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SALAPEENISAM

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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,

"தியூம் சிர்வாசு நவான்த்திரப் புல்லம்
குறுக்கு விரூக்க வீடு பிரித்தியூருக்காக
சவுக்கு தாரந்த சீராகச் செய்விடு
அவந்தும் அங்கைக் காண்பு எச்சிட்டு"

- குறும் 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.

“சுருக்கங்களை மின்னுறுத்தும் கல்லன்று பார்ப்பனே இயங்காறிக்க காலமுற்றி மனிதன் முற்றிலும் - தவங்கு
மேல்வரைக்காமல் இருந்தும் எல்லாமல் காண்பாது காண்பாது”

- கோவில்சாகியம்ப.

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 manthra, kanmakandam. It is given in the following lines from 18 Siddhars Naadi Nool.

```
"நெருந்து புதிய பாகு
தண்டத்திற்கு குருகு பன்றிகு
சார்கு வாரை விட்டேற்று
அனுரைத் துறை பயணம்
நெருந்து காரை தச்சுறுலா
நிறைவிலும் காளும் காட்சும்
நெருந்து கருது காட்சிகள்
நெருந்து கூர்ந்து போன்றோன்று
நெருந்து பூர்வை வள்ளுவது
இருந்தால் வள்ளக்கோளை
- பிரெசைல்லா முதலக்கு குந்து சாமா.
```

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. Paravukaal - 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. Nadukkaal - 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. Olloliththee - 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. Siguvaig - 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)


5. Samanan - Oli vali.


7. Koorman - Kottavi 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.
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. Gnyiru 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.


3. Lobam - Strongy.


5. Matham - Pride.


8. Agankaaram - Ego.

Avaththai – 5

1. Ninaivu - Wakefulness

2. Kanavu - Dream.

3. Urakkam - Sleep
4. Paerurakkam - Stage of stupor.

5. Uyirppadakkam - Stage of samathi.

“எப்படி எப்படி எப்படி தோன்றும்

நீய்ப் நீய்ப் நீய்ப் நோக்கியுள்ள மனிதம்

நீய்ப் நீய்ப் நீய்ப் நோக்கியுள்ள நேர்வனில்

துவைத்தியலைப் பிரயித்துநிக்கும்”

- பாருத்தம் தோற்றம் கையாண்.

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.
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.
10. Nithirai - Sleep.

**Udal Akkini - 4**

1. Samanakkini - It is called naturally situated samanavayu. It is responsible for proper digestion.

2. Mandhakkini - Samanavayu combined with kabam to form mandhakini. 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 irregular 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.
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>
<thead>
<tr>
<th>S.No.</th>
<th>Mukkutram</th>
<th>Thannilai Valarchchi</th>
<th>Piranilai Valarchchi</th>
<th>Thannilai Adaithal</th>
</tr>
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<tr>
<td>1.</td>
<td>Vali</td>
<td>Muthuvenir kaalam</td>
<td>Kaar kaalam</td>
<td>Koothir kaalam</td>
</tr>
<tr>
<td>2.</td>
<td>Azhal</td>
<td>Kaar kaalam</td>
<td>Koothir kaalam</td>
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<td>3.</td>
<td>Iyam</td>
<td>Pinpani kaalam</td>
<td>Ilavenir kaalam</td>
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</tr>
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Table - 1
Seasonal Variations of Uyir Thathukkal
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

"நிதி எனிய தொடர்ச்சியில் விளம்ப வாய்ந்த காலத்தில்"

- நேதியேமா.

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, symptomatology 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

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

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

*Water, urine, nature, disposition
*Causing to shine, rubbing, cleansing.

*Clearness, brilliancy.

*Chest, mind, heart

*Causing to fall as from disease or illness.
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 **affected.**
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...

*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 dearange 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 dearanged humours. All these varieties of cough pass into consumption, if neglected.
*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 inflammed 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].

*Nose.

*Mucous substance, unctuous.
*Water, cold water.

**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.

*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.

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

"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)"

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.
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.

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, “பாராராசா சேகாரம் என்றும் குருத்து பெயர்க்கும் வகையில்
போட்டு போன எல்லாத்தோட்டம் விளக்க போக்காகும் போன எல்லாத்தோட்டான விளக்க
ஏனைமுள்ள வேர்க்க விளக்க வெள்ளிக்க வேர்க்கான
விளக்கம் வருகையில் வேர்க்க வெள்ளிக்க வேர்க்கான
தேர்த்தோட்டம் நமது கேட்கும் வகையில் வருகையில்
என்று வருகையில் வேர்க்க வெள்ளிக்க வேர்க்கான
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என்று வருகையில் வேர்க்க வெள்ளிக்க வேர்க்கான.

- பராரசாசாரம் (பாராராசா சேகாரம்)

Before reviewing the specific signs and symptoms of the dissertation topic “Sala peenisam” other information regarding definition, etiology, 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
- Mokkadaippu.

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

"\text{நீர்கோவை நீர்கோவை முக்குனேர் பைசல் மொக்கடைய்ப்பு}
\text{கிண்வாக சிற்பை பைசல் பைசல் பைசல்}
\text{அக்னித்து நீர்கோவை முக்குனேர் கும்பையின்பு}
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\text{பருவு நீர்கோவை முக்குனேர் கும்பையின்பு}
\text{பார்வை நீர்கோவை முக்குனேர் கும்பையின்பு}
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\text{அக்னித்து நீர்கோ...
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

“குருட்டு காலியாயும் கதவமான வரகல்
அண்கி குருட்டனும் குருட்டனும்
அல்லது குருட்டம் இறந்து விளங்கும்”

- அத்ம ராசமிரதம்

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

T.V. SAMBASIVAM PILLAI MARUTHUVA AGARATHI:

பும்பூலத்தில் காலியாயில் கதவானது குருட்டம் இறந்து விளங்கும்
அல்லது குருட்டனும் குருட்டனும் அல்லது குருட்டம் இறந்து விளங்கும்
அல்லது குருட்டம் இறந்து விளங்கும்

குருட்டம் விளங்கும் குருட்டம் விளங்கும் குருட்டம் விளங்கும்

என நன்மை குருட்டம் விளங்கும் குருட்டம் விளங்கும் குருட்டம் விளங்கும்

இது குருட்டம் விளங்கும் குருட்டம் விளங்கும் குருட்டம் விளங்கும்
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.
7. Lying in an uneven bed.
8. Excessive sexual indulgence.

IV. AGASTHIYAR GURUNAADI – 27:

"பிரிக்கான் மும்பையூ வியக்கம் விலங்கில் வெள்ளை காண்பதும் வசனமும் விக்குதூரும் நான்காற்று மூன்றும் குடியாற்றும் பெரும்பலம் முன்னால் பிரிக்கும் கொள்ளாம் துளயும் குறைந்தை
பிரிக்கும் வித்யாவை வாழ்வை நோக்கியே விக்குதும் வல்லும் விக்குதும்
கூற்றும் விக்குதும் வைலே பிரிக்குத்தும் வைலே பிரிக்குத்தும்
கூற்றும் விக்குதும் வைலே பிரிக்குத்தும்".

- அகந்தியா தேர்கை

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:

"வருடத்துறுத்து பெருவுக்கொள்வ விநாயக விவேகா
வநிலையில் காணப்படும் வேதம்

நிகர்வடை நிறைவு செய் நுக்குத்தி வந்து

நிகர்வடை நிறைவு செய் நுக்குத்தி வந்து

அத்தோ நிறைவு நுக்குத்தி வந்து

- அகரந்திரம் குப்பூவையன்

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

VI. THERAIYAR SEKARAPPA

"பெருவுக்கொள்வ விநாயக விவேகா

பார்க திருத்து புனர்வடை வேதம்

மாவாவின் கண்டத்தில் வந்து

கரையாம் குன்னியார் காண்டியிட்டு

சாக்தியோ முடிய விநாயக விவேகா

பார்க்கோ திருத்து புனர்வடை வேதம்

திருத்து பெருவுக்கொள்வ விவேகா

மாவாவின் கண்டத்தில் வந்து

சாக்தியோ முடிய விநாயக விவேகா

நிர்வாக கிட்டிலையிட்டு துணையா நடை

பார்க்கோ திருத்து புனர்வடை வேதம்

திருத்து பெருவுக்கொள்வ விவேகா

மாவாவின் கண்டத்தில் வந்து

சாக்தியோ முடிய விநாயக விவேகா".
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.

"காத்தி விதைப்பட்டல் கலன் கூர்கடந்
செங்கு விதைப்பட்டல் முன்னல் கூற்கடன்
செங்கு விதைப்பட்டல் வெவ்வேறு பாகிய
செங்கு விதைப்பட்டல் கூற்கடன்"

- சிவட்டை வெள்ளைப்பாணை

Drinking unboiled and contaminated water causes penisam.

VII. NEER PAICHAL ROGA NITHANAM:

"நீர்ப்பாசாயும் இயற்கைக்கான் பிறந்து ரீதுற்றுமணி
பாசாயும் இயற்கைக்கான் திருமண்டு முன்னூர்
பாசாயும் இயற்கைக்கான் பாகி குளிர்ச்சித்தொன்று
பாசாயும் இயற்கைக்கான் வெள்பொருள் திருமண்டு முன்னூர்".

- பெள்ளை பாசாயும் வெள்ளைப்பாணை

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

VIII. SIDDHA MARUTHUVANGA CHURUKKAM:

"வீட்டீக்கூடு நீக்கியே
திகழ்கள் விதைப்பட்டல்
செங்கு பாகிய
According to “siddha maruthuvanga churukkam”, suppression of tears will cause peenisam.

IX. AGASTHIYAR KANMA KANDAM – 300

"agathiyam kanma kandam kanma kanma kandam
agathiyam kanma kandam kanma kanma kandam
agathiyam kanma kandam kanma kanma kandam
agathiyam kanma kandam kanma kanma kandam"

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 NIRMAYA 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.


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

"கொல்லத்துடன் புலக்குறுத்துத் தோய்வு கருதுத் துருக்கு உடையே கொல்லத்தில் இரும்பு குருதி காண நேர்வு கொண்டான் இரும்பு பிற்புச்சி இரும்பு காண நேர்வு கொண்டான் இரும்பு பிற்புச்சி இரும்பு காண நேர்வு கொண்டான் இரும்பு பிற்புச்சி இரும்பு காண நேர்வு கொண்டான் இரும்பு பிற்புச்சியுள்ள "

- அகராதிபாத் - 2000

1. Irritation of the throat, face and ears.

2. Nasal itching with watery nasal discharge.

3. Heaviness of the head.

II. NEER PAICHAL ROGA NITHANAM:

"நீர் பாசாள் ரோகா நித்தனம்: நீர் பாசாள் ரோகாவில் கருத்து

மக்களின் திண்மக்கள் ஓர்கள் உண்மைகளுடன் நிரம்பினச் சீர்மக்கள்

கூடுமையாக அசாத்தாக கிளையாக அடைகளாக காணப்படும்

பக்கத்தில் பெருமில் நிறைய பெரியக் கிளைகளாயிருக்கின்றன்”.

- நீர்ப்பாசாள் ரோகா நித்தனம்

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

“நீர் பாசாள் ரோகாவில் கொழும்புகள் அளாக்கும் நிறை

குறுக்கு பொதுமக்களின் குழுவிலே பெரும் குழு

ஏற்ப பொதுமக்கள் கூட்டம் பள்ளிகளின் முழுப்புகளின்

சுருக்க முதல் தொடர் நீர்ப்பாசாள் பெருமில் நிறை”

- நீர்ப்பாசாள் ரோகா நித்தனம்

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:

"துப்படியார் மதிவுக்கு என் கால்வாய் இந்து செஞ்சால்
நோவலை தான்பண்ணத்தை நாஞ்சித்து எறுது என்
பன்னலை திவேனில் விளம்பு மாபெரும் நாக்குமல்லாம்
பேசும் உண்மையாகத் பிரிவியும் எளியுங்கள்”.

- நாராயணம் நாராயணம் ஏன் எளியுங்கள்

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

IV. GUNAVAGADAM:

"துணையும் மதிவுக்கு இராசாயனம் கால்வாய் விளம்பு ஒன்றை
எளும் கடவுள் கால்வாய்களாக விளம்பு பிரிவியும் இரும்பு
எளும் கடவுள் நாக்குமல்லாம் என் கால்வாய் பிரிவியும்
பேசும் உண்மையாக உண்மையாகத் பிரிவியும் எளியுங்கள்”.

- ஐராவனம்
1. Headache
2. Mucous discharge
3. After few days purulent discharge with bad odour

"அல்லாஹ்வுடைய பெருவியவற்றை கவரி கைதிய மண் தோற்றம் முதல்கு மண்னை பார்க்கவிட்டது செய்யப்பட மண் விழாவின் மண்னலை கட்டு நிர்வாக முறையினர் விக்கு வயிறு போன்று எறிய நீர் பழக்கம் இயற்றவேற்கிறது"

- துஞ்சாமல்

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.
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.

VII. JEEVA RATCHAMIRTHAM – NASIGA ROGA BETHAM:
1. Difficulty in breathing.
2. Increased sneezing
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:

"Sravasthukalak kantakavil dharadapam vekalpam
sambhakam santhirakam bahum aksham
nikham katham kumipaminnam virudhakki sannubham
thirukottiyangal thirukkudikku. thirumana mahayum
Adbhudan niyamam thirukurippam vishuda thoppum
Adbhuka purushagiri pookkalam veppal
Kaalakkathirikshiyam hakanam veppal
Kaalakkathirikshiyam hakanam veppal
Thupathiyam kavalapppu thupathiyam
Thupathiyam kavalapppu thupathiyam

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சிலம்பக் குவிதை எழும் மறைமுக நீக்காது
பிறந்த நந்தி கூற்றிக் கூறுவதை கூறுவது நிர்வாகம்
சாத்தல் விளையாடி கூறுவது விளையாடி
காப்புடன் குப்பிப்பின் விளையாடும் கூறுவது
துணைப்பிட்டை இறக்கினால் சுருக்கப்பட்டு கூறுவது
தானம் எச்சா பெருமான் தருண் பெருக்கினை
நாற்கி தென் கூற்றுக்கு தக்கீடு
காட்டச்சா கிருட்சப்பக்கில் பொருளிமை பார்க்கக்
முறையில் காற்றவள் திறக்கவும் நாட்டும்
பதாம்பெருமை காற்றாக்தும் அருகையும் பூமியை
பட்டைமுன்னண் விடுமுன்னண் விளையாடும் மிளகாணி
பாலாமூன்றாக குறுக்கு முக்குறுக்கு கற்று
பாதக்கமத்து திருக்குணிக்கு விளையாடும் வாரியான
நிகத்தியசம்மான முக்கியத்துறையின் நூற்றுமாற்றம்
கூறுவது விளையாடும் முக்கியத்துறையின் வண்ணம்வேறு
செல்வாக்கு விளையாடும் முக்கியத்துறையின் புகழ் பெற்றாக்கும்
இறுக்கியன்றன் கூற்றுப்பாட்டின் பர்க்கான்மை பார்க்க
கூறுவது பலரால் பொருளாக்கிய பக்தங்கரங்காக
செல்லாமுன் பொருளாக்கிய முக்கியத்துறையின் வண்ணம்வேறு
துணைப்பிட்டை இறக்கினால் குறுக்கு முக்குறுக்கு
நூற்றுமாற்றம் நூற்றுமாற்றம் நூற்றுமாற்றம்
- உதவியாளியா தொன்மாந்தர்
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 uncurable 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
Among these four diseases the symptoms under pitha thalai nokkadu is related with the symptoms of peenisam when properly matched.

"வாழ்ச்சியாய் நீரியல் கதை கதையும்
மேற்கொண்டு சிறப்புக்கு குளிர் காட்டி
குக்குழுக்குயாவ் மானியக்கான், மேலும்
நீண்டுதான் கொண்டிருக்கும் குறையானக்கானுடை
வரும் வாழ்ச்சிக்குப் புரிய நூற்று
மேன்றுக் கருவன் முக்கது காட்டியும்
குருண்டும் கதையும் புதிய கதையும்
குறையான கதாக்குண்டுப் புதிய கதையும்
வாழ்ச்சியாய் குறையான கதையும்".

- புத்தாண்டு குறையான கதையும் - 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
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. Anthithummal 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. Sirai 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. Sirai peenisam

**Naadi Nadai of Sala Peenisam**

I. According to Pari Poorana Naadi,

“விருப்பாளன் பொய் புராதகம் மாணவியாது

முதன்மையில் பொருள்கூட்டி பிற்கு விளுப்பை”

II. According to Sathaga Naadi,

“பக்தமாள பிற்குத்தி விளுப்பை கொண்டு

போச்சுக் பல்கின் மிதியானப் பார்த்த

நூற்றண்டு நபர்கள் எவும் ருபு முதல்

சலருமை நிதியான சுருக்கையான கல்லைகளம்

சலருமை முறித்து வாச்நே அவியுத்தி காண்டு

சலருமைகளுக்கு பாட்டுக்குக் காண்டு விளம்பு

சலருமை குடமையான விளக்க விளம்பு

நூற்றண்டு வாச்நே மாணவியான காண்டுக்கூடை”

III. “நூற்றண்டு விளக்க விளம்பு

நூற்றண்டு வாச்நே மாணவியான

மாணவியான பொருள்கூட்டி

நூற்றண்டு பாட்டுக்கூடை”
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, "நீக்கமன்களும் நீக்கமன் வரும் பட்டி குறைக்கையும் வாக்குகள் வாக்கப்படி நிளவும்"

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.

"லூர்தித் கருவாம் பிரிவுகளும் கருவாம் காப்பும் கருவாம் காப்பும்"

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

<table>
<thead>
<tr>
<th>Increased Pitham</th>
<th>Changes observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anar pitham</td>
<td>Indigestion, reduced appetite</td>
</tr>
<tr>
<td>Aalosagam</td>
<td>Lacrymation of eyes.</td>
</tr>
<tr>
<td>Ranjagam</td>
<td>Pallor, tiredness</td>
</tr>
<tr>
<td>Saathagam</td>
<td>Lack of desired function</td>
</tr>
<tr>
<td>Prasagam</td>
<td>Redness</td>
</tr>
</tbody>
</table>

Table - 3  Iyam

<table>
<thead>
<tr>
<th>Increased Iyam</th>
<th>Changes observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalambagam</td>
<td>Dyspnoea, cough, sneezing</td>
</tr>
<tr>
<td>Kiletham</td>
<td>Indigestion, reduced appetite</td>
</tr>
<tr>
<td>Pothagam</td>
<td>Coated tongue, Poor appreciation of taste</td>
</tr>
<tr>
<td>Sandhigam</td>
<td>Pain in joints</td>
</tr>
<tr>
<td>Tharpagam</td>
<td>Lacrimation of eyes due to irritation</td>
</tr>
</tbody>
</table>
### Table - 4 Vali

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

### Table - 5 CHANGES IN UDAL THATHUKKAL

<table>
<thead>
<tr>
<th>Decreased udal thathukkal</th>
<th>Changes observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saaram</td>
<td>Generlised weakness of both body and mind</td>
</tr>
<tr>
<td>Senneer</td>
<td>Pallor, sluggishness</td>
</tr>
<tr>
<td>Oon</td>
<td>Lethargy of five sense organs, pain in joints</td>
</tr>
<tr>
<td>Kozhuppu</td>
<td>Damage of nasal mucosal layers</td>
</tr>
<tr>
<td>Enbu</td>
<td>Pain in joints, hair fall</td>
</tr>
<tr>
<td>Moolai</td>
<td>Tiredness, lacrymal irritation</td>
</tr>
<tr>
<td>Sukilam/ Suronitham</td>
<td>Loss of libido, pre mature ejaculation, menstrual disturbances</td>
</tr>
<tr>
<td>Ennvagai thervugal</td>
<td>Changes observed</td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Naa</td>
<td>Coated tongue, poor appreciation of taste</td>
</tr>
<tr>
<td>Niram</td>
<td>Pallor of skin, conjuctiva and nail bed</td>
</tr>
<tr>
<td>Mozhi</td>
<td>Hoarseness of voice</td>
</tr>
<tr>
<td>Vizhi</td>
<td>Pallor of conjuctiva</td>
</tr>
<tr>
<td>Sparisam</td>
<td>Tenderness over the sinus areas in frontal and maxillary regions.</td>
</tr>
<tr>
<td>Malam</td>
<td>Niram- Manjal</td>
</tr>
<tr>
<td></td>
<td>Thanmai- Normal</td>
</tr>
<tr>
<td></td>
<td>Alavu- Normal</td>
</tr>
<tr>
<td></td>
<td>Kalapu- Nil</td>
</tr>
<tr>
<td>Moothiram Neerkuri</td>
<td>Niram - Straw yellow, white</td>
</tr>
<tr>
<td></td>
<td>Manam - Aromatic</td>
</tr>
<tr>
<td></td>
<td>Nurai - Present</td>
</tr>
<tr>
<td></td>
<td>Enjal - Deposit present</td>
</tr>
<tr>
<td></td>
<td>Idai - Normal</td>
</tr>
<tr>
<td>Neikuri</td>
<td>Pearl shape</td>
</tr>
<tr>
<td>Naadi</td>
<td>Pitha kabam, pitha vatham</td>
</tr>
</tbody>
</table>
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,

"சன்னேசு குரோலர்மா கட்டிக்கிரீ பரகநெதனிடு
துவங்கிய திதிகளை விளிப்பு கரு சித்தீரையங்களே
சோரங்கே துடும மாறிய வாழ்வுகைதிரிடு கூறுகேங
சமேசினத்து சோ பிட்சம் முதிர்வா குரோலர்மா நெதனிடு"

பகுதி ரவு - 8

"சன்னேசு குரோலர்மா கட்டிக்கிரீ பரகநெதனிடு"

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.

“தேவகையின் குருவுக்கு விடை விரைவு"]

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 inflammed 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.
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.

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.
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 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 cribiform 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 osteocartiligenous 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 sibro - 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 4 mm as it is overlapped by the following

a. From above, by the uncinate 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
It’s 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 sphenoethmoidal 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 while 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 linked 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 interior infection from the nasopharynx.

Infection of a sinus (or) inflammation of the mucosal lining of sinus cavity in 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 intercranial 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 faceover 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 it’s 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 carries tooth. Drainage of the sinus is difficult because its ostium lives 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 break 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 aggrevated 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 gradully 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 drawn 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 candal 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 anterio 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 past from above through the root of the nose to the centre of the film.

Views for the paranasal sinuses

1. Occipitomental view (Water’s view)
2. Occipito frontal view (Cold well view)
3. X-ray the base of the skill (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 force 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 humours. Bony exision can occur because of osteomyelities or mucoceles.

**Oblique view**

These are occasionally helpful to ethmoids contract 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. 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.

**Functions of Paranasal sinuses**

The Paranasal sinuses are thought to serve the following functions.

1. Warming and moistening of inspired air may be partly bone 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 form 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 turgescent. 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 spheno-ethmoidal 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. E.g., 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 prostaglandins. 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 parasympathetic 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 become 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 professer and lecturer of the Post Graduate Noi Naadal Department.

EVALUATION 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

<table>
<thead>
<tr>
<th>S.No</th>
<th>Age</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;33 yr</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>33-66 yr</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>

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

Table - 8

Sex

<table>
<thead>
<tr>
<th>S.No</th>
<th>Sex</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>8</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Female</td>
<td>12</td>
<td>60</td>
</tr>
</tbody>
</table>

Among 20 cases 60 % were female and 40 % were male.
### Table - 9

**Occupation**

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

Out of 20 cases, 45% were students.

### Table - 10

**Socio economic status**

<table>
<thead>
<tr>
<th>S No</th>
<th>Class</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High class</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Middle class</td>
<td>12</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Below poverty line</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

Out of 20 cases, 60% cases belongs to middle class.
Table - 11

Diet habits

<table>
<thead>
<tr>
<th>S.No</th>
<th>Diet</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vegetarian</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Non-Vegetarian</td>
<td>16</td>
<td>80</td>
</tr>
</tbody>
</table>

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

Table - 12

Personal habits

<table>
<thead>
<tr>
<th>S.No</th>
<th>Habits</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intake of cold food products</td>
<td>15</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>Alcohol</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Smoking</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Yoga</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

75% of cases were having the habit of intake of cold food products.
Table - 13

Kaalam (Life span)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Kaalam</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaba kaalam &lt;33yrs 4m</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>2</td>
<td>Pitha kaalam 33yr5m-66yr 8m</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>

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

Table - 14

Symptoms

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

The clinical features of sala peenisam were positive in 100% of cases.
Table - 15

Seasonal variation

<table>
<thead>
<tr>
<th>S.No</th>
<th>Paruva kaalam</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Koothir kaalam</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>2</td>
<td>Munpani kaalam</td>
<td>6</td>
<td>30</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Thinai</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marutham</td>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td>2</td>
<td>Neidhal</td>
<td>2</td>
<td>10</td>
</tr>
</tbody>
</table>

90% of cases were reported in Marutha Nilam.
Table - 17

Altered characters of Azhal

<table>
<thead>
<tr>
<th>S No</th>
<th>Azhal</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Paasagam</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Ranjagam</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>3</td>
<td>Saathagam</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Aalosagam</td>
<td>13</td>
<td>65</td>
</tr>
<tr>
<td>5</td>
<td>Praasagam</td>
<td>14</td>
<td>70</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>S No</th>
<th>Iyam</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avalambagam</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Kiletham</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Potham</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>4</td>
<td>Tharpagam</td>
<td>17</td>
<td>85</td>
</tr>
<tr>
<td>5</td>
<td>Sandhigam</td>
<td>14</td>
<td>70</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>S No</th>
<th>Vali</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Piranan</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Abaanen</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Uthanen</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Viyanen</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Samanan</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>6</td>
<td>Naagan</td>
<td>_</td>
<td>_</td>
</tr>
<tr>
<td>7</td>
<td>Koorman</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>8</td>
<td>Kirukaran</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>9</td>
<td>Devathathan</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Thanajeyan</td>
<td>_</td>
<td>_</td>
</tr>
</tbody>
</table>

Out of 20 cases, Piranan, Viyanan, Uthanan, Samanan, Kirukaran and Devathathan were affected in 100 % of cases, Abaanen was affected in 15 of cases and Koorman was affected in 80 % of cases.
Table - 20
Manikkadai nool

<table>
<thead>
<tr>
<th>S No</th>
<th>Viral kadai alavu</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9 ¼</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>8 ¾</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>8 ¼</td>
<td>12</td>
<td>60</td>
</tr>
</tbody>
</table>

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

Table - 21
Ennvagai thervugal

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

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

<table>
<thead>
<tr>
<th>S No</th>
<th>Spreading of oil</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pearl</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>Pearl, Mellena paraval</td>
<td>4</td>
<td>20</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>S No</th>
<th>Decreased Udal Thathukkal</th>
<th>No of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saaram</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Senneer</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
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<tr>
<td>7</td>
<td>Sukkilam/ Sronitham</td>
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<td>25</td>
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</table>

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

<table>
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<tr>
<th>S No</th>
<th>Kosam</th>
<th>No of cases affected</th>
<th>Percentage</th>
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</thead>
<tbody>
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In 100 % of cases, Pranamaya kosam was affected. Annamaya kosam was affected in 60 % of cases.

Table - 25

X-RAY SKULL- PNS View

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<td>12</td>
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<td>Frontal and maxillary sinusitis</td>
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<td>Frontal sinusitis</td>
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</table>
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 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 aggrevated during koothir and munpani kaalam due to dearragement 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:

Piran, Uthan, Viyan, Saman, Kirukaran and Devathan 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 aggrevated 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 aggrevation 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

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.
- 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

<table>
<thead>
<tr>
<th>Vivathathu kuria Noigal Symptoms</th>
<th>Common symptoms</th>
<th>Absent</th>
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<tbody>
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<td>Mooku Neer paaichal</td>
<td>Rhinitis Heaviness Pain in the cheek</td>
<td>Fever, Cough, Sneezing</td>
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<tr>
<td>Nassiga beedam</td>
<td>Pain in the cheek and chin Mucopurulent discharge Heaviness</td>
<td>Fever Cough Sneezeing</td>
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</table>
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.
1. Thanvanthiri Vaithiyam – Volume - 1
2. Yugi Vaithiya Sinthamani perunool - 800
3. Siddha Maruthuvanga Surukkam – Dr. C. S. Uthamarayan, H.P.I.M.,
4. Siddha Marthuva Noi Naadal Noi Mudhal Naadal Thirattu-Part I – Dr. M. Shanmuga Velu, H.P.I.M.,
5. Thotra Kirama Aaraichiyum Siddha Maruthuva Varalaarum –Dr. C.S. Uthamarayan,H.P.I.M.,
6. Udal Thathuvam – Dr. D. M. Venugopal, H.P.I.M.,
7. Noi Illa Neri –Dr.K.Thurairasan, H.P.I.M.,
8. Maruthuva Thanipadalgal– Dr. R. Thiyagarajan, L.I.M.,
10. Nagamunivar Thalai Noi Maruthuvam
11. Thirukkural
13. Madurai Tamil Paeragaraathi
14. Pararasa Sekaram (Siaroga Nithanam)
15. Agasthiyar Gunavagadam
16. Athma Rathchmirtham
17. Agasthiyar Guru Naadi – 27
18. Theriyar Sekarappa
19. Neer Paichal Roga Nithanam
20. Agasthiyar Kanma Kandam – 300
21. Mathava Nithanam
22. Yugi Vaithya Kaaviyam
23. Uyir kaakum Siddha Maruthuvam
26. Robbins Pathologic Basis of Disease
27. Immunology - Dr. T. K. Renganathan
**Table - 27 INTERPRETATION OF UDALTHAADHUUKAL**

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A - Affected   NA - Not affected

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

**PROFORMA**

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Signature of department faculty

12. Complaints and duration:

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13. History of present illness:

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-----------------------------------------------------------------------------------------------------------------------------------

14. Past history:

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15. Family History:

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16. Personal History:

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<td>19. Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Alcohol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Yoga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Food habits</td>
<td>V</td>
<td>NV</td>
</tr>
</tbody>
</table>

**General etiology for SALA PEENISAM**

<table>
<thead>
<tr>
<th></th>
<th>1.Yes</th>
<th>2.No</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Excessive intake of cold water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. Excessive intake of cold food products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Exposure to cold climate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Inhalation of allergens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Seasonal variation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Medication side effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. Impractice of yoga</td>
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</table>
Clinical Symptoms of SALA PEENISAM:

<table>
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<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>186. Head ache</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>187. Running nose</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>188. Nasal blockage</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>189. Cough</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>190. Sneezing</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>191. Fever</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

GENERAL EXAMINATION

<p>| | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>31. Weight</td>
<td></td>
<td>(kg)</td>
</tr>
<tr>
<td>32. Temperature</td>
<td></td>
<td>(°F)</td>
</tr>
<tr>
<td>33. Pulse rate</td>
<td></td>
<td>/minute</td>
</tr>
<tr>
<td>34. Heart rate</td>
<td></td>
<td>/minute</td>
</tr>
<tr>
<td>35. Respiratory rate/minute</td>
<td></td>
<td>/minute</td>
</tr>
<tr>
<td>36. Blood pressure</td>
<td></td>
<td>(mm/Hg)</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>1. Present</th>
<th>2. Absent</th>
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</thead>
<tbody>
<tr>
<td>37. Pallor</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>38. Jaundice</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>39. Cyanosis</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
40. Lymphadenopathy  

41. Pedal edema  

42. Clubbing  

43. Jugular venous pulsation  

**VITAL ORGANS EXAMINATION**

<table>
<thead>
<tr>
<th>Organ</th>
<th>1.Normal</th>
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<tbody>
<tr>
<td>44. Stomach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45. Liver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46. Spleen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. Lungs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. Heart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. Kidney</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. Brain</td>
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</table>

**SIDDHA SYSTEM OF EXAMINATION**

**IYMPORIGAL / IYMPULANGAL**

<table>
<thead>
<tr>
<th>Item</th>
<th>1.Normal</th>
<th>2.Affected</th>
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</thead>
<tbody>
<tr>
<td>54. Mei/Ooru</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. Vaai/Suvai</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. Kan/Oli</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. Mookku/Naatram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. Sevi/Osai</td>
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<td></td>
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</tbody>
</table>
### KANMENTHIRIYANGAL / KANMAVIDAYANGAL

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>59.</td>
<td>Kai/Thaanam</td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>Kaal/Kamanam</td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>Vaai/Vasanam</td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>Eruvaai/Visarkam</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>Karuvaai/Aanantham</td>
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### YAAKKAI

<table>
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</table>

### GUNAM

<table>
<thead>
<tr>
<th></th>
<th>1. Sathuva Gunam</th>
<th>2. Rasatha Gunam</th>
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</thead>
<tbody>
<tr>
<td>3.</td>
<td>Thamasa Gunam</td>
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</table>

### UYIR THATHUKKAL

### I. Vali

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
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<tbody>
<tr>
<td>66.</td>
<td>Uyirkkaal (Praanan)</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>Keelnokkukkaal (Abaanan)</td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>Nadukkaal (Samaanan)</td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>Melmokkukkaal (Udhaanan)</td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>Paravukaal (Viyaanan)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vaanthikaal (Naahan)</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>----------------------</td>
<td>----</td>
</tr>
<tr>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72</td>
<td>Vizhikkaal (Koorman)</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>Thummikkaal (Kirukaran)</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>Kottavikkaal (Devathan)</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Veengukkaal (Dhananjeyan)</td>
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</tbody>
</table>

**II. Azhal**

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>76</td>
<td>Aakkanal (Anala pitham)</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>Olloliththee (Prasaka pitham)</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>Vannayeri (Ranjaka pitham)</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>Nokku Azhal (Aalosaka pitham)</td>
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</tr>
<tr>
<td>80</td>
<td>Aatralangi (Saathaka pitham)</td>
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**III. Iyam**

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
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<tbody>
<tr>
<td>81</td>
<td>Aliiyam (Avalambagam)</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>Neerppiiyam (Kilethagam)</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>Suvaikaaniyam (Pothagam)</td>
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<tr>
<td>84</td>
<td>Niraivuiyam (Tharpagam)</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>Ondriiyam (Santhigam)</td>
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</tbody>
</table>
**UDAL THATHUKKAL**

<table>
<thead>
<tr>
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<th>1. Normal</th>
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</tr>
</thead>
<tbody>
<tr>
<td>86. Saaram</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>87. Senneer</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>88. Oon</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>89. Kozhuppu</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>90. Enbu</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>91. Moolai</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>92. Sukkilam</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**MUUKUTRA MIGU GUNAM**

**I. Vali Migu Gunam**

<table>
<thead>
<tr>
<th></th>
<th>1. Present</th>
<th>2. Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>93. Emaciation</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>94. Blackish colouration of body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>95. Desire to take hot food</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>96. Shivering of body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>97. Abdominal distension</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>98. Insomnia</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>99. Constipation</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>100. Weakness</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>101. Weakness of sense organs</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>102. Giddiness</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
103. Sluggishness

### II. Azhal Migu Gunam

<table>
<thead>
<tr>
<th></th>
<th>1. Present</th>
<th>2. Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>104. Yellowish discolouration of the skin</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>105. Yellowish discolouration of the eye</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>106. Yellowish discolouration of urine</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>107. Yellowish discolouration of faeces</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>108. Increased appetite</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>109. Burning sensation in the body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>110. Insomnia</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

### III. Iyam Migu Gunam

<table>
<thead>
<tr>
<th></th>
<th>1. Present</th>
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</tr>
</thead>
<tbody>
<tr>
<td>111. Excessive salivation</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>112. Eraippu (dyspnoea)</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>113. Heaviness of the body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>114. Whiteness of the body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>115. Chillness of the body</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>116. Reduced appetite</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>117. Cough</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>118. Increased sleep</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>119. Sluggishness</td>
<td>☐</td>
<td>☐</td>
</tr>
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### 120. State Of Mukkutram

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
### 121. NOI UTRA KAALAM

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kaarkaalam</td>
<td>2. Koothirkaalam</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Munpanikaalam</td>
<td>4. Pinpanikaalam</td>
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<td></td>
</tr>
<tr>
<td>5. Ilavenirkaalam</td>
<td>6. Muthuvenirkaalam</td>
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### 122. NOI UTRA NILAM

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</thead>
<tbody>
<tr>
<td>4. Neithal</td>
<td>5. Paalai</td>
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### ENNVAGAI THERVUKAL

#### NAA

123. Maa Padinthiruthal

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<table>
<thead>
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<tbody>
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</table>

124. Niram

<p>| | | |</p>
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<tbody>
<tr>
<td>4. Others</td>
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</table>

125. Suvai

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</thead>
<tbody>
<tr>
<td>1. Pulippu</td>
<td>2. Kaippu</td>
<td>3. Inippu</td>
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</table>

126. Vedippu

<p>| | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Absent</td>
<td>2. Present</td>
</tr>
</tbody>
</table>

127. Vai neer ooral

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
</table>
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

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. Karuppu</td>
<td>2. Manjal</td>
<td></td>
</tr>
<tr>
<td>3. Sivappu</td>
<td>4. Velluppu</td>
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138. Thanmai (Consistency)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Ilagal</td>
<td>2. Irugal</td>
</tr>
<tr>
<td>3. Thin</td>
<td>3. Bulky</td>
</tr>
</tbody>
</table>

139. Alavu

<p>| | |</p>
<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>1. Normal</td>
<td>2. Increased</td>
</tr>
<tr>
<td>3. Decreased</td>
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</tbody>
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140. Kalichchal

<p>| | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Absent</td>
<td>2. Present</td>
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</table>

141. Seetham

<p>| | |</p>
<table>
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<tbody>
<tr>
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</table>

142. Vemmai

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</thead>
<tbody>
<tr>
<td>1. Absent</td>
<td>2. Present</td>
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</tbody>
</table>

### MOOTHIRAM (Siruneer)

#### NEER KURI

143. Niram

<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. Venmai</td>
<td>2. Manjal</td>
</tr>
<tr>
<td>3. Sivappu</td>
<td></td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Others</td>
<td></td>
</tr>
</tbody>
</table>

144. Manam

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absent</td>
<td>2. Present</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
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<tr>
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</tbody>
</table>
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   □   2. Mothiram   □
3. Muthu   □   4. Aravil Mothiram   □
5. Aravil Muthu   □   6. Mothirathil Aravam   □
7. Mothirathil Muthu   □   8. Muthil Aravam   □
9. Muthil Mothiram   □   10. Asathiyam   □
11. Mellena paraval   □

NAADI(KAI KURI)

Naadi Nithanam

149. Kaalam
   1. Kaarkaalam   □   2. Koothirkaalam   □
3. Munpanikaalam   □   4. Pinpanikaalam   □
5. Ilavenirkaalam   □   6. Muthuvenirkaalam   □
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

28. Not known

29. Padham

1. I 2. II 3. III 4. IV
**RAASI**

1. Mesam
2. Rishabam
3. Midhunam
4. Kadakam
5. Simmam
6. Kanni
7. Thulam
8. Virulchiham
9. Dhanusu
10. Maharam
11. Kumbam
12. Meenam
13. Not known

**INVESTIGATION**

**BLOOD**

<table>
<thead>
<tr>
<th>Test</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC (Cells/cumm)</td>
<td></td>
</tr>
<tr>
<td>DC (%)</td>
<td>1.P</td>
</tr>
<tr>
<td></td>
<td>2.L</td>
</tr>
<tr>
<td></td>
<td>3.E</td>
</tr>
<tr>
<td></td>
<td>4.B</td>
</tr>
<tr>
<td></td>
<td>5.M</td>
</tr>
<tr>
<td>Hb (gms%)</td>
<td></td>
</tr>
<tr>
<td>E.S.R. (mm/hr)</td>
<td>1.1/2hr</td>
</tr>
<tr>
<td></td>
<td>2.1hr</td>
</tr>
<tr>
<td>Blood Sugar (R) (mgs%)</td>
<td></td>
</tr>
<tr>
<td>Blood Urea (mgs%)</td>
<td></td>
</tr>
<tr>
<td>Serum Cholesterol</td>
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</tbody>
</table>

**URINE**

<table>
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<tbody>
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<td>Albumin</td>
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<tr>
<td></td>
<td>1.Trace</td>
</tr>
<tr>
<td></td>
<td>2.+</td>
</tr>
<tr>
<td></td>
<td>3.++</td>
</tr>
<tr>
<td></td>
<td>4.+++</td>
</tr>
<tr>
<td>Sugar</td>
<td>0.Nil</td>
</tr>
<tr>
<td></td>
<td>1.Trace</td>
</tr>
<tr>
<td></td>
<td>2.+</td>
</tr>
<tr>
<td></td>
<td>3.++</td>
</tr>
<tr>
<td></td>
<td>4.+++</td>
</tr>
<tr>
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<td>5.++++</td>
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### DEPOSITS

<table>
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<th>No</th>
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<tbody>
<tr>
<td>170.</td>
<td>Pus cells</td>
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<tr>
<td>171.</td>
<td>Epithelial cells</td>
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<tr>
<td>172.</td>
<td>RBCs</td>
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</tr>
<tr>
<td>173.</td>
<td>Crystals</td>
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</table>

### SPECIFIC GRAVITY OF URINE:

#### MOTION TEST:

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>174.</td>
<td>Ova</td>
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<td></td>
</tr>
<tr>
<td>175.</td>
<td>Cyst</td>
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<tr>
<td>176.</td>
<td>Occult blood</td>
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</tr>
</tbody>
</table>

#### X-ray - PNS

#### CT – SCAN – PNS

#### Nasal smear

#### Endoscopically guided microswab Culture