhal

1. Normal

2. Affected

- |                                   |                          |                          |       |
|-----------------------------------|--------------------------|--------------------------|-------|
| 76. Aakkanal (Anala pitham)       | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 77. Olloliththee (Prasaka pitham) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 78. Vannayeri (Ranjaka pitham)    | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 79. Nokku Azhal (Aalosaka pitham) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 80. Aatralangi (Saathaka pitham)  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

## III. Iyam

1. Normal

2. Affected

- |                              |                          |                          |       |
|------------------------------|--------------------------|--------------------------|-------|
| 81. Aliiyam (Avalambagam)    | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 82. Neerppiyam (Kilethagam)  | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 83. Suvaikaaniyam (Pothagam) | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 84. Niraiuiyam (Tharpagam)   | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 85. Ondriiyam (Santhigam)    | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

## UDAL THATHUKKAL

	1. Normal	2. Affected	
86.Saaram	<input type="checkbox"/>	<input type="checkbox"/>	_____
87.Senneer	<input type="checkbox"/>	<input type="checkbox"/>	_____
88.Oon	<input type="checkbox"/>	<input type="checkbox"/>	_____
89.Kozhuppu	<input type="checkbox"/>	<input type="checkbox"/>	_____
90.Enbu	<input type="checkbox"/>	<input type="checkbox"/>	_____
91.Moolai	<input type="checkbox"/>	<input type="checkbox"/>	_____
92. Sukkilam	<input type="checkbox"/>	<input type="checkbox"/>	_____

## MUKKUTRA MIGU GUNAM

I. Vali Migu Gunam	1. Present	2. Absent
93.Emaciation	<input type="checkbox"/>	<input type="checkbox"/>
94.Blackish colouration of body	<input type="checkbox"/>	<input type="checkbox"/>
95.Desire to take hot food	<input type="checkbox"/>	<input type="checkbox"/>
96.Shivering of body	<input type="checkbox"/>	<input type="checkbox"/>
97.Abdominal distension	<input type="checkbox"/>	<input type="checkbox"/>
98.Insomnia	<input type="checkbox"/>	<input type="checkbox"/>
99.Constipation	<input type="checkbox"/>	<input type="checkbox"/>
100.Weakness	<input type="checkbox"/>	<input type="checkbox"/>
101.Weakness of sense organs	<input type="checkbox"/>	<input type="checkbox"/>
102.Giddiness	<input type="checkbox"/>	<input type="checkbox"/>

103.Sluggishness

**II. Azhal Migu Gunam**

1. Present

2. Absent

104.Yellowish discolouration of the skin

105.Yellowish discolouration of the eye

106.Yellowish discolouration of urine

107.Yellowish discolouration of faeces

108.Increased appetite

109.Burning sensation in the body

110.Insomnia

**III. Iyam Migu Gunam**

1. Present

2. Absent

111.Excessive salivation

112.Eraippu (dyspnoea)

113.Heaviness of the body

114.Whiteness of the body

115.Chillness of the body

116.Reduced appetite

117.Cough

118.Increased sleep

119.Sluggishness

**120.State Of Mukkutram**

1. Vali  2.Azhal  3.Iyam  \_\_\_\_\_

### 121.NOI UTRA KAALAM

- |                  |                          |                    |                          |
|------------------|--------------------------|--------------------|--------------------------|
| 1. Kaarkaalam    | <input type="checkbox"/> | 2. Koothirkaalam   | <input type="checkbox"/> |
| 3.Munpanikaalam  | <input type="checkbox"/> | 4.Pinpanikaalam    | <input type="checkbox"/> |
| 5.Ilavenirkaalam | <input type="checkbox"/> | 6.Muthuvenirkaalam | <input type="checkbox"/> |

### 122.NOI UTRA NILAM

- |           |                          |          |                          |            |                          |
|-----------|--------------------------|----------|--------------------------|------------|--------------------------|
| 1.Kurinji | <input type="checkbox"/> | 2.Mullai | <input type="checkbox"/> | 3.Marutham | <input type="checkbox"/> |
| 4.Neithal | <input type="checkbox"/> | 5.Paalai |                          |            |                          |

### ENNVAGAI THERVUKAL

#### NAA

#### 123 . Maa Padinthiruthal

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

#### 124..Niram

- |            |                          |           |                          |             |                          |
|------------|--------------------------|-----------|--------------------------|-------------|--------------------------|
| 1. Karuppu | <input type="checkbox"/> | 2. Manjal | <input type="checkbox"/> | 3. Velluppu | <input type="checkbox"/> |
| 4. Others  | <input type="checkbox"/> |           |                          | _____       |                          |

#### 125. Suvai

- |              |                          |            |                          |           |                          |
|--------------|--------------------------|------------|--------------------------|-----------|--------------------------|
| 1. Pulippu   | <input type="checkbox"/> | 2. Kaippu  | <input type="checkbox"/> | 3. Inippu | <input type="checkbox"/> |
| 4. Thuvarppu | <input type="checkbox"/> | 5. Kaarppu | <input type="checkbox"/> | 4. Uppu   | <input type="checkbox"/> |

#### 126.Vedippu

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

#### 127.Vai neer ooral

- |           |                          |           |                          |           |                          |           |                          |
|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|
| 1. Normal | <input type="checkbox"/> | 2. Excess | <input type="checkbox"/> | 3. Scanty | <input type="checkbox"/> | 4. Absent | <input type="checkbox"/> |
|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|-----------|--------------------------|

128. **NIRAM (Skin)**

1. Karuppu  2. Manjal  3. Velluppu  4. Maaniram

129. **MOZHI**

1. Sama oli  2. Urattha oli  3. Thaazhntha oli

**VIZHI**

130. Niram

1. Karuppu  2. Manjal   
3. Sivappu  4. Velluppu  \_\_\_\_\_

131. Kanneer

1. Normal  2. Abnormal  \_\_\_\_\_

132. Erichchal

1. Present  2. Absent  \_\_\_\_\_

133. Peelai seruthal

1. Present  2. Absent  \_\_\_\_\_

**MEI KURI**

134. Veppam

1. Mitha Veppam  2. MiguVeppam  3. Thatpam

135. Viyarvai

1. Normal  2. Increased  3. Reduced  \_\_\_\_\_

136. Thodu vali

1. Absent  2. Present  \_\_\_\_\_

**MALAM**

137. Niram

- |            |                          |             |                          |       |
|------------|--------------------------|-------------|--------------------------|-------|
| 1. Karuppu | <input type="checkbox"/> | 2. Manjal   | <input type="checkbox"/> | _____ |
| 3. Sivappu | <input type="checkbox"/> | 4. Velluppu | <input type="checkbox"/> |       |

138. Thanmai (Consistency)

- |           |                          |           |                          |       |
|-----------|--------------------------|-----------|--------------------------|-------|
| 1. Ilagal | <input type="checkbox"/> | 2. Irugal | <input type="checkbox"/> | _____ |
| 3. Thin   | <input type="checkbox"/> | 3. Bulky  | <input type="checkbox"/> |       |

139. Alavu

- |           |                          |              |                          |              |                          |
|-----------|--------------------------|--------------|--------------------------|--------------|--------------------------|
| 1. Normal | <input type="checkbox"/> | 2. Increased | <input type="checkbox"/> | 3. Decreased | <input type="checkbox"/> |
|-----------|--------------------------|--------------|--------------------------|--------------|--------------------------|

140. Kalichchal

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

141. Seetham

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

142. Vemmai

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

**MOOTHIRAM (Siruneer)**

**NEER KURI**

143. Niram

- |           |                          |           |                          |            |                          |
|-----------|--------------------------|-----------|--------------------------|------------|--------------------------|
| 1. Venmai | <input type="checkbox"/> | 2. Manjal | <input type="checkbox"/> | 3. Sivappu | <input type="checkbox"/> |
| 4. Others |                          |           |                          |            | _____                    |

144. Manam

- |           |                          |            |                          |       |
|-----------|--------------------------|------------|--------------------------|-------|
| 1. Absent | <input type="checkbox"/> | 2. Present | <input type="checkbox"/> | _____ |
|-----------|--------------------------|------------|--------------------------|-------|

145. Nurai

1. Normal  2. Increased  3. Reduced

146. Edai(Ganam)

1. Normal  2. Increased  3. Reduced

147. Enjal(Alavu)

1. Normal  2. Increased  3. Reduced

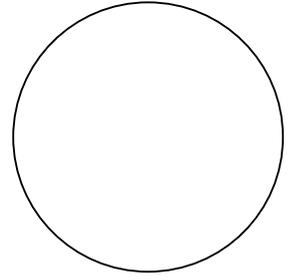
148. Thadavai

1. Day  2. Night  \_\_\_\_\_

**NEI KURI**

- |                      |                          |                       |                          |
|----------------------|--------------------------|-----------------------|--------------------------|
| 1. Aravam            | <input type="checkbox"/> | 2. Mothiram           | <input type="checkbox"/> |
| 3. Muthu             | <input type="checkbox"/> | 4. Aravil Mothiram    | <input type="checkbox"/> |
| 5. Aravil Muthu      | <input type="checkbox"/> | 6. Mothirathil Aravam | <input type="checkbox"/> |
| 7. Mothirathil Muthu | <input type="checkbox"/> | 8. Muthil Aravam      | <input type="checkbox"/> |
| 9. Muthil Mothiram   | <input type="checkbox"/> | 10. Asathiyam         | <input type="checkbox"/> |
| 11. Mellena paraval  | <input type="checkbox"/> |                       |                          |

Diagram



**NAADI(KAI KURI)**

**Naadi Nithanam**

149..Kaalam

- |                   |                          |                     |                          |
|-------------------|--------------------------|---------------------|--------------------------|
| 1. Kaarkaalam     | <input type="checkbox"/> | 2. Koothirkaalam    | <input type="checkbox"/> |
| 3. Munpanikaalam  | <input type="checkbox"/> | 4. Pinpanikaalam    | <input type="checkbox"/> |
| 5. Ilavenirkaalam | <input type="checkbox"/> | 6. Muthuvenirkaalam | <input type="checkbox"/> |

150. Desam

1. Kulir  2. Veppam  \_\_\_\_\_

151. Vayathu

1. 1-33yrs  2.34-66yrs  3. 67-100yrs

152 .Udal Vanmai

1. Iyyalbu  2. Valivu  3. Melivu

153.Naadiyin Vanmai

1. Vanmai  2. Menmai

154 .Naadiyin Panbu

1. Thannadai  2. Puranadai  3. Illaitthal   
4. Kathithal  5. Kuthithal  6. Thullal   
7. Azhunthal  8. Padutthal  9. Kalatthal   
10. Munnookku  11. Pinnokku  12. Suzhalal   
13. Pakkanokku

155. **Naadi nadai**

1. Vali  2. Azhal  3.Iyam   
4. Vali Azhal  5. Vali Iyam  6. Azhal Vali   
7. Azhal Iyam  8. Iyavali  9. Iya Azhal   
10. Sanni  \_\_\_\_\_

**MANIKKADAI NOOL ( Viral Kadai Alavu )**

. 156. Date of Birth

157. Time of Birth

158. Place of Birth

159. Pirandha Thinai

**160. NATCHATHIRAM**

- |                |                          |                  |                          |                 |                          |
|----------------|--------------------------|------------------|--------------------------|-----------------|--------------------------|
| 1.Aswini       | <input type="checkbox"/> | 2.Barani         | <input type="checkbox"/> | 3.Karthikai     | <input type="checkbox"/> |
| 4.Rohini       | <input type="checkbox"/> | 5.Mirugaseeridam | <input type="checkbox"/> | 6.Thiruvathirai | <input type="checkbox"/> |
| 7.Punarpoosam  | <input type="checkbox"/> | 8.Poosam         | <input type="checkbox"/> | 9.Aayilyam      | <input type="checkbox"/> |
| 10.Makam       | <input type="checkbox"/> | 11.Pooram        | <input type="checkbox"/> | 12.Utthiram     | <input type="checkbox"/> |
| 13.Astham      | <input type="checkbox"/> | 14.Chithirai     | <input type="checkbox"/> | 15.Swathi       | <input type="checkbox"/> |
| 16.Visakam     | <input type="checkbox"/> | 17.Anusam        | <input type="checkbox"/> | 18.Kettai       | <input type="checkbox"/> |
| 19.Moolam      | <input type="checkbox"/> | 20.Pooradam      | <input type="checkbox"/> | 21.Utthiradam   | <input type="checkbox"/> |
| 22.Thiruvonam  | <input type="checkbox"/> | 23.Avittam       | <input type="checkbox"/> | 24.Sadayam      | <input type="checkbox"/> |
| 25.Poorattathi | <input type="checkbox"/> | 26.Utthirattathi | <input type="checkbox"/> | 27.Revathi      | <input type="checkbox"/> |
| 28.Not known   | <input type="checkbox"/> |                  |                          |                 |                          |

**29.Padham**

- |      |                          |       |                          |        |                          |       |                          |
|------|--------------------------|-------|--------------------------|--------|--------------------------|-------|--------------------------|
| 1. I | <input type="checkbox"/> | 2. II | <input type="checkbox"/> | 3. III | <input type="checkbox"/> | 4. IV | <input type="checkbox"/> |
|------|--------------------------|-------|--------------------------|--------|--------------------------|-------|--------------------------|

## RAASI

- |              |                          |              |                          |            |                          |
|--------------|--------------------------|--------------|--------------------------|------------|--------------------------|
| 1.Mesam      | <input type="checkbox"/> | 2.Rishabam   | <input type="checkbox"/> | 3.Midhunam | <input type="checkbox"/> |
| 4.Kadakam    | <input type="checkbox"/> | 5.Simmam     | <input type="checkbox"/> | 6.Kanni    | <input type="checkbox"/> |
| 7.Thulam     | <input type="checkbox"/> | 8.Viruchiham |                          | 9. Dhanusu | <input type="checkbox"/> |
| 10.Maharam   | <input type="checkbox"/> | 11.Kumbam    | <input type="checkbox"/> | 12.Meenam  | <input type="checkbox"/> |
| 13.Not known | <input type="checkbox"/> |              |                          |            |                          |

## INVESTIGATION

### BLOOD

- 161.TC (Cells/cumm) :
- 162.DC (%) : 1.P  2.L  3.E   
4.B  5.M
- 163.Hb (gms%) : .
- 164.E.S.R. (mm/hr) : 1.1/2hr  2.1hr
- 165.Blood Sugar (R) (mgs%) :
166. Blood Urea (mgs%) :
167. Serum Cholesterol :

### URINE

- 168.Albumin : 0.Nil  1.Trace  2.+   
3.++  4.+++
- 169.Sugar : 0.Nil  1.Trace  2.+   
3.++  4.+++  5.++++

**DEPOSITS**

1. Yes

2. No

170.Pus cells

\_\_\_\_\_

171.Epithelial cells

\_\_\_\_\_

172.RBCs

\_\_\_\_\_

173.Crystals

\_\_\_\_\_

**SPECIFIC GRAVITY OF URINE:**

**MOTION TEST:**

1. Yes

2. No

174.Ova

\_\_\_\_\_

175.Cyst

\_\_\_\_\_

176.Occult blood

\_\_\_\_\_

**X-ray - PNS**

**CT – SCAN – PNS**

**Nasal smear**

**Endoscopically guided microswab Culture**