A STUDY ON
DIAGNOSTIC METHODOLOGY
OF KABA KAASAM IN THE CONTEXT
OF ENNVAGAI THERVUGAL

Dissertation submitted to
THE TAMILNADU Dr. M.G.R MEDICAL UNIVERSITY
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DOCTOR OF MEDICINE (SIDDHA)
(BRANCH V – NOI NAADAL)

DEPARTMENT OF NOI NAADAL
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13. Bibliography
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INTRODUCTION

Siddha system of medicine is believed to be developed by mudhal siddhan Lord Shiva and this system is propagated via by Siddhars. Siddhars are supernatural and spiritual saints who had an vast knowledge on matters and materials in and around universe. The wings of Siddha are flourishing in Tamilnadu still now. This is the only system which not only deals about treatment and medicine but also to attain mortality. It deals about

- Vadham,
- Vaidhyam,
- Yogam
- Gnanam.

This is the unique system which defines health as perfect, state of physical, physiological, social and spiritual well being of an individual.

They describes that the purpose of life is to attain, spiritual upliftment or immortality. For attaining immortality the barriers are disease, ageing and death.

They paved a way to treat the barriers like disease, death and ageing and confound a treatment method called Siddha Maruthuvam.

Siddhars made a holistic approach to cure disease they gave very much importance in diagnosing the disease rather to treat. They found and practiced many methods like:
- Ennvagai thervu
- Naadi
- Jothidam
- Panchpatchi

in diagnosing the disease and also for prognosis.

In ancient days though our Siddhar’s had used such Ennvagai thervu as a significant tool not only in diagnosing but also to determine the life span of the patient.

The dissemination and vulnerability to Low socio economic status and more prevalent among tropics, most contagious nature of the disease are significantly noted.

The above said Kabakaasam will become major disaster to humanity if not treated. For better treatment it should be properly diagnosed.
ANATOMY IN SIDDHA

பதிப்புத்தக 3 வமை

1. குறிப்பிட்டும்

"நாமதெ பெருமான் பெருமான் பைத்துறையிலான்
குறிப்பிட்டன் பெருமான் பைத்துறையிலான்
குறிப்பிட்டன் பைத்துறையிலான் பைத்துறையிலான்
பைத்துறையிலான் பைத்துறையிலான் பைத்துறையிலான் பைத்துறையிலான்”
- பிரித்த குமாரேந்திரி

பார்க்க தொகுத்திவிளக்காக காந்திவேலியுடன் அலுவலம்
குலாக்கிகுறிப்பிட்டும்.

2. குறிப்பிட்டும்

"சுருக்குவரும் என்று பைத்துறையிலான் குறிப்பிட்டு
வருமாறு அருக்கிப் புகையும் பானையினரும்
பிறக்கும் பானையினரும் மதிக்கத்துக்கான பானை
யுருவியடையடை யுருவியடையடை யுருவியடையடை
சுருக்கும் சுருக்கும் சுருக்கும்
பானையும் பானையும் பானையும்
- பிரித்த குமாரேந்திரி

குழந்தைகளுக்கு ஒரு முன்னமைக்கு அதிகம் விளக்கிவிளக்கு, குழந்தைகளுக்கு, அதிகம் விளக்கிவிளக்கிய
பார்க்க அந்த குழந்தை 7000

3. குறிப்பிட்டும்

கவலை அம்மன்போல்குற்றுக்கென்றும் பைத்துறை
பார்க்கும் குறிப்பிட்டு தொகுத்திவிளக்கும் தொகுத்திவிளக்கு
தொகுத்திவிளக்கு தொகுத்திவிளக்கும் தொகுத்திவிளக்கு
பார்க்கும் குறிப்பிட்டு குறிப்பிட்டு குறிப்பிட்டு
மதிக்கத் தொகுத்திவிளக்கும் மதிக்கத் தொகுத்திவிளக்கும்
- பிரித்த குமாரேந்திரி 7000
72,000

பாதுகாப்புச்சூழல் ஆக்கமாக விளக்குவியலகாதராக செய்தியாக்கப்பட்டுள்ளது.
SIDDHA PHYSIOLOGY

1. தானுருவம் : 25

புது - 5, வெளி - 5, பொறு - 5, கருடைரி - 5, நாரைகையில் - 5, பொறுக்குறி - 5
திகுப்புகள் பாதுகாக்கும்.

கொடையும் பாதுகாப்புச் செய்வதற்கான உடல் தன்மை குறுக்குடும்பதை
கார்ப்பையும், குட்பியகால குறுக் றங்கள் மீது கார்ப்பால் குறுக்குமிக்கமானே
ஆக்கப்பட்டு விடு விளக்கியாக.

2. கார்ப்பைடு - 35:

கருவில் - 4, ஆற்றிய - 1, கரு - 10, அரியம் - 5, கன்றம் -5, அல்ல 35
துணைகளைக் கொண்ட குறுக்குமிக்கம் -35 விட்டு. இது மூல்தோற்றுக்குப் பாதுகாக்கும்.

3. தென்மானக்கைது -36

ஆற்றிய - 6, பொறுக்குறி -3, பொறும்-3, சுருக்கம் - 3, பால்யூரு -3, கீரை -
3, பொறும்-2, பொறுக்குறி - 8, எம்பாக்கார் - 5 அல்லது 36ம் கருவில் குறுக்குமிக்க
கார்ப்பைடு.
ETIOLOGY IN SIDDHA

The disease of the mankind are classified under three subdivision.

1. Daivikam
2. Atmikam
3. Bhauthikam

Daivigam

Defines sufferings are by their own karma’s.

Atmikam

Defines suffering through in animate objects.

Bhautikam

Defines no one is responsible for our sufferings Adhi daivigam is considered as a main factor for today’s diseased condition. It classifies the suffering in two categories.

Pertaining to mind

1. Suffering due to mental attitude
2. Envy regarding health, wealth, beauth of other people
3. Mental stress
4. Anger
5. Too much desire towards sensual objects superiority, inferiority complexes.

Pertaining to physical body

1. Kaasam
2. Kuttam
3. Megam
4. Kunman
5. Suffering due to elements of nature from excess cold, heat, rain
6. Lighting and thunder
7. Trauma by enemic
8. Injuries by animal insects
9. Aga kaarana noigal
10. Sufferings
11. Suffering due to old age
12. Suffering due to Ignorance, death
13. Laboured delivery.
PATHOLOGY IN SIDDHA

Siddha pathology is mainly based on three humours Vali, Azhal, Iyam, which are the three vital elements which regulates all the physiological activities in their normal proportion.

When the mutual harmony between the three humours gets disturbed they bring about ill health.

Siddhars spent more attention to the disorders of these bodily elements and give a detailed description on pathogenesis of the disease.
Diagnosis of disease is important of for in any system of. Unless the diagnosis is correct. However root medicines are advised to the patient there will be no raical cure unless the root cause of it is recognised. Hence to arrive at the proper diagnosis. Eight kinds of Examination are listed above.

They are

✓ Naa
✓ Niram
✓ Mozhi
✓ Vizhi
✓ Sparisam
✓ Malam
✓ Moothiram
✓ Naadi
How to observe pulse:

The patient can also be made to sit down and then pulse of the can be observed.

The right hand in the case of males and left in case of females should be read for best result. In case of males the current visible on the right arm are bound to give trues and more accurate picture of their movements similarly the females have their feminine range on the left arm but also for the accuracy.
Again it is emphasised that for males are placement of physician finger should be in downward and for female it should be upwards.

At first the patient should be seated comfortably and his / or finger phalanges should be straightened and each of the finger should be given a stroke and the their palm should be rubbed.

The Elbow should maintained in semi flexed with the lower end of the fore arm in the mid prone portion the patient’s right wrist is held on its lateral aspect about an inch up from the wrist is held on the lateral aspect about an inch up from the wrist Join by the Left hand of the physician boldly the write between the thumb and the other fingers.

The three fingers of the physicians should be placed in such a manner that there is an interspace of half a centimeter between each finger the Index finger being at the top near the wrist joint. Middle finger and ring finger. First examine the pulse by the Index finger by slightly pressing it but at the same time not pressing the other two finger. Thus by the sense of feel by the Index finger the status of vadhadhosem is to be confirmed.

Then similarly the other two finger as tried separately as said before and the status of pitha dosha, kapha dhosa are determined by tracing pulse is these finger separately.

Thus careful study of the character of pulse were at there different place by the three finger thrice by the concentration of mind over it will aid to arrive at the proper results.

Again by feeling of big finger and small finger simultaneously denotes Bhoutha naadi.
Generally the pulse of both the hand of the patient may be observed and condition of his is here healthy may be assutaked.

**The position of three humours:**

<table>
<thead>
<tr>
<th>Humour</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vadha</td>
<td>in abdomen</td>
</tr>
<tr>
<td>Pitta</td>
<td>In chest</td>
</tr>
<tr>
<td>Selathuma</td>
<td>above neck</td>
</tr>
</tbody>
</table>

**Influence of various factors on pulse:**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Third of human life</td>
</tr>
<tr>
<td></td>
<td>Vadha period</td>
</tr>
<tr>
<td></td>
<td>Second one third</td>
</tr>
<tr>
<td></td>
<td>Pitha period</td>
</tr>
<tr>
<td></td>
<td>Last one third</td>
</tr>
<tr>
<td></td>
<td>Kabha period</td>
</tr>
<tr>
<td>Sex</td>
<td>For, women the character of the pulse have is said to be little less in case of female that to of a male.</td>
</tr>
<tr>
<td>Time</td>
<td>6 AM to 10 AM</td>
</tr>
<tr>
<td></td>
<td>Vadha period</td>
</tr>
<tr>
<td></td>
<td>10 AM to 20 PM</td>
</tr>
<tr>
<td></td>
<td>Pitha period</td>
</tr>
<tr>
<td></td>
<td>2 PM to 6 PM</td>
</tr>
<tr>
<td></td>
<td>Kabha period</td>
</tr>
<tr>
<td>Days</td>
<td>Monday</td>
</tr>
<tr>
<td></td>
<td>Wednesday</td>
</tr>
<tr>
<td></td>
<td>Vadha will be increase</td>
</tr>
<tr>
<td></td>
<td>Friday</td>
</tr>
<tr>
<td></td>
<td>Saturday</td>
</tr>
<tr>
<td></td>
<td>Pitha will be Increase</td>
</tr>
<tr>
<td></td>
<td>Sunday</td>
</tr>
<tr>
<td></td>
<td>Kabha will be Increase</td>
</tr>
<tr>
<td></td>
<td>Tuesday</td>
</tr>
</tbody>
</table>
Seasonal variation of pulse

1. Chithirai - Vaikasi
   - Pulse should be traced at sun rise.
   (mid April - mid June)

2. Aani - Aadi, Aipasi
   - Pulse should be traced at noon.
   Karthigai (mid June - mid denthee)

3. Aavani, Purattasi and Panguni
   (mid August – mid October) - pulse should be traced at night
   (Mid march – mid april.)

Among the 8 foldes of examination used to the purpose of diagnosis of dasa Naadi is consider to be the best and the most reliable factor and the siddha physicians work expects in this and could predict the complaints perfectly without any Interrogation or further examination. As days passsed on gradually the physician totally neglected this and with the results we can say that the original genuiue practical aspects of this previous art almost disappeared. The art of pulse ready is a completed. Process and completely differs from other system. It cannot be scientifically taught, but it is understood by developing the mutual faculting and meditation of mind and a clear understanding of the relation ship between the human and the summary nature. (Anda panda thathuvam.)
தொகுப்பு பரிசு

குறிப்பிட்டு என்ன வாரிகள் எனது

குறிப்பிட்டு வாரிகள் எனது பின் பினால் வாரிகள்

பார்வையுடன் வாரிகள் எனது

பார்வையுடன் வாரிகள் எனது குறிப்பிட்டு

நூற்றாண்டின் தலைவாரிகள் எனது

நூற்றாண்டின் தலைவாரிகள் எனது குறிப்பிட்டு

முந்தி மறு மறு மறு கருதம்

முந்தி மறு மறு மறு கருதம்

பார்வையுடன் வாரிகள் எனது நூற்றாண்டின்

பார்வையுடன் வாரிகள் எனது நூற்றாண்டின்

முந்திய குறிப்பிட்டு குறிப்பிட்டு குறிப்பிட்டு

முந்திய குறிப்பிட்டு குறிப்பிட்டு குறிப்பிட்டு

முந்திய குறிப்பிட்டு குறிப்பிட்டு குறிப்பிட்டு

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மரக்கத மரக்காது மரக்காதா
பதினேருந்து

பாதுகாப்பு

பாதுகாப்பு மக்களின் வாழ்க்கை வருமானம்

அருகில் முதுமுறை காணப்பட்ட பாதுகாப்பு

ரோஜாலினா சுல்குபாதம் பிரியத்தில் உறுப்பினர்

சீனாவில் பிரம்மா பாதுகாப்பு

நோய் குறைவு செய்ய பாதுகாப்பு நோய்க்கை

பாதுகாப்பு பாதுகாப்பு வெளியிட்டு நோய்க்கை

பாதுகாப்பு வெளியிட்டு நோய்க்கை

காரணமாக நோய்க்கை பெறியது

நோய்க்கை நோய்க்கை பெறியது

நோய்க்கை நோய்க்கை பெறியது

பாதுகாப்பு பாதுகாப்பு நோய்க்கை

பாதுகாப்பு பாதுகாப்பு நோய்க்கை

பாதுகாப்பு பாதுகாப்பு நோய்க்கை

பாதுகாப்பு பாதுகாப்பு நோய்க்கை

மாற்றாக நோய்க்கை பெறியது

பிரியத் தேராய்க்கை கைவை காரணமாக

சுல்குபாதம் பிரியத் தேராய்க்கை

சுல்குபாதம் பிரியத் தேராய்க்கை

சுல்குபாதம் பிரியத் தேராய்க்கை

சுல்குபாதம் பிரியத் தேராய்க்கை
குறிப்பிட்டு, மற்றும் மற்றும் மற்றும்

பதிக்கும் மற்றும் மற்றும்

மனைவன் பதிக்கும் மற்றும்

மாருந்தை மற்றும் மற்றும்

மருந்தை மற்றும் மற்றும்

மருந்தை மற்றும் மற்றும்

மருந்தை மற்றும்

- மாருந்தை மற்றும்
- மாருந்தை மற்றும்
- குறிப்பிட்டு
- குறிப்பிட்டு
- குறிப்பிட்டு

குறிப்பிட்டு மற்றும் மற்றும்

குறிப்பிட்டு மற்றும்

குறிப்பிட்டு மற்றும்

குறிப்பிட்டு, மற்றும் மற்றும்

மாருந்தை மற்றும்

மாருந்தை மற்றும்

மாருந்தை மற்றும்
AIM AND OBJECTIVES

- To study the significance of Envagai thervu in diagnosing kabakaasam
- To review the literature about etiology premonitory symptoms classification naaadi nadi
- To Evaluate the Etiopathogeneis of Kabakaasam
- To find the Astrological significance responding the prevalence of the disease.
- To find the significance of Manikadainool
- Comparative study of Manikadai Nool with body mass Index of patient suffering from Kabakaasam.
- To study the Incidence of kabakaasam in relationship with kaalam, Nilam, ozhukkam.
- To use the modern parameters to confirm the diseases.
Siddha medical science includes subjects like philosophy, Alchemy, Psychology, Astronomy, Astrology etc.,. There are several treatise in Tamil known as ‘Siddhar Tatwa katalai’ which enumerates 96 basic constituent principles in nature. Human body both the physical and the subtle is made up of 72,000 Naadi Narambugal and 7 vital chakkaram the three Important Mandalam being sun, moon, fire, then 10 vital air (prana) and 10 vital. Naadi the first three namely

1. Idakalai
2. Pingalai
3. Suzhumunai

Breathing is a manifestation of vitalizing force called pranan. The air we breathe is in physical air is sthula air. By doing pranayana over the physical air Inhaled, the subtle air is controlled. This way of controlling breathing is known as vaasi it will prolong life.

It has been said that during Normal breathing cycle human body is not utilizing the full energy.

Pranayama is a kind of ecosteric breathe (pranan) which means the assimilation of the universal energy by human system.

Kabakaasam is one of 6 major disease which affects the pranan. In both sthula and sookuma body.
ELUCIDATION OF DISSERTATION TOPIC

- Pulmonary symptoms

- Breathing
- Inhalation
- Exhalation
- Expectoration
- Cough
- Emaciation
- Difficulty in breathing

- Cause

- Symptoms

- Patients

- Inhales

- Emaciation

- Breathe

- Life

- Inhale

- Inhales

- Increased
<table>
<thead>
<tr>
<th>Tamil</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>குருட்டுறையும்</td>
<td>(Lower abdomen)</td>
</tr>
<tr>
<td>மைன்எதுறையும்</td>
<td>(Beauty)</td>
</tr>
<tr>
<td>பாதரமுறையும்</td>
<td>(Destruction)</td>
</tr>
<tr>
<td>உட்புறும்</td>
<td>(Physical Body)</td>
</tr>
<tr>
<td>மருவையும்</td>
<td>(Emaciation)</td>
</tr>
<tr>
<td>குருவுறையும்</td>
<td>(fever)</td>
</tr>
<tr>
<td>தின்மசுத்துறையும்</td>
<td>(Giddiness, Confusion of the mind)</td>
</tr>
<tr>
<td>தின்மசுத்துறையும்</td>
<td>(Vomiting Nausea)</td>
</tr>
<tr>
<td>நாருகண்டத்துறையும்</td>
<td>(Irritability)</td>
</tr>
<tr>
<td>குருட்டுறையும்</td>
<td>(Physical character of human body)</td>
</tr>
<tr>
<td>பாதரமுறையும்</td>
<td>(Phlegm)</td>
</tr>
</tbody>
</table>

One among three Humours of the body.
**Pthisis**

**Consolidation**

Phlegm

(cataract of the eye)

Cough

* T.V. 呼吸器炎孟

** 咳嗽 肺炎

*** 雾状 肺炎 静止

**** 干性 肺炎

Characterized by cough with Expectoration

Accomplished with increased in respiration with difficulty in it

To compensate this condition Indigestion Results in

Increase in Loss of appetite weight or Emaciation

Accomplished with fever and giddiness

Mental confusion with Nausea.
And Tiredness, Lassitude all over the body.

This feature Explains silethuma kaasam

**Kaba Kaasam is characterized by**

1. Cough with Expectoration
2. Increased respiration
3. Difficulty in Breathing
4. Indigestion, and loss of appetite
5. Loss of weight
6. Fever
7. Giddiness
8. Vomiting or Nausea
9. Mental Irritability
10. Lassitude.
REVIEW OF LITERATURE

History

In the context of the research, a thorough review of the literature was conducted. Various scholars have contributed to the understanding of the topic. Among them, Dr. X and Dr. Y have made significant contributions. Dr. X's work on the historical context of the research topic is particularly noteworthy. Dr. Y's analysis of related studies has provided a comprehensive understanding of the research question. Further, Dr. Z's critique of the methodologies used in previous studies has enhanced the research framework.

In conclusion, the literature review has provided a solid foundation for the research. It has highlighted the gaps in the existing research and has paved the way for new avenues of investigation. The findings of this review will be incorporated into the research methodology to ensure a robust and comprehensive exploration of the research question.
Classification of kaasam

1. மாநகர்குறுகம்
2. மறைவு குறுகம்
3. செய்திக் குறுகம்
4. குடியிருப்பிடம்
5. கார் குறுகம்
6. சோதனைக் குறுகம்
7. பகுதிக் குறுகம்
8. வாழ்க்கைக் குறுகம்
9. உறுப்பு குறுகம்
10. மாநகர் குறுகம்
11. மாத மாதிக்கு காயம்
12. பாதிக்கு காயம்
13. பாதிக்கால் காயம்
14.காணை காயம்

- சத்ரகரசரசரோ காயக்கிளையில் (ப.147)

காயம்

1. மாத காயம்
2. பிக்குக்கால் காயம்
3. கப காயம்
4. கொண்டுச் காயம்
5. கொண்டுக்கால்

- காற்றொல்வியே காயக்கிளையில் மூன்றாண்டு (காய - காயச் வைரஸ்)

அந்தக் கொள்கை காயக்கிளையில் 5 பாதிகள்

1. மாத பாதிகள்
2. பிக்குக்கால் பாதிகள்
3. கப பாதிகள்
4. மாத பிக்குக்கால் பாதிகள்
5. கொண்டுச் பாதிகள்

தீர்மானம் அகிலப்பெரும் விளிம்புகள் - 12

➤ பிக்கு காயம்
➤ பாதிக்காலம்
➤ பாதிக்காலாக காயம்
➤ பிக்குக்காலாக காயம்
➤ பிக்குக்கால் காயம்
➤ கப காயம்
➤ பிக்குக்கால்
➤ பாதிக்காலம்
➤ மாத காயம்
➤ பாதிக்காலாக காயம்
➤ பிற்று காசம்
➤ பிற்றுவய காசம்
➤ புழக்கம்
➤ குருட்சம்
➤ பொருளாதார காசம்.

4. மாதிரிவிளக்கங்கள் - கைகள் - 5

1. மாதிரிவிளக்கம்
2. பதுக்குக்காசம்
3. புதுக்குக்காசம்
4. புதுக்குக்காசம்
5. புதுக்குக்காசம்

பாகத்தின் வருடம் - க்காசம் - 5

Pg - 130 (4448 எழுத்துகள்)

444 எழுத்துகள்

- காசம் - 40 மண்டல (1 Book of Indian medicine)

சித்ராக்கின் கவருத்தம் - 5 - மண்டல -

1. சித்ராக்கின் கவருத்தம்
2. பின்னக்காசம்
3. சிலியாக்காசம்
4. காசுக்கைகள் - I
PREMONITORY SYMPTOMS

As per குறிப்பிட்டும் வருமான சரணாலாம்

1. செலுத்தல் காத்துப்
2. மேம்பாட்டு
3. அழிபாடு விளைப்பட்டாம்.

காரணிகளின் பணம்புறை

“அத்தியே மதிப்பு கிராமத்தில் பக்தர் வரவு நிறுவத்து
காட்சி விளையாடும் குறிப்பிட்டிட விளங்கும்
நிலைத்துடன் குறுக்காள்றி குழுவால் பக்தர்களின்
அனுமதிக்கப்பட்டு வந்தப் பெரும் நிலையாட்டுக்கு வருக”

காரணிகள் 2 குறிப்பிட்டும் தமன்றன் போன்றை குறிப்பிட்டிடும்
பின்னர் காட்சியால் குறுக்காள்றி குழுவால் முழுவதுடன்

As per நிறுவ விளக்கம் சரணாலாம் - 93

கீழுள்ளவற்றுக்கு காண்பது நோய் வண்ணதிடு
கோண விளக்கத்தின் பக்தர் நிறுவ
கீழுள்ளவற்று நோய் வண்ணதிடு நோய் வண்ணதிடு
சரணாலாம் நோய் வண்ணதிடு
பின்னர் மக்களால் வந்துமிகுத்து வந்துமிகுத்து
மற்றும் அனைத்து இடைநிலை
பத்தாற்றை முதிக்கு காண்பது காண்பது
சுற்றுமையிலானது சுற்றுமையிலான
பத்தாற்றை விளக்கம் காண்பது காண்பது
செலுத்தல் கோணநிலையின் தொகுதி கோணநிலையின்
செலுத்தல் கோணநிலையின் தொகுதியின்
பார்க்க விளக்கம் பிளங்கிவிச் பார்க்கல்வது

கட்டுப்பாடு தேர்தல் நடுவேண்டும்

பார்க்க விளக்கம் பிளங்கிவிச் பார்க்கல்வது

பார்க்க விளக்கம்

திட்டமும் விளக்கிவிச் திட்டமும்

பார்க்கல்வது:

அவர்காக பரிசெய்த விளக்கம் பார்க்க விளக்கிவிச் பார்க்கல்வது

திட்டமும்

✓ பரிசெய்தம்

✓ விளக்குமன் குறிப்பிட்டு

✓ அக்கேற்றுப் போய்விட்டு

✓ முழுமத்

✓ விளக்குமன் புகழ்த்து

✓ அக்கேற்று

✓ முழுமத் அம்மன் குறிப்பிட்டு

✓ குறுக்கு விளக்குமன் குறிப்பிட்டு

அக்கில குறிப்பிட்டுக்கானது

பார்க்க அரங்கம்

As per விளக்க வரல் விளக்காக்கம் பார்கல்வது

1. விளக்க வரலாறு வேளாணிக்க விளக்க வரலாறு குறிப்பிட்டு

2. விளக்க வரலாறு

3. விளக்க
4. கொர்கள் உள்ளடக்கம்
5. பின்புறணைம
6. பின்னம
7. உளவர் உள்ளடக்க நேரப்பினம் அதிக காலம், மணி, காரிய, தானம் போன்று செயலிலாக கேட்கப்பட்டுள்ளது உள்ளடக்கங்கள்.
8. சிலோசல்சா முறை உள்ளடக்கம் படுத்தும் செயல்
9. பல்லவரின் விளக்குடை தொடர்காலம், தொடர்காலம் வரும் நூற்றாண்டுகள், காலநிதி விளக்குடை அதிகம் தோன்றும் தொடர்காலம் இன்னும் தோன்றும் பல்லவரின் விளக்குடை தொடர்காலங்களும்.
10. இரண்டு உள்ளடக்க நிரல் அடுத்து பார்க்கும் என்றுடன் இணைத்து பார்க்கும் முறையும்.
11. பள்ளிகருவியான கொர்கள் கருவி, உளவர் உள்ளடக்க தொடர்காலம் நேரப்பினம் போன்று, கேட்கப்பட்டுள்ள தொடர்காலம் வரும் நூற்றாண்டுகள், காலநிதி வைத்து தொடர்காலம் இன்னும் தோன்றும் போன்று கொர்கள் கருவி
12. குறிப்பிட்டு சொன்ன, பின்னம் அறிவிப்பு முறையும்.
13. இரண்டு உள்ளடக்கம் பார்க்கு முறையும் கேட்கப்பட்டு தொடர்காலம்
14. பொதுக்குறிப்பிட்டு பார்க்கும்.
15. கெடைபாடுகள்.
16. மேல்படுத்து பார்க்கும்.
17. முறையே அடுத்து.
18. எடைப் பார்க்கும்.
19. முறையே பார்க்கும்.
20. இரண்டு உள்ளடக்கம் அடுத்து பார்க்கும்.
21. சிலோசல்சா பார்க்கும்.
22. குரக்க மச்சலம்.
23. சது நிலைமுனை.

- நீரானையும் நீக்கம்

**Symptoms**

**சிறுத்துறைஞ்சல்தொடர்கள்**

As per தொடர்தொடர்ந்துச் சாகம்

1. மார்மு - தகவல் மார்மு
2. மண்டலக்குருக்குரு - உரியல் மீனநிலைகளை
3. மார்மு
4. கிளிருந்துறைஞ்சல்
5. கொரெட்டு பரார்த்த துயர் நெடுங்கை

சிறுத்துறைஞ்சல்தொடர்கள்/சோதநிலை நிலைப்பு பார்வையை தடைப்பை கூட்டி
கலின் நிலை விலைநிலை குறியீட்டின் எழுத்தை வார்த்தைகள்

மருந்தநிலைமுனை - 62

**SYMPTOMS**

As per சோதநிலைகள் சாகம்

மார்மு சிறுத்துறைஞ்சல்தொடர்கள்/சோதநிலை, கலின் தடைப்பை கூட்டி
கலின் நிலைப்பு, பார்வையை தடைப்பை அசாதனிக்குகோள் மீனநிலை
பார்வை கணேற்று விளைநிலைத்தொடர்களை நீர்த்தொடர் அசாதனிக்குகோள்
மார்மு எடுக்கும் விளைநிலை சாகம், கலின், குறு அகழ்வு காற்று
அத் அகழ்வு அசாதனிக்குகோள் விளைநிலை, குறு அகழ்வு காற்று.
As per கலையுறுதியான விளக்கம்

பாதியான பதமாய்வின் பின்னர் வந்து விளக்கத்தை, குறிப்பிட்டு

வரையறை விளக்கம் கம்பம் கம்பத்தை குறாக்கியபடி

கூறும்படி விளக்கம் குறாம்படி கவன விளக்கம்

தர்க்க கருத்துக்கூட்டு குறாம்படி கவன பயன்

தொண்டு வந்துகிய விளக்கம் குறாம்படி விளக்கப்படுத்து

பாதிக்கப்பட்டு விளக்கம்

பாதிக்கப்பட்டு விளக்கம்

குறுக்கு விளக்கம் குறாம்படி

திருப்பதியே விளக்கம் சடந்து கூறியது. திருப்பதியே விளக்கம் குறாம்படி,

மாநிலம் பாதிக்கிய விளக்கம் பற்றிய பாதிப் பாதிப், விளக்கம் பற்றிய, வேதாதிகம் சிறுகீ

சிறுயார்களின் முறையில் குற்றக்கூட்டு தொண்டு வந்து செய்யப்படும் விளக்கம்

தொண்டு வந்து குறாம்படி பிரிவில் விளக்கும் குறாம்படி விளக்கப்படுத்து

சிறுநிறுவன வருடம்:

பாதிப்பு, கலைடிவு விளக்கம் பிரிவில் விளக்கும் விளக்கம் கூறும்படி

சிறும்பபுரை பயிற்சிக்கான அற்றுக்க, பாதிக்கிய விளக்கம் பற்றிய,

அறைக்காண, அந்த முறையில் விளக்கம் விளக்கம், பாதிப்பு விளக்கம்

சிறுநிறுவன வருடம்

சிறும்பபுரை பயிற்சிக்கான அற்றுக்க, பாதிக்கிய விளக்கம் பற்றிய

சிறும்பபுரை பயிற்சிக்கான அற்றுக்க, பாதிப்பு விளக்கம் விளக்கம், குறாம்படி

சிறும்பபுரை பயிற்சிக்கான அற்றுக்க, பாதிப்பு விளக்கம் விளக்கம்.
AETIOLOGY

1. As per Sarangapani - 61

As per Sarangapani (Authors in Tamil), etiology of the disease is discussed in the following manner:

2. As per Sarangapani (Authors in Tamil)

As per Sarangapani (Authors in Tamil), etiology of the disease is discussed in the following manner:

3. As per Sarangapani (Authors in Tamil)

As per Sarangapani (Authors in Tamil), etiology of the disease is discussed in the following manner:

4. As per Sarangapani (Authors in Tamil)

As per Sarangapani (Authors in Tamil), etiology of the disease is discussed in the following manner:
காலனி

செயல்கலன் ஆக்கம்

சுருக்கியக் கலனில் புகழ்வற்ற

1. நூர்ம
2. அமர்ப்ப மாணவ பக்கத்
3. மூன்றிகள், குறுக்கில் கையில், மாணவ, பாணி, கடவு
4. விளக்கம், விளம்பம்
5. மாணவுக்காக மரணத்தை
6. காப்பாரை
7. சூத்திரம்
8. மண்டலம்
9. குழு

இசைவிதம் நைலஸ் ராஜ் காலனி (கடவு குறிப்பிட்டு)

கலனி நைலஸ் ராஜ் காலனி, கர்நாடகா, ஜார்க்கான், கன்னடக் கல்வி மாணவுக்களிடையே நைலஸ் ராஜ் காலனி, மீறிப்பிட்டு சக்திகரமாய்யும் நைலஸ் ராஜ் காலனி பிறந்து வந்து சான்ந்தியாளரும் நைலஸ் ராஜ் காலனி சான்ந்தியா.

துணை விளக்கம் கலனின் கோவிலுக்கு விளக்கம்

சுருக்கியக் கலனில் காந்தியம் மாலை

சான்ந்தியாக சுருக்கியக் கலனி கண்டு கிடை

சுருக்கியக் காலனி சுருக்கியக்

- காலனி குறிப்பிட்டு
Asper உயிரியைக்குறிப்பு - 61

குறுக்குதொலுரை ரீதியான முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை

பியோசோக்கோ முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை

Asper முழுநோட்டு காலம்

சிலைத்தோன்று அறிவுக்குறிப்பு பொருள்தோன்று பொருள்தோன்று

மேற்குத் புரோசோக்கோ முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை குறுக்குதொல

Asper முழுநோட்டு காலம்

சிலைத்தோன்று அறிவுக்குறிப்பு பொருள்தோன்று பொருள்தோன்று

மேற்குத் புரோசோக்கோ முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை குறுக்குதொல

Asper முழுநோட்டு காலம்

சிலைத்தோன்று அறிவுக்குறிப்பு பொருள்தோன்று பொருள்தோன்று

மேற்குத் புரோசோக்கோ முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை குறுக்குதொல

Asper முழுநோட்டு காலம்

சிலைத்தோன்று அறிவுக்குறிப்பு பொருள்தோன்று பொருள்தோன்று

மேற்குத் புரோசோக்கோ முழுநோட்டுக்கேள்பாளர் குறுக்குதொலுரை குறுக்குதொல
தினங்களோடு, மிகவும் அனுப்புக்கான காம் (குறுக்கு) நிகழ்ந்த கீழில் தான்கிக்காம். பொருள் நகரியும் நாளிலோம் விளக்கம் கவனிக்காதீருந்து அறக்கட்டளை உறுதியாக நம்பிக்கை மத்தியாரனுக்கு கூறும் கல்வி அவர்கள் கண்டுபிடிக்கிறது. அதிகம் கூறும் நாளிலோம் விளக்கம் கூறும் கூறைநூற்றாண்டுகள் பெரும் கால கனவைகளாக கருதப்படுகின்றன. நீர்நிலை போல் வில்லியம் பிளாட்னியை வரா எனினும் காலத்தை கருதும் காரணத்தை அமையினார்.

- நீர்நிலை போல் II பாகம்

நம்பிக்கைப் புரிந்து கூறினர், காலத்தில் எதற்கு அர்ப்பனை, அந்தந்த குறுக்கு வெளியில் அம்வாற்றுக நோவோ கூறினார் கருதும் காரணத்தை அமையினார்.

As per குறிப்பிட்டு நோய்

நல்லால் பதில்பாக வெளியில் பிளாட்னியை வரா எனினும் நீர்நிலை போல் விளக்கம் கூறும், வெளியில் எதற்கு விளக்கம் கூறுகிறது. காலத்தை கருதும் காலத்தை எனினும் விளக்கம் கூறும் ஸ்பீசு வெளியில் விளக்கம் கூறுகிறது.
PATTERNS OF NAADI IN KAASAM

1. உள்ள பாதைகளும் பூச்சிய காத்திருக்கும்

2. இன்னொரு குறிப்பிட்டு போன்ற நாட்டை இன்னும் காணும்

3. அதற்கான குறிப்பிட்டு என்று வேளாண்டும்
4. சுமார் குறிக்கும் பாடல்

சோனம் தொன்னுறு நைக்குரும்.

- நூற்றாண்டு மாதம் திசையாழ்வாம் பாடல்

5. கம்பலன்னு கச் காணம் கராத்து

6. ஆரபன்கு காணல் காரணிகாக

As per Agasthiar Naadi Nool Sasthiram

பிள்ளை கால்

கட்டுமுடிய பார்க்கும் விளையாட்டு கதவுக்கான என்ன என்று

This lines denotes the play of Pitha Naadi Like movent of ant
The play of pitha Naadi like Kaudhari bird denotes the Sayakaasam

Characteristics of slerpena pulse

The disease which arise due to Kabaneer were sleppana 96, cough, eelai, Bronchitis, gout, tuberculosis.

The Sight of slerpanam

While reading the pulse if the selappanam pulse run rapidly the patient will have swelling. Fever with shivering, laziness, manthara kaasam, wheezing, cough vomiting tuberculosis. Occurs

The slerpena Joining the pitham

Back act with above as if impact to sanguvarman has occurred sprain, pain tuberculosis. Disease like sinusitis clotting of blood, Jaundice and except heat will appear pulse reading thanuology – 51. By

But the science of system biology today rooted in genomics clearly appreciates the concept of vadha, pitta, kabha prakruti which are correlated with genotypes as they are Innate Constitutional character present at birth itself is based on the Influence of Environmental factor kala vannai, Thega vanai.

The extension of this concept is the area of Noi Nidhanan or diagnostics, method, unique to our system of medicine.
In our literature the stages or conditions which are curable with greater efforts and not curable had dealt in detail.

The social cultural scientific and spiritual components of siddha science are slowly getting separated and jettisoned from the medical practice and it is very difficult for our medicine to be accepted by the society without these understandings.
ASTROLOGICAL REVIEW FOR KASAM

1. கிரியைக் கிளக்குத்துவம், குருக்குக் கல் தவறுத்து தெற்குத் தானேயில் காரணமாக அலங்கரிக்காமல்

2. பட்டால் விழிக்கிறோம் 6-ஆம் சூரியனின் இந்த விளக்கம், இன த்ரிபீதி

3. சது, குருக்கு, நிரந்தரமாக கல்லு, ஒருவர் வைத்து தானீகித்து

4. 6-ஆம் சூரியன், பஞ்சம் கிளக்கு குருக்கு பார்க்கு காரணமாக காணும்

5. பஞ்சம், குருக்கு இல்லாதே அம்மாள் விரித்து செல்வத் தந்தி, திவ்யம் நீதியாக

6. 7-ஆம் சூரியன் திவ்யத்து செங்கரமாக.

7. "பஞ்சம் பார்க்கு காரணத் தானியம்"

8. கிரியைக் கிளக்குத்துவம் கிளக்குத்து

9. 6-8-12-ஆண்டு கிரியைக் கிளக்குத்து, பல்வேறு சூரியனின் இந்த விளக்கம், பிள்ளை

10. கிரியைக் கிளக்குத்து -6-ஆண்டு பல்வேறு சூரியனின் காரணத் நீதியாக.

11. கிரியைக் - 10-ஆண்டு குருக்கு 7-ஆண்டு பல்வேறு சூரியனின்

12. குருக்கு கிரியைக் கிளக்குத்து காரணத் நீதியாக

13. 12-8, 6 - குருக்குக் கிரியைக் பல்வேறு சூரியனின் இந்த விளக்கம்

14. 6-ஆண்டு சூரியன் திவ்யத்து காரணமாக காரணமாக அம்மாள்
15. குழல் குழக்குத்தியுடனும் ஆண்டு தின்மில் குதிகள் இறுதியும் காந்தியில் மேட்டு, தாரியூம், எச்சியா பாலி பாப்பெண்
16. பட்டா - 6-ம் குதிகள் பாலியூம் கால் இறுதியும் 1 இறுதியும்
குண்டியது கிரியூம் அரசியூம் கால் இறுதியும், உச்சியூம் பாலி
இறுதியும் மற பாலியூம் பாலியூம்
17. குதிகள் தின்லிங்கள் 1-ம் குழல்பாலியால் பாலியூம் கிருத்தியூம்
கால் குழல் குழக்குத்தியுடனும்
18. கிரியூம் களிசு பாலியூம் குதிகள் இறுதியும் கால் இறுதியும்

19. குதிகள் குழல் குழக்குத்தியுடனும் பாலி இறுதியும்

20. 8-ம் கிரியூம் கால் வளர்ந்து குதிகள் இறுதியும் நிறுத்து பாலி

21. குழல் குழக்குத்தியுடனும் பாலியூம் கிருத்தியூம் கால் இறுதியும்

22. 6-ம் குழக்குத்தியுடனும் குதிகள் இறுதியும் கால் இறுதியும்

23. 6-ம் குழல் குழக்குத்தியுடனும் பாலியூம் கால் இறுதியும்

24. 6/3/12 வரை குழல் குழக்குத்தியுடனும் குதிகள் இறுதியும்

25. குழல் குழந்தைக் கையூட்டும் ஒன்றுக் கையூட்டும்

26. பாலியூம் - கிருத்தியூம் கால் குழந்தைக் கையூட்டும் ஒன்றுக்

27. பாலியூம் - குழல் குழக்குத்தியுடனும் குதிகள் இறுதியும்
28. பிறந்தவரின் வயது மூன்று வருடம் பிறத்திலும் பாரம்பரிய வேளில் அந்தப்பட்டவில் நோய் பந்தியலை மீண்டும்

29. பிறந்தவரின் புது பிறந்தவரின் வேளாளர் குழுவரை கொண்டார், கழைக்கு
வரும், கவரிக்கப் பெருப்பும் பாரும் நேரடிக்கொள்ளும்.

30. கி.கேதிற - கால்வீரின் புது வேளாளர் குழுவரை வந்தார், கிருட்டிக்கு
பாரும் நேரடிக்கொள்ளும்.

31. கி.பீதிற - கிமுக்கள் விளக்கத்தில் குழு பெருப்புகளின் கால்வீர் விளக்கத்தில்
கிருட்டிக்கு வந்தார்.

- புதியவரின் வேளாளர் கிருட்டிக்கு
AETIOPATHOGENESIS

Abstinence of food, putrid intake of food, intake of excess non vegetarian food and excess indulgence in sex are identified as the aetiology of kabha kaasam.

Abstinence of food:

The pathogenesis is as follows, Missing of food for any time well result in increase in Anar pitham within the stomach.

Putrid food and Non vegetarian food:

The pathogenesis is of the same in both the aetiologis the of these creates mandham where three is a complex of increased Kledhaga kabham with decreased Anar pitham is found.

Excessive Indulgence in Sex:

Its pathogenesis is purely combination of Pitha humour with uttinam. The increased pitha humour then liquefies kabham producing respiratory symptoms in the kabha area.

These humours are carried by vyaanan vaayu, one of the vaayus of vaadham to the seven bodily humours. The seven bodily humours are deranged one by one producing the symptoms the disease kabha kaasam.
ETIOPHTHOGENESIS OF KABA KAASAM

Abstinence of Food
Ingestion of Putrid Food
Ingestion of Non veg food
Excess Indulgence in sex

Inhalation of smoke’s

Reduction in prana / (platform for micro organism to culture) / Lung Infections
Formation of Analpittam
Kledhakaba complex

Mandhagini

Triger’s
uddhanavayu /
Cough, dyspnea,
vomiting)

Reduced viyanan

Poor

Rasa formation (tiredness)

Fever (Loss of appetite)

Poor cenner (Anaemia)

Reduced function of Oon

Reduced function of kozhuppu

Reduced function of Enbu

Reduced Function of Moola

Reduction of Sukkilam

Reduction of Oojas

(Emaciation)
PATHOLOGY OF KABAKAASAM

Due to Dietary habits and karmic aetiology heat accumulates in moolatharam. This results in increase of ushana in Pitha. Pitha has the property of diluting and liquefying things which joins with it. This pitha, ushanam is the prime cause for the pathogenesis.

This factor triggers 2 sequales

1. Pitha accumulation in kabha region
2. Kabha accumulation in Pitha region

In kaba Region, pitha accumulates and inflammatory reactions occurs producing premonitory symptoms (POORVA ROOBHAM). This is the seed factor for the growth of microbes.

In Pitha Region:

Pingalai, praanam, Abdomen and eyes etc are pitha’s dwelling place. Kabha vitiates within these places and reduces Pitha,

- Decreased praanan affects the lungs. Reduced pitham is the soil factor for the growth of in microbes.
- Decrease praanan delays the digestion process.

Analpitham and increased kledhaga kabham along with samana vayu results in limpropee digestion forming Aamam.


Aamam formation is followed by destruction and reduced function of seven udal thathukal resulting in emaciation of the body.
DETAILED PATHOLOGICAL VIEW OF KABAKAASAM

புகழ் பொய்க்கல்கினியைத்
சவார்கில் கேம்பூரியைத்
காம்பூரியைத்

பிறந்தகருளுருகம் தன் நீர்கண்டம்

சிறந்த பொணர்வாசன
செல்குரம்

பொணரும் பட்டியல் |
செல்குரம்

சவார்கில்
செல்குரம்

பொணரும் பட்டியல் (புரூட்டம்)

1. பொணரும் பரிவாய் (பிள்ளை)

செல்குரம்
செல்குரம்

(Seed factor)

2. பொணரும் பரிவாய் (பிள்ளை)

செல்குரம்
செல்குரம்

(Seed factor)

3. அனைத்தின்பு + கிளோகேம்

சமூகப் பரிவாய்

செல்குரம்

அனைத்தின்பு மருத்துவம்

செல்குரம்

செல்குரம்

மருத்துவம்

அம்மு செல்குரம்

அம்மு செல்குரம்

அம்மு செல்குரம்

அம்மு செல்குரம்

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Fate of the disease

+ பிடிகும் முன்முறை

= கம்புமை மேற்கு

= கம்புமை மேற்கு

= பிடி கம்புமை மேற்கு

= மேற்கு மேற்கு
As the author had discussed earlier that Pitha humour with uttinam is the causative factor, the fate of the disease turns our when the kabha humour is triggered. It forms two combinations pitha with kabha as pitha kabha, kabha pitha. We have text reference in Siddha, that Pitha kabha as a curative sign and kabha pitha as hardly curable sign. These two combinations are off good prognostic value.

If the combination turns with vadham as kabha vaadham vaadha habham, it turns fatal. I have done these interpretations from Naadi Nadai and Neerkuri & Neikuri.
THEORETICAL VIEW OF THE DISSERTATION

ANATOMY AND PHYSIOLOGY OF RESPIRATORY SYSTEM

Kaba Kaasam is the disease of respiratory system, so the author starts with better understanding of respiratory system both in Siddha and modern science.

Our body is made up of five elements. There in Several Combination of anatomical structures for its functions.

The anatomy of respiratory system in Siddha is

\[ \text{\textit{அஹ்மத்தூ}} = \text{\textit{மேல்வா}} + \text{\textit{திரி}} \]
\[ \text{\textit{மில்வா}} = \text{\textit{திரி}} + \text{\textit{சாப்பு}} \]

Our whole Respiratory tract is born from the dhathu maamism and Raktham.

The physiological functions are done by 3 humours,

1) Vadham
2) Pitham
3) Kabam

The Physiological functions of Lungs are carried by avalambagam which is the fundamental factor for respiration and Circulation.

From Yugi’s saying

“இவான்னை விழந்துகொள்ள கிழப்புகே கோவன
பர்வால் கல்லாக்கி குது குில”

Lungs & Respiratory system’s comes under pitha’s Region. Where Avalambagam which is Prime Kabham which does the function of respiration. Any dearrangement in Avalambagam and pitham it will cause disease.

Lymphatic drainage through which any antigens / microbes / toxini, are taken to Lynephnodes or to other Lymphoid tissues. Where the Lymph is filtered from the bone narrow Lymphocyte are taken to thymus
gland and maturation of T Lymphocyte takes Avalambagakapham provides their function to the body.

**UDAL Vanmai** is the protective the body can be group under kapham, which in turn is formed by integration of earth, water element

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Nilam + New
    ↓
Kabam
    ↓
Udal Vanmai
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Udal vanmai is the pure essence of seven Udal thathu which is said to be strength. This strength shield all thathu, it encourage all physical activities to continue undisturbed and motivates Internal external organ to perform their respective function udal vanmai is the Immunity, resistance power to prevent the onset of disease.
TUBER CLOUSIS

Who is at risk of contracting TB?

Anyone can contract TB, especially if they are in a closed space with the affected person. The unaffected person inhales droplets with bacteria and these bacteria reach the lungs. Here, the immune system puts up a fight against the bacteria. If successful, the bacteria will remain in the lungs but in a “latent” form. If the immune system is unsuccessful in containing the bacteria, then an active case of TB can develop. Once the bacteria invade the body and overwhelm the immune response of the body, they can also find their way to various organs through the blood stream.

Signs and Symptoms of TB

People with a latent TB infection don’t have any symptoms, don’t feel sick and cannot infect others. They do, however, test positive to the Mantoux Skin Test. Treating latent TB is important since it can get activated, especially if the immune system is weakened for any reason, including nutritional deficiencies or infection with HIV.

In the case of an active infection, signs and symptoms vary according to the organ that is affected.

In case the lungs are affected, the symptoms are:

- A cough persisting for 2 to 3 weeks and beyond, which is usually worse in the mornings
- Chest pain
- Blood in the sputum (the mucus and saliva produced when coughing or clearing throat)
- Breathlessness

Back pain may be caused by tuberculosis of the spine, and blood in the urine may be caused by tuberculosis in your kidneys.
TB in the brain can cause headaches, a stiff neck, confusion, vomiting, an altered mental state, seizures and other signs and symptoms related to the nerves.

In general, a person with active TB in any organ may have these signs and symptoms:

- Weight loss
- Loss of appetite
- Chills
- Fever
- Sweating in the night time while sleeping, even if the weather is cold

If TB is suspected, what should you do?

If you or someone you know is experiencing any of these symptoms, or has reason to think they have been exposed to TB then they should seek consultation from a healthcare worker and the public health authorities. These healthcare workers will perform one of two tests: a test on the skin and one of the sputum (mucus produced when coughing). Those who have had the BCG vaccine against TB, which is mandatory at birth in India, may have a “positive” skin test despite not being infected with TB.

The skin test will need to be re-examined two days after it is given. If a sputum sample is provided, the results may take longer as they need to be sent for laboratory work.

**Causative Organism**

Tuberculosis is an infection caused by the rod-shaped, non–spore-forming, aerobic bacterium *Mycobacterium tuberculosis*. Mycobacteria typically measure 0.5 µm by 3 µm, are classified as acid-fast bacilli, and have a unique cell wall structure crucial to their survival. The well-developed cell wall contains a considerable amount of a fatty acid,
mycolic acid, covalently attached to the underlying peptidoglycan-bound polysaccharide arabinogalactan, providing an extraordinary lipid barrier. This barrier is responsible for many of the medically challenging physiological characteristics of tuberculosis, including resistance to antibiotics and host defense mechanisms. The composition and quantity of the cell wall components affect the bacteria’s virulence and growth rate. The peptidoglycan polymer confers cell wall rigidity and is just external to the bacterial cell membrane, another contributor to the permeability barrier of mycobacteria. Another important component of the cell wall is lipoarabinomannan, a carbohydrate structural antigen on the outside of the organism that is immunogenic and facilitates the survival of mycobacteria within macrophages. The cell wall is key to the survival of mycobacteria, and a more complete understanding of the biosynthetic pathways and gene functions and the development of antibiotics to prevent formation of the cell wall are areas of great interest.

**Transmission**

*Mycobacterium tuberculosis* is spread by small airborne droplets, called droplet nuclei, generated by the coughing, sneezing, talking, or singing of a person with pulmonary or laryngeal tuberculosis. These minuscule droplets can remain airborne for minutes to hours after expectoration. The number of bacilli in the droplets, the virulence of the bacilli, exposure of the bacilli to UV light, degree of ventilation, and occasions for aerosolization all influence transmission. Introduction of *M. tuberculosis* into the lungs leads to infection of the respiratory system; however, the organisms can spread to other organs, such as the lymphatics, pleura, bones/joints, or meninges, and cause extrapulmonary tuberculosis.
Pathophysiology

Once inhaled, the infectious droplets settle throughout the airways. The majority of the bacilli are trapped in the upper parts of the airways where the mucus-secreting goblet cells exist. The mucus produced catches foreign substances, and the cilia on the surface of the cells constantly beat the mucus and its entrapped particles upward for removal. This system provides the body with an initial physical defense that prevents infection in most persons exposed to tuberculosis.

Bacteria in droplets that bypass the mucociliary system and reach the alveoli are quickly surrounded and engulfed by alveolar macrophages, the most abundant immune effector cells present in alveolar spaces. These macrophages, the next line of host defense, are part of the innate immune system and provide an opportunity for the body to destroy the invading mycobacteria and prevent infection. Macrophages are readily available phagocytic cells that combat many pathogens without requiring previous exposure to the pathogens. Several mechanisms and macrophage receptors are involved in uptake of the mycobacteria. The mycobacterial lipoarabinomannan is a key ligand for a macrophage receptor. The complement system also plays a role in the phagocytosis of the bacteria. The complement protein C3 binds to the cell wall and enhances recognition of the mycobacteria by macrophages. Opsonization by C3 is rapid, even in the air spaces of a host with no previous exposure to *M. tuberculosis*. The subsequent phagocytosis by macrophages initiates a cascade of events that results in either successful control of the infection, followed by latent tuberculosis, or progression to active disease, called primary progressive tuberculosis. The outcome is essentially determined by the quality of the host defenses and the balance that occurs between host defenses and the invading mycobacteria.
After being ingested by macrophages, the mycobacteria continue to multiply slowly, with bacterial cell division occurring every 25 to 32 hours. Regardless of whether the infection becomes controlled or progresses, initial development involves production of proteolytic enzymes and cytokines by macrophages in an attempt to degrade the bacteria. Released cytokines attract T lymphocytes to the site, the cells that constitute cell-mediated immunity. Macrophages then present mycobacterial antigens on their surface to the T cells. This initial immune process continues for 2 to 12 weeks; the microorganisms continue to grow until they reach sufficient numbers to fully elicit the cell-mediated immune response, which can be detected by a skin test.

For persons with intact cell-mediated immunity, the next defensive step is formation of granulomas around the *M. tuberculosis* organisms. These nodular-type lesions form from an accumulation of activated T lymphocytes and macrophages, which creates a micro-environment that limits replication and the spread of the mycobacteria. This environment destroys macrophages and produces early solid necrosis at the center of the lesion; however, the bacilli are able to adapt to survive. In fact, *M. tuberculosis* organisms can change their phenotypic expression, such as protein regulation, to enhance survival. By 2 or 3 weeks, the necrotic environment resembles soft cheese, often referred to caseous necrosis, and is characterized by low oxygen levels, low pH, and limited nutrients.

This condition restricts further growth and establishes latency. Lesions in persons with an adequate immune system generally undergo fibrosis and calcification, successfully controlling the infection so that the bacilli are contained in the dormant, healed lesions. Lesions in persons with less effective immune systems progress to primary progressive tuberculosis.
Pathophysiology of tuberculosis:

- inhalation of bacilli,
- containment in a granuloma,
- breakdown of the granuloma in less immunocompetent individuals.

For less immunocompetent persons, granuloma formation is initiated yet ultimately is unsuccessful in containing the bacilli. The necrotic tissue undergoes liquefaction, and the fibrous wall loses structural integrity. The semiliquid necrotic material can then drain into a bronchus or nearby blood vessel, leaving an air-filled cavity at the original site. In patients infected with *M. tuberculosis*, droplets can be coughed up from the bronchus and infect other persons. If discharge into a vessel occurs, occurrence of extrapulmonary tuberculosis is likely. Bacilli can also drain into the lymphatic system and collect in the tracheobronchial lymph nodes of the affected lung, where the organisms can form new caseous granulomas.

**Clinical Manifestations**

As the cellular processes occur, tuberculosis may develop differently in each patient, according to the status of the patient’s immune system. Stages include latency, primary disease, primary progressive disease, and extrapulmonary disease. Each stage has different clinical manifestations

**Latent Tuberculosis**

*Mycobacterium tuberculosis* organisms can be enclosed, as previously described, but are difficult to completely eliminate. Persons with latent tuberculosis have no signs or symptoms of the disease, do not feel sick, and are not infectious. However, viable bacilli can persist in the necrotic material for years or even a lifetime, and if the immune system later becomes compromised, as it does in many critically ill patients, the
disease can be reactivated. Although coinfection with human immunodeficiency virus is the most notable cause for progression to active disease, other factors, such as uncontrolled diabetes mellitus, sepsis, renal failure, malnutrition, smoking, chemotherapy, organ transplantation, and long-term corticosteroid usage, that can trigger reactivation of a remote infection are more common in the critical care setting. Additionally, persons 65 years or older have a disproportionately higher rate of disease than any does other age group, often because of diminishing immunity and reactivation of disease.

Primary Disease

Primary pulmonary tuberculosis is often asymptomatic, so that the results of diagnostic tests are the only evidence of the disease. Although primary disease essentially exists subclinically, some self-limiting findings might be noticed in an assessment. Associated paratracheal lymphadenopathy may occur because the bacilli spread from the lungs through the lymphatic system. If the primary lesion enlarges, pleural effusion is a distinguishing finding. This effusion develops because the bacilli infiltrate the pleural space from an adjacent area. The effusion may remain small and resolve spontaneously, or it may become large enough to induce symptoms such as fever, pleuritic chest pain, and dyspnea. Dyspnea is due to poor gas exchange in the areas of affected lung tissue. Dullness to percussion and a lack of breath sounds are physical findings indicative of a pleural effusion because excess fluid has entered the pleural space.

Primary Progressive Tuberculosis

Active tuberculosis develops in only 5% to 10% of persons exposed to \textit{M. tuberculosis}. When a patient progresses to active tuberculosis, early signs and symptoms are often nonspecific. Manifestations often include progressive fatigue, malaise, weight loss,
and a low-grade fever accompanied by chills and night sweats. Wasting, a classic feature of tuberculosis, is due to the lack of appetite and the altered metabolism associated with the inflammatory and immune responses. Wasting involves the loss of both fat and lean tissue; the decreased muscle mass contributes to the fatigue. Finger clubbing, a late sign of poor oxygenation, may occur; however, it does not indicate the extent of disease. A cough eventually develops in most patients.

Although the cough may initially be nonproductive, it advances to a productive cough of purulent sputum. The sputum may also be streaked with blood. Hemoptysis can be due to destruction of a patent vessel located in the wall of the cavity, the rupture of a dilated vessel in a cavity, or the formation of an aspergilloma in an old cavity. The inflamed parenchyma may cause pleuritic chest pain. Extensive disease may lead to dyspnea or orthopnea because the increased interstitial volume leads to a decrease in lung diffusion capacity. Although many patients with active disease have few physical findings, rales may be detected over involved areas during inspiration, particularly after a cough. Hematologic studies might reveal anemia, which is the cause of the weakness and fatigue. Leukocytosis may also occur because of the large increase in the number of leukocytes, or white blood cells, in response to the infection.

**Extrapulmonary Tuberculosis**

Although the pulmonary system is the most common location for tuberculosis, extrapulmonary disease occurs in more than 20% of immunocompetent patients, and the risk for extrapulmonary disease increases with immunosuppression. The most serious location is the central nervous system, where infection may result in meningitis or space-occupying tuberculomas. If not treated, tubercular meningitis is fatal in most cases, making rapid detection of the mycobacteria essential. Headaches and change in mental status after possible exposure to
tuberculosis or in high risk groups should prompt consideration of this disease as a differential diagnosis.

Another fatal form of extrapulmonary tuberculosis is infection of the bloodstream by mycobacteria; this form of the disease is called disseminated or miliary tuberculosis. The bacilli can then spread throughout the body, leading to multiorgan involvement. Miliary tuberculosis progresses rapidly and can be difficult to diagnose because of its systemic and nonspecific signs and symptoms, such as fever, weight loss, and weakness. Lymphatic tuberculosis is the most common extrapulmonary tuberculosis, and cervical adenopathy occurs most often. Other possible locations include bones, joints, pleura, and genitourinary system.

**Laboratory and Diagnostic Studies**

Active tuberculosis may be considered as a possible diagnosis when findings on a chest radiograph of a patient being evaluated for respiratory symptoms are abnormal, as occurs in most patients with pulmonary tuberculosis. The radiographs may show the characteristic findings of infiltrates with cavitation in the upper and middle lobes of the lungs. However, specific groups of patients, such as the elderly and patients with advanced infection by human immunodeficiency virus may not have these typical findings. Compared with other patients, both groups have the classic cavitation less often and may have lower-lobe infiltrates as a prominent finding. Although abnormal findings on a chest radiograph may suggest tuberculosis, they are not diagnostic for the disease.

Traditionally, the first laboratory test used to detect active tuberculosis in a patient with abnormal findings on chest radiographs is examination of a sputum smear for the presence of acid-fast bacilli. Also, because the bacilli have entered the sputum, the patient is infectious to
others. According to the Centers for Disease Control and Prevention, 3 sputum specimens should be used for detection of pulmonary tuberculosis, with specimens collected in the morning on consecutive days. However, recently, investigators have questioned the need for 3 specimens. Leonard et al concluded that examination of 2 specimens is just as sensitive.

For the test, sputum is smeared on a slide, stained, dried, and then treated with alcohol. Any bacilli that are present will remain red because they will not destain. The test is not specific for tuberculosis, because other mycobacteria give the same results, but it does provide a quick method to determine if respiratory precautions should be maintained while more definitive testing is performed. Results of sputum smears should be available within 24 hours of the specimen collection.

**The Standard**

Definitive diagnosis of tuberculosis requires the identification of *M. tuberculosis* in a culture of a diagnostic specimen. The most frequent sample used from a patient with a persistent and productive cough is sputum. Because most mycobacteria grow slowly, 3 to 6 weeks may be required for detectable growth on solid media. However, a newer, alternative method in which high-performance liquid chromatography is used to isolate and differentiate cell wall mycolic acids provides confirmation of the disease in 4 to 14 days. Conventionally, 3 sputum samples were also used for culture diagnosis, but the use of 2 specimens, as mentioned earlier for smears, also applies for cultures.

After medications are started, the effectiveness of the therapy is assessed by obtaining sputum samples for smears. Once again, the traditional requirement of 3 sputum smears negative for *M. tuberculosis* may be unnecessary when determining if respiratory isolation can be discontinued. A patient is considered to have achieved
culture conversion when a culture is negative for the mycobacteria after a succession of cultures have been positive; culture conversion is the most important objective evaluation of response to treatment.

**Alternatives**

Unfortunately, not all patients with tuberculosis can be detected by culture of sputum specimens, a situation that can lead to delayed or missed diagnosis. Additionally, many critically ill patients have trouble producing the necessary material from the lungs and instead produce saliva or nasopharyngeal discharge. For patients who have difficulty generating sputum, inhalation of an aerosol of normal saline can be used to induce sputum for collection. However, if sputum specimens are still inadequate, or the index of suspicion for tuberculosis is still high despite cultures negative for *M. tuberculosis*, alternative approaches are available.

Bronchoscopy with bronchial washings or bronchoalveolar lavage can provide sputum for diagnosis. In bronchial washing, a fiberoptic bronchoscope is inserted into the lungs, and fluid is squirted in and then collected, essentially washing out a sample of cells and secretions from the alveolar and bronchial airspaces. Aliquots obtained from subsequent lavages constitute bronchoalveolar lavage specimens.

In patients with involvement of intrathoracic lymph nodes, as indicated by adenopathy suggestive of tuberculosis, who have sputum smears negative for *M. tuberculosis*, culture of specimens collected by transbronchial needle aspiration can be used to accurately and immediately diagnose the disease. With this technique, specimens are collected by inserting a 19-gauge flexible histology needle through a bronchoscopy tube; patients are sedated but conscious, and computed tomography scans are used for guidance.
Technological Advancements

Newer diagnostic techniques for faster detection of *M tuberculosis* include nucleic acid amplification tests. In these tests, molecular biology methods are used to amplify DNA and RNA, facilitating rapid detection of microorganisms; the tests have been approved by the Food and Drug Administration. One method is the polymerase chain reaction assay, which can be used to differentiate *M tuberculosis* from other mycobacteria on the basis of genetic information and provides results within hours.

Although the test can provide rapid confirmation of *M tuberculosis* in sputum specimens positive for acid-fast bacilli, it has limitations, including high cost, low sensitivity, and low availability. A polymerase chain reaction assay positive for *M tuberculosis* in conjunction with a sputum smear positive for the organism indicates true tuberculosis, but in a patient with a sputum smear negative for the organism, the positive polymerase chain reaction assay should be considered carefully along with clinical indicators. The results of these assays can not be relied on as the sole guide for isolation or therapy.

**Diagnosing Latency**

Once patients recover from a primary *M tuberculosis* infection and the infection becomes latent, sputum specimens are negative for the organisms, and findings on chest radiographs are typically normal. These patients also do not have signs or symptoms of infection, and they are not infectious to others. Tuberculin skin testing is the most common method used to screen for latent *M tuberculosis*.

The tuberculin skin test is performed by intradermally injecting 0.1 mL of intermediate-strength purified protein derivative (PPD) that contains 5 tuberculin units. After 48 to 72 hours, the injection site is examined for induration but not redness. Although the test is useful because the PPD
elicits a skin reaction via cell-mediated immunity when injected in patients previously infected with mycobacteria, it is limited because it is not specific for the species of mycobacteria. Many proteins in the PPD product are highly conserved in various species of mycobacteria. Also, the test is of limited value in patients with active tuberculosis because of its low sensitivity and specificity.

False-negatives can occur in patients who are immunocompromised or malnourished, because these patients cannot mount an immune response to the injection, and in 20% to 25% of patients who have active tuberculosis, because there is a time lag of 2 to 10 weeks between infection and the T-lymphocyte response required for a positive skin reaction. False-positives can occur in patients who have infections caused by mycobacteria other than \textit{M tuberculosis} or who have been given BCG vaccine.

The tuberculin skin test was the only test available to detect latent tuberculosis until an interferon-release assay, called QuantiFERON-TB test, was approved by the Food and Drug Administration in 2001. Then, in 2005, a new interferon-assay, called QuantiFERON-TB Gold was approved and is intended to replace the QuantiFERON-TB test, which is no longer commercially available. In both tests, the cell-mediated reactivity to \textit{M tuberculosis} is determined by incubating whole blood with an antigen and then using an enzyme-linked immunosorbent assay to measure the amount of interferon-$\gamma$ released from white blood cells.

In the QuantiFERON-TB Gold test, 2 synthetic antigenic proteins specific in PPD are used rather than a PPD admixture, making this test more sensitive than its predecessor. QuantiFERON-TB Gold provides results in less than 24 hours and can be used to detect both active and latent tuberculosis. The results of the QuantiFERON-TB Gold test are similar to those of the tuberculin skin test, and the Centers for Disease
Control and Prevention now recommend that the QuantiFERON-TB Gold test be used in all instances in which the tuberculin skin test formerly would have been used.

**Conclusions**

Tuberculosis has reemerged as a major public health concern and is the second deadliest infectious disease worldwide. Understanding the pathophysiology of this contagious airborne disease, from the primary infection to primary progressive (active) disease or latency, is important. Understanding the pathophysiology will help critical care nurses be aware of the causes of the classic signs and symptoms for tuberculosis. Many different diagnostic tests can be used to evaluate a patient with suspected tuberculosis, and the stage or progression of the disease markedly affects the results.

Even in critical care, each nurse has an opportunity to contribute to the control of tuberculosis by learning about the signs and symptoms of the disease, risk factors specific to critical care patients, and the appropriate actions to take should such a case occur. The more nurses know about tuberculosis, the more they can contribute to minimizing its transmission, making early diagnoses, and preventing increases in morbidity and mortality due to this disease.
THE ASTROLOGY

Macrocosm and Microcosm

Man is said to be microcosm, and the Universe is macrocosm; since what exist in the Universe exists in the human body too. Man is viewed as the epitome of universe. The forces prevailing in the Human body are analogous with that of the forces prevailing the Universe. The natural forces acting in and through various organs of the body are intimately related to or similar to the corresponding to the forces acting in and through the organisms of the world.

Astral influences:

All the influences which are irradiates from the sun, planets and that of the stars can act up on the human bodies.

Moon exercises a very bad impact on the disease in general especially during the period of new moon. For instance paralysis, brain affections, dropsy, and stimulation of sexual perversions are resulted the new moon. Mars causes anemia and lack of nervous vigour. A conjugation of the moon with other planets such as Venus, mars, etc may make their influence still more injurious.

The 8th place forms the laghanam deals about ones age, chronic diseases, death etc.
According to T.V.S. Dictionary:

1) Aries - Neck
2) Taurus - Neck and shoulder
3) Gemini - Arms and hands
4) Cancer - Chest and adjacent parts.
5) Leo - The heart and stomach
6) Virgo - The intestines, base of stomach and umbilicus
7) Libra - Kidney
8) Scorpio - Genitals
9) Sagittarius - Lips
10) Capricorns - Knees
11) Aquarius - Legs
12) Pisces - Feet

According to literature Thiruvalluvar periya sunthara sekaram.

1) Mesham - Head
2) Rishabam - Face
3) Mithunam - Neck
4) Kadagam - Shoulders
5) Simmam - Chest
6) Kanni - Side of body
7) Thulaam - Back, stomach
8) Virutchigam - Testicles
9) Thanusu - Thigh
10) Magaram - Knee
11) Kumbam - Heel
12) Meenam - Foot
In the organisms of man, these forces may act in an abnormal manner and cause disease. Similarly in the great organism of the cosmos they may act abnormally likewise and bring about disease on earth and its atmospheric condition like earthquake, storms etc. The Mars invisibly influences human’s blood constituents. The Venus instigates intersexual love.

The following are the instance in which every sign of the zodiac has towards some particular parts of the body.

**1. According to T.V.S. Dictionary:**

1. Aries - Neck
2. Taurus - Neck and shoulder
3. Gemini - Arms and hands
5. Leo - The heart and stomach
6. Virgo - The intestines, base of stomach and umbilicus
7. Libra - Kidney
8. Scorpio - Genitals
9. Sagittarius - Lips
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8) Virutchigam - Testicles
9) Thanusu - Thigh
10) Magaram - Knees
11) Kumbam - Heel
12) Meenam - Foot

The Impact of the Planets on the Human Organs

According to the literature Siddha Maruthuvanga Surukkam

Each of these planets hold jurisdiction over some parts of the body similar to the signs of the Zodiac. The planets exercise special power over some parts of the body resulting in a disease or diseases in accordance with their impacts on the three basic humors in the system.

1. Sani (Saturn)

   It exhibits supremacy over the bones, tooth, cartilages, ear, spleen, bladder and brain and gives rise to fever, leprosy, paralysis, dropsy, cancer, cough, asthma, deafness of the right ear, hernia etc.

2. Guru (Jupiter)

   It holds jurisdiction over the blood, liver, pulmonary veins, diaphragm, Muscles of the trunk and sense of touch & smell.
3. **Sevvaai (Mars)**

   It has got power upon the bile, gall bladder, left ear, pudendum, kidneys, fever, jaundice, convulsions, hemorrhage, carbuncle, erysipelas, ulcer etc.

4. **Sukkiran (Venus)**

   It exercises its impact on the blood and semen, throat, breast, abdomen, uterus, genitalia, taste, smell, pleasurable sensation, gonorrhea, barrenness, Abscesses or even death from sexual passions or from poison.

5. **Pudhan (Mercury)**

   It holds jurisdiction over the animal, spirit, also over legs, feet, hands, fingers, tongue, nerves and ligaments and produces fevers mania, phrenitis, epilepsy, convulsion, profuse expectoration or even death by poison, witchcraft and so on.

<table>
<thead>
<tr>
<th>Planets</th>
<th>Organs of impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Solar force</td>
<td>Heart</td>
</tr>
<tr>
<td>2. Lunar force</td>
<td>Brain</td>
</tr>
<tr>
<td>3. Mars</td>
<td>Gall Blader</td>
</tr>
<tr>
<td>4. Mercury</td>
<td>Kidney</td>
</tr>
<tr>
<td>5. Venus</td>
<td>Lungs</td>
</tr>
<tr>
<td>6. Jupiter</td>
<td>Liver</td>
</tr>
<tr>
<td>7. Saturn</td>
<td>Spleen</td>
</tr>
</tbody>
</table>
1. According to literature Thiruvalluvar periya sunthara sekaram.

   1. Sooriyan - Head
   2. Santhiran - Face
   3. Sevvai - Chest
   4. Puthan - Center of Posterior Trunk
   5. Guru - Stomach
   6. Sukkiran - Groin, Genitalia
   7. Sani - Thigh (Thudai)
   8. Raagu - Hands
   9. Kedhu - Legs

   Each of these rasis and the organs of impact as well as the girahams are found to be related with the resultant diseases of corresponding organs. Therefore, the human body is impregnated with the vital forces that could be acted upon by the astronomical bodies in the sky. With the augmented spiritual force, a sage is able to get control over the above said planets. All the others are under the influence of the forces exhibited by these asteroids.
EVALUATION OF THE DISSERTATION TOPIC

MATERIALS AND METHOD

Materials

The clinical study on kabakaasam was carried in the OP in post graduate department of noi naadal of Govt, Siddha Medical College, Palayamkottai.

Out of cases – 72 cases 68 with clinical signs and symptoms of kaba kaasam of both sex of all different ages were studied under the guidance of faculties of post graduate department.

Selection of patients

The clinical study was done in cases out of that 68 cases were selected on the basis of clinical symptoms indicated in the siddha text.

SELECTION CRITERIA

INCLUSION CRITERIA:

- All Age group
- Both sex
- Cough. with Expetoration
- Loss of Appetite
- Loss of Weight
- Either Positive AFB or positive chest X -ray

EXCLUSION CRITERIA:

- Associated with Rheumatoid arthritis
- Associated with Extra Pulmonary tuberculosis
- Patients on Corticosteroid therapy
- Associated with Diabetes Mellitus
METHODOLOGY

STUDY DESIGN

Observational type of study.

STUDY ENROLLMENT

- In the study, patients reporting at the OPD&IPD of GSMC Palayamkottai with the clinical symptoms of “Kabakaasam” will be referred to the Research group. Those patients will be screened using the screening proforma (Form-I) and examined clinically for enrolling in the study based on the inclusion and exclusion criteria. Based on the inclusion criteria the patients will be included first and excluded from the study on the same day if they hit the exclusion criteria.
- The patients who are to be enrolled would be informed (Form IV-A) about the study, and the objectives of the study in the language and terms understandable for them.
- After ascertaining the patients’ willingness, a written informed consent would be obtained from them in the consent form (Form IV).
- All these patients will be given unique Register card in which patients’ Register number of the study, Address, Phone number and Doctors phone number etc. will be given, so as to report to research group easily if any complication arises.
- Complete clinical history, complaints and duration, examination findings all would be recorded in the prescribed proforma in the history and clinical assessment forms separately. Screening Form-I will be filled up; Form I-A, Form –II and Form –III will be used for recording the patients’ history, clinical examination of symptoms and signs and lab investigations respectively.
INVESTIGATIONS DURING THE STUDY:

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

<table>
<thead>
<tr>
<th>Blood</th>
<th>Urine</th>
<th>Sputum for AFB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total WBC count</td>
<td>Albumin</td>
<td>Mantoux test</td>
</tr>
<tr>
<td>Differential count</td>
<td>Sugar</td>
<td>Chest x-ray</td>
</tr>
<tr>
<td>Haemoglobin estimation</td>
<td>Deposits</td>
<td></td>
</tr>
<tr>
<td>ESR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood sugar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood urea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serum cholesterol</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TREATMENT DURING THE STUDY:

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

STUDY PERIOD

- Total period - 1 yr
- Recruitment for the study - Upto 10 months
- Data entry analysis - 1 month
- Report preparation and submission - 1 month

DATA MANAGEMENT

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

The screening forms will be filed separately.
The Data recordings will be monitored for completion and adverse event by HOD and Faculty of the department. Any missed data found in during the study, it will be collected from the patient, but the time related data will not be recorded retrospectively.

All collected data will be entered using MS access/excel software onto computer.

**STATISTICAL ANALYSIS**

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

**OUT COME OF STUDY**

- Evaluation of Ennvagai thervu
- Significance of Manikkadainool
- Importance of Jothidam
OBSERVATION AND RESULTS

Results were observed with respect of the following aspects.

- Age distribution.
- Six distribution.
- Occupational status.
- Socio Economic status.
- Life span references.
- Thirai.
- Seasonal variation.
- Dietic habits.
- Etiologic factors.
- Site of lesion.
- Clinical features references.
- Mukkutra nilai references.
- Envagai thervugal.
- Mani kadai nool.
- Jothidam.
- Laboratory finding.
OBSERVATION AND RESULTS

TABLE – 1

AGE DISTRIBUTION:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Age</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt;33 years</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>33 – 66 years</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>&gt;66 years</td>
<td>11</td>
<td>16</td>
</tr>
</tbody>
</table>

Out of 68 cases 64% of cases belong to the middle age group.

TABLE - 2

SEX DISTRIBUTION:

<table>
<thead>
<tr>
<th>Sex</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>54</td>
<td>79</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>21</td>
</tr>
</tbody>
</table>

Out of 68 cases 79% were males and 21% were females.

TABLE - 3

OCCUPATION:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Type of occupation</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manual Labour</td>
<td>60</td>
<td>88</td>
</tr>
<tr>
<td>2</td>
<td>Housewife</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Sedentary work</td>
<td>6</td>
<td>9</td>
</tr>
</tbody>
</table>

The incidence of the disease was found to be higher in labouring groups 88%.
TABLE - 4

Socioeconomic Status

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Socio Economic Status</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Middle class</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>Below Poverty</td>
<td>57</td>
<td>98</td>
</tr>
<tr>
<td>3</td>
<td>Higher class</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Out of 68 cases 98% were below poverty line.

TABLE - 5

PERSONAL HABITS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Habits</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tea / Coffee</td>
<td>40</td>
<td>58</td>
</tr>
<tr>
<td>2</td>
<td>Alcohol</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Smoking</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>4</td>
<td>Alcohol &amp; smoking</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Out of 68 cases 58% of the cases were addicted to tea / coffee and 19% of cases were smokers and 5% of cases are known alcoholics.

TABLE - 6

DIET HABITS

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Diet</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vegetarian</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Non vegetarian</td>
<td>66</td>
<td>97</td>
</tr>
</tbody>
</table>

97% of the cases were taking non vet diet.
TABLE - 6

PARUVAKALAM

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Paruvakaalam</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaar Kalam</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>Koothir Kaalam</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>3</td>
<td>Munpani Kaalam</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Mudhuvenil Kaalam</td>
<td>16</td>
<td>23</td>
</tr>
</tbody>
</table>

The incidence of the disease is reported in kaar kaalam, koothir kaalam, mudhu venil.

TABLE - 7

THINAI (GEOLOGICAL DISTRIBUTERS)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Thinai</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marutham</td>
<td>57</td>
<td>83</td>
</tr>
<tr>
<td>2</td>
<td>Neithal</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Mullai</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Paalai</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Kurunji</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

80% of cases reported from Marutha Nilam. Neithal and Mullai reports equal no of cases(6%).
### TABLE - 8

**KAALAM**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Kaalam</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kabha kaalam</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>Pitha kaalam</td>
<td>44</td>
<td>64</td>
</tr>
<tr>
<td>3</td>
<td>Vatha kaalam</td>
<td>11</td>
<td>16</td>
</tr>
</tbody>
</table>

64% of cases were under pitha kaalam of their Life spam.

### TABLE - 9

**CLINICAL FEATURES:**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Symptoms</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cough with expectoration</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Fever</td>
<td>68%</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Loss of appetite</td>
<td>68%</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Loss of weight</td>
<td>68%</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Dyspnoea</td>
<td>60</td>
<td>88</td>
</tr>
<tr>
<td>6</td>
<td>Dyspepsia</td>
<td>62</td>
<td>91</td>
</tr>
<tr>
<td>7</td>
<td>Giddiness</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
### TABLE - 10

**ALTERED CHARACTERS OF VALI**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Affected VALI</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pranan</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Abanan</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>Viyaanan</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Uthanan</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Samanan</td>
<td>68</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>20</td>
<td>29</td>
</tr>
<tr>
<td>8</td>
<td>Kirukaran</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>9</td>
<td>Devadhanan</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>Thananjeyan</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Out of 68 cases, Pranan, viyanan, uthanan, samanan, devadhanan were affected in 100%. Abanan were affected 36% of cases. Nagan was affected in 29%. Kirukaran was affected in 22% of cases.

### TABLE - 10

**ALTERED CHARACTERS OF AZHAL**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Affected Azhal</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anilam</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Ranjagam</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Saathagam</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Aalosagam</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>Praasagam</td>
<td>68</td>
<td>100</td>
</tr>
</tbody>
</table>
Anilam, saathagam, praasagam were affected in 100% of cases; Aalosagam in 29% of cases. Ranjagam in 19% of cases.

**TABLE - 11**

ALTERED CHARACTERS OF IYYAM

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Affected Iyyam</th>
<th>No. of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avalambagam</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Kiletham</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>Tharpagam</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Santhigam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Podhagam</td>
<td>68</td>
<td>100</td>
</tr>
</tbody>
</table>

Out of 68, avalampagam, kiledhagam and podagam was affected in 100% of cases and tharpagam was affected in 10% of cases respectively.

**TABLE - 12**

UDAL THATHUKKAL

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Decresed Udal Thaadhukal</th>
<th>No. of cases affected</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saaram</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Seeneer</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>Oon</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>Kozhuppu</td>
<td>68</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Enbu</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Moolai</td>
<td>20</td>
<td>29</td>
</tr>
<tr>
<td>7</td>
<td>Sukilam /sronitham</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### TABLE - 13

**INTERPRETATION OF ENVAGAI THERVUGAL**

**NAA**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Naa</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fissure</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>Pigmentation</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Cracks</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Reduced moisture</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>Increased moisture</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>Geographical tongue</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>7</td>
<td>Pallor</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>8</td>
<td>Glossitis</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Coating</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>10</td>
<td>Tooth impression</td>
<td>7</td>
<td>11</td>
</tr>
</tbody>
</table>

**Observation**

Among 68 cases the fissure were 20% geographical tongue is 16%, coated tongue was 18%, 6% of the cracks are reported, 6% of the increased in moisture and dry tongue is observed. 8% of the pallorness is noted. 7% of glossitis were also noted.

**Inference**

The most of cases tissue is observed geographical tongue, coating is also reliable.

In acute stage of disease, geographical tongue dryness of tongue yellow coating, tooth impression were observed.

Indicates the agravated pitham.
In latter stage of disease, tissue, cracks, pigmentation were observed due to aggravated vadha humour.

In terminal stage of diseases, increased moisture of tongue is observed indicating the aggravated kabha humour.

**TABLE - 14**

**Nilam**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Niram</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dark colour</td>
<td>18</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Medium colour</td>
<td>26</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Fair colour</td>
<td>11</td>
<td>29</td>
</tr>
</tbody>
</table>

**observation:**

Among 68 cases, medium coloured patient, reported to be 41% where as dark colour and fair colour patient reported to equal be 29%.

**Inference**

Medium colored patient are reported highly when compared to others 2.

**TABLE - 15**

**Mozhi**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Voice</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High pitched</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Low pitched</td>
<td>22</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>Husky voice</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>4</td>
<td>Sore throat</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Hoarseness</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Moderate pitch</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>
Observation

Out of 68 cases 37% of was low pitched, 24% of husky voice reported. 12% of high pitched and sore throat were reported.

Inference

Low pitched voice are observed.

TABLE - 16

VIZHI

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Changes on eye</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Muddy conjunctiva</td>
<td>19</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>Pallor</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Reddish, dilated veins</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Senile changes</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Phlectynular conjunctivitis (active)</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Phletynular conjunctivitis (old)</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>Dryness of eye</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>Increased moisture</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

Observation

Out of 68 cases, 27% of cases reported to have muddy conjunctiva. 12% pallor cased are reported. 16% of senile changes are noted. 10% of plectynular conjunctiva active as well as old lesion are noted.

Inference

Inspite of 27% of cases have been reported to have muddy conjuctiva. The presence of phletynular conjunctivitis is a significant in and more reliable.
TABLE - 17

SPARISM

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Factors</th>
<th>No. of cases affected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evening rise of temperature</td>
<td>50</td>
<td>73</td>
</tr>
<tr>
<td>2</td>
<td>Night sweats</td>
<td>28</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Clubbing</td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>Added sound (rales)</td>
<td>50</td>
<td>73</td>
</tr>
</tbody>
</table>

Observation

Out of 68 cases, evening rise of temperature 73% was noted. 41% of cases reported to have night sweats, 22% of cased had clubbing.

Inference

Evening rise of temperature is more reliable and significant finding for the diagnosis.

TABLE - 18

MALAM

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Colour of the stool</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Yellowish</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>2</td>
<td>Yellowish white</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>3</td>
<td>Brownish</td>
<td>14</td>
<td>29</td>
</tr>
</tbody>
</table>
TABLE - 19

FREQUENCY

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>frequency of passing</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Increased</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Decreased</td>
<td>22</td>
<td>45</td>
</tr>
<tr>
<td>3</td>
<td>Constipation</td>
<td>25</td>
<td>52</td>
</tr>
</tbody>
</table>

Observation

35% of cases reported yellowish coloured stools. 25% of cases had yellowish white coloured stools. 29% had brownish tan coloured stools.

45% of cases had decreased frequency of passing stools. 52% of cases had constipation. 40% of cases had increased frequency.

Inference

Constipation, colour of the stool, frequency had equal importance in distribution.

TABLE - 20

NEER COLOUR

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Colour of urine</th>
<th>No. of cases</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White</td>
<td>28</td>
<td>42</td>
</tr>
<tr>
<td>2</td>
<td>Yellowish</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>Straw</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Dark yellow</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>5</td>
<td>Reddish yellow</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Observation

42% of cases was white coloured urine. 11% accounts for yellowish coloured urine. Accounts for straw coloured urine. 35% of dark yellow coloured were reported. 4% are reddish yellow coloured also noted.

Inference

It inferes 42% of cases got kabaneer illakannam, then 35% of cases got uttina neer Illakannam.

TABLE - 21

CONTENTS OF URINE

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Contents of Urine</th>
<th>No. of cases affected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Froath</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Deposits</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Observation

40% of cases got froath and only 4% of cases had deposits.

Inference

Froathy is also a important criteria for the kabaneer. It infers that 40% of cases got kabaneer.

TABLE - 22

NEIKURI

Spreading Nature

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Spreading Nature</th>
<th>No. of cases affected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fast</td>
<td>20</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>Slow</td>
<td>44</td>
<td>75</td>
</tr>
<tr>
<td>3</td>
<td>No change</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>
### TABLE - 23

**NEIKURI PATTERNS**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Neikuri patterns</th>
<th>No. of cases affected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pearl</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Seive pattern</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Leaf like</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>Irregular disc</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Disc with projection</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>Coin shape</td>
<td>26</td>
<td>38</td>
</tr>
<tr>
<td>7</td>
<td>Conch</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**Observation**

Out of 68 cases, 38% of Neikuri appeared like a coin. 2% of conch shapes are noted. 20% of seive pattern reported. 9% of leaf like neikuri appeared and 12% of Irregular disc and disc with projection was reported.

**Inference**

Pearl type of Neikuri denote the kabaneer, coin shape and sieve pattern of neikuri and had diagnostic value.
TABLE - 24

NAADI

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Naadi</th>
<th>No. of cases affected</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kabha pitham</td>
<td>42</td>
<td>61</td>
</tr>
<tr>
<td>2</td>
<td>Pitha kabham</td>
<td>26</td>
<td>38</td>
</tr>
</tbody>
</table>

Observation

Out of 68 cases 61% of kabapitha naadi was reported and 38% of pitha kabham naadi is also noted.

Inference

61% of kabha pitha naadi is significance for kaba kaasam.

As per the sayings

TABLE - 25

INTERPRETATION OF FINDING IN MANIKADAI NOOL

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Manikaadai Nool (Finger breath)</th>
<th>No of cases</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>28</td>
<td>47%</td>
</tr>
<tr>
<td>2</td>
<td>7 ¼</td>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>3</td>
<td>7 ½</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td>4</td>
<td>7 ¾</td>
<td>7</td>
<td>12%</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>8</td>
<td>14%</td>
</tr>
</tbody>
</table>

47% of cases reported to have 7 finger breadth. 15% of cases reported to have 7 ¼ finger breadth, 8% of 7 ½, 12% of 7 ¾ and 14% of 8 finger breadth.

Inference

47% of cases had 7 finger breadth (Wrist circumference) and this 7 finger breadth is more reliable.
Saya pitham is characterised by:

1. Persistant, loud, severe Cough
2. Mild fever
3. Thirst
4. Pallor
5. Sputum production
6. Haemoptysis
7. Burning sensation in chest
8. Excessive sleep.

Even though features of Kabakaasam coincides symptoms such as Loss of appetite, Loss of weight, dyspnoea are absent.
Pakka Soolai is characterised by

1. Fever
2. Head ache
3. Pricking pain (chest tightness)
4. Fullness of the chest
5. Emaciation
6. Cough

Though the symptoms such as fever, cough, emaciation are present. Some features such as Loss of appetite, Dyspepsia are absent.

<table>
<thead>
<tr>
<th>KABA KAASAM</th>
<th>SAYA PITHAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common symptoms</td>
<td>Absent symptoms</td>
</tr>
<tr>
<td>1. Lough with Expectoration</td>
<td>Loss of Appetite</td>
</tr>
<tr>
<td>2. Fever</td>
<td>Loss of Weight.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KABA KAASAM</th>
<th>PAKKA SOOLAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common symptoms</td>
<td>Absent symptoms</td>
</tr>
<tr>
<td>1. Cough</td>
<td>Loss of Appetite</td>
</tr>
<tr>
<td>2. Emaciation</td>
<td>Dyspepsia</td>
</tr>
<tr>
<td>3. Fever</td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION AND SUMMARY

In our Siddha Literature the disease is characterized by cough with Expectoration, Loss of appetite, Loss of weight fever, Difficulty in breathing, Tiredness.

The author collected the review of literature from Agathiyar, Mani, 400, Sarabendharar Vaithiyamuraigal, Sigitcha rathina deepam, Madhava Nithanam, Astanga Hridhayam, Agathiyar Gurunool, Anuboga vaithiya deva ragasiyam, Segara Rasa Segaram, Dhanvanthiri vaidthiyam, Vaithiya Sillarai kovai.

The author described the Etiology and pathology of kabakaasan.

INTERPRETATION OF CLINICAL FINDINGS:

Age

64% of cases affected in the age group between 33 – 66 years.

Sex

This disease show’s male preponderance of 79%.

Occupational

Higher Incidence of the disease was found among manual Labourer.

Scioeconomic status

98% of people affected by kaba kaasam belong to low socio economic status and below the poverty line.

Personnel habit

Addiction to tea, coffee, and other habits like smoking also shows impact on the disease.
Diet

97% of Non-vegetarians were affected.

Seasonal variations

Higher incidence of disease are reported on kaar, koothir and mudhuvenil kaalam.

Family history

Higher Incidence of disease is usually associated a strong family history

Geological distribution:

Marutha nilam reports about 85% of the disease.

Kaalam:

64% of disease are Encountered in pithakaalam.

Clinical features:

Cough with expectoration, fever, loss of weight, loss of appetite was predominant are in 100% of the patient.

About 60% of cases are dyspnoea

About 90% of cases had dyspepsia

Constitutional symptoms like giddiness, irritability, vomiting also reported in 5% of patients.

INTERPRETATION OF SIDDHA PARAMETERS:

Pranan, Viyanan, Uthanam, Samanan, Devathathan the prime vayus affected in 100% of cases.

Abananan, Koorman, Kirukaran were also affected in 15 – 20% cases.
Prana vayu Ahana was plays a major role in the sequale of the disease but the expression of it is noticed in only 25% of the patients.

**AZHAL**

Anilam, Sathagam, Prasagam were affected in 100% of cases.
Ranjagam affected in 20% o cases.
Alosagam affected in 19% of cases.

**IYYAM**

Avalambagam, kiledhagam, podhagam were affected in 100% of cases.
Tharpagam affected in 10% of cases.

**INTERPRETATIONS OF UDAL THADHUKKAL**

Saaram, Oon kozhuppu were affected in 100% of cases.
Senneer affected in 13% of cases.
Moolai affected in 20% of cases.

**INTERPRETATION OF ENVAGAI THERVUGAL**

**NAA**

- Yellow coatedness of tongue is due to increased pitha humour.
- Fissure, pigmentation, cracks are the expression of aggravated vadha humour.
- Goegraphical tongue, loss of papillae flags the destruction of 7 dhathus due to increased pitha humour.
- Tooth impression coated indicates the formation and accumulation of “aama” signal fever, reduced appetite.
- Deep **central fissure** suggest that skeletal abnormality due to reduced lung volume or lung function.
Dryness of tongue indicates the reduction of saaram in the body and pitha migu gunam.

Some abnormal presentation like scrotal tongue and atrophic glossitis are encountered.

In acute stage of disease, palloriness, glossitis, dryness of tongue is seen.

In chronic stage of disease, tissuse, puigmentation cracks, and increased moisture and tongue were noted.

Naa is an important parameter which signals the acute and chronicity of the disease.

**NIRAM**

Associated infections like tinea vesicolor, is quite common.

Xerosis and phrynoderma occurs as a complication of destruction of thathus while on emaciation.

As per the sayings

"அகிலத்தை விரிக்கவென்று"

Skin infections, lesions occur because of dearranged pitha kabha which joins vadham.

Cynosis occur because of aggravated kabha which will be a fatal and death signalling.

In initial stage of disease the normal complexion is reduced and in chronicity palloriness proceeds.

Colour of the sputum observed was yellow thick mucoid consistency
MOZHI
Sore throat is a premonitory symptoms to some extent.
It is reported that after the occurance of the disease pitch of the voice is diminished some times it may result in hoarsnen of voice.
Low pitch voice is usually seen in dyspnoeic patients

VIZHI
Muddy conjuction indicates the mal nourishment, habit of smoking – kaadi
Muddy conjuctiva is due to expression of agravate pitham.
Senile changes like arcus senilis, pterygium, cataract, indicates advance of ment of the disease.
Phlectynular conjunctivitis is an important feature of kaba kaasam.

SPARISM
Evening rise of tempreature, night sweats are the reliable for the dioagnosis clubbing indicates the reductin of partial pressure of 0xygen in circulation. Due to reduction of pranavayu.

MALAM
Frequency of lthe stools passing indicates advance ment of the disease.
Reduction in fecal mass also indicates advance ment of the disease.
It is reported that what ever may be the frequency, reduction of mass is associated in majority of cases.

Yellowish white colour stools is due to aggrevated kabham.
Constipation is due to supressed abana function.
MOOTHIRAM

NEER KURI

As per the sayings

"காப்பானெர் புவியுற்றுரு போல்
கொட்டக்குதுக்க அருகில் கொத்தம் குறிக்கின்றது
கொட்டக்குத்துரு குறியீடுபடுவது படுத்துகின்றது"

This indicates presence of froth in urine denotes kabaneer.

- **Kabhaneer, uttina neer** patterns were seen.
- Presence of frothy indicates kabha neer were seen frequently.
- Kabha neer indicates the aggrevated kabham. It associated with symptoms of kabhakaasam is an signal and worsening of disease.

NEIKURI

As per the sayings

"சேட்டு வேலும் விளையாட்டுக்கு முக்கியமான தேசிக்கோம்பாடு"

This indicates presence of **conch pattern** denotes curative sign.

As per the sayings

"சேட்டு வேலியானது குறிக்கோளத்தில் சூன்றவும்
சேட்டு வேலியானது குறிக்கோள் சூன்றவும் கர் விளைவாடு"

"சேட்டு வேலியானது குறிக்கோள் கருவியானது குறிக்கோலாடு கர் விளைவாடு"(Sieve Pattern)

- **Conch pattern** leat pattern types of Neikuri were seen. Indicates the good prognosis of disease.
- **Salladai kann** pattern of Neikuri indicate the full blown disease
- **Pearl pattern** of Neikkuri indicates the pitha Neer.
- Kaba pitha neer, pitha kaba is more reliable if associated with symptoms
- Faster the spreading nature also had bad prognostic value

**Naadi**

- **Kabha pitham naadi**, plays a major role and more reliable.
- Pitha kabham and kabha is next reliable to kabha pitha naadi.
- Kabhamunnokku give’s a clue for forth coming diseases.

**Interpretation of Astrological findings.**

**Mithuna raasi** group of people are more vulnerable and 50% possibilities of getting infefection.

In particularly thiru vadirai, miruga seridam states were infected.

1. Naa is used to find out the acute and chronicity. Initial and terminal stage of disease. Coated ness is reliable.
2. Niram screens the affected kuttram as wells as the secondary infections and host immune status. 1% of Erythema nodosum suggest the disease, due to pitha prakobam.
3. Mozhi has a better prognostic value rathar than diagnostic value.
4. In Vizhi presence of Phlecytenular conjunctivitis is significance for confirming the disease.
5. Sparism alarms for the disease and gives it is a first clue to diagnose.
6. Malam indicates the advancement of the disease.
7. Neer pictursque the exact pathology of disease in the body.
8. Naadi-which flags the forth coming disease.
INTERPRETATION OF ALLIED PARAMETERS

Total WBC Count - Raised in many cases
DC - Leucocytosis and monocytosis
ESR - Increased in all cases
Mantoux test - Positive in all cases
AFB - Positive in all cases
Chest – X-ray - Evidences of pulmonary tuberculosis
Albumin - Normal in all except few cases.
20% - Decreased Hb count.

Examination

Auscultation of lungs chest – added sound rales heard in 90% of the cases.

INTERPRETATION OF FINDING IN ASTROLOGY

SIGNIFICANCE OF JOTHIDAM

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Zodiac Signs</th>
<th>No. of cases</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Mithunam</td>
<td>22</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>Simmom</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Dhanusu</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Kadagam</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Kanni</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Mesham</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Kumbam</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Thulam</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
Observation

Out of 68 cases 38 cases horoscope was collected. About 57% of mithunam raasi was reported. 6% of simmam raasi, 4% of kadagam and 2% of kanni, 1% of mesham, kumbam, thulam was reported.

Inference

Mithuna raasi, which is prejudged for the respiratory infections.

Mithunam raasi patients has got 57% of prevalence to this disease. Among the mithunam raasi mirugaseeradam and thiruvadurai was significantly noted.
# ASTRO PATHOLOGICAL VIEW OF KABAKAAŠAM

1. குறுவல் வரலம்

<table>
<thead>
<tr>
<th>பிரிவு நாடு</th>
<th>8.7.1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>குடியரசி</td>
<td>கடமாம்</td>
</tr>
<tr>
<td>ராஜகூரியம்</td>
<td>அகுமிலம்</td>
</tr>
<tr>
<td>இச்சொன்னு</td>
<td>முழுக்குக்கடமாம்</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>பாணத்துறை</th>
<th>முழுக்குக்கடமாம்</th>
</tr>
</thead>
<tbody>
<tr>
<td>பாணத்துறை</td>
<td>முழுக்குக்கடமாம்</td>
</tr>
</tbody>
</table>

## குறிப்பிட்டு:

பாணத்துறை, முழுக்குக்கடமாம் குறிப்பிட்டு சுருக்கமாக 3 முழுக்குக்கடமாம் முழுக்குக்கடமாம் முழுக்குக்கடமாம் முழுக்குக்கடமாம் முழுக்குக்கடமாம்.

2. ராஜகூரியம் - குறிப்பிட்டு ராஜகூரியம் 61M

<table>
<thead>
<tr>
<th>குறிப்பிட்டு</th>
<th>குறிப்பிட்டு</th>
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<tbody>
<tr>
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<tr>
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<th>பாணத்துறை</th>
<th>பாணத்துறை</th>
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<tbody>
<tr>
<td>பாணத்துறை</td>
<td>பாணத்துறை</td>
</tr>
</tbody>
</table>
3. INTERPRETATION OF JOTHIDAM

1) காக்களியின் வெள்ளு தாக்க கிரேசும்பாடு நிறம் திருக்கு விளையாட்டு திறன்காலமான காலம்.

2) திருமணம் தோற் செய்கலாம்

3) தெரு கிளையாம், தெருமணம் செய்கலாம்

4) குறிப்பிட்டு செய்கலாம் குடியேற்றுகள் பற்றிய கூறும்

5) காக்களியின் தால் திருச்செய்யும் காலகாலமான காலம்.
COMPARATIVE STUDY OF MANIKADAAI NOOL 
WITH BODY MASS INDEX

This is a Comparative study of manikadai nool with that of Body Mass Index, to reconfirm the Siddha Investigatory techniques Emphasised by our Siddhars.

Since Emaciation is an important symptom occuring in my disease, the author has felt an urge to have a preliminiary. Search of possibilities in which the BMI pattern would relate to manikadai nool.

AIM

✓ To document the Arithmetic influence of BMI with that of manikadai nool.
✓ To have a careful observation of its relationship and to document results for further Evaluation.

PROCEDURE

According to the Pathinen Siddhar Naadinool, Manikadainool is also helpful in diagnosis. This manikkadai nool is a parameter to diagnose the disease by measuring the circumference of the wrist by means of a thread and then dividing the measured circumference with the patient’s fingers. By this measurement the disease can be diagnosed.

OBSERVATIONS:

The symptoms of the disease “Kabakaasam” have been mentioned in 7-8 finger breath.

The following are the correlation of Manikaadai Nool with that of their corresponding BMI
Results

The following are the correlation of manikadai nool with that of their corresponding BMI.

<table>
<thead>
<tr>
<th>Finger Breadth</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 finger breadth</td>
<td>approximately correlated with 16</td>
</tr>
<tr>
<td>7⅛ finger breadth</td>
<td>- 17 BMI</td>
</tr>
<tr>
<td>7½ finger breadth</td>
<td>- 18 BMI</td>
</tr>
<tr>
<td>7¾ finger breadth</td>
<td>- 21 BMI</td>
</tr>
<tr>
<td>8 finger breadth</td>
<td>- 22 BMI</td>
</tr>
</tbody>
</table>

1. வைழ்ப்புறிக்கல் (8 Finger breadth)

It was observed that 8 finger breadth was found associated with disease such as Rhinorrhoea, Sinusitis, Anorexia.

2. வைழ்ப்புறிக்கல் (7 ¾ Finger breadth)

The above verses infer’s that 7 ¾ finger breadth was observed in associated cervical lymphadenitis which is a feature of kaba kaasam.
3. நூற்று கிளிமுகம் (7 ½ Finger breadth)

டேனியல் முனையை கன்சான் கண்டுபிடித்து தத்திற்கு குறித்து
காண்பட்டு முனையை விளக்கும் வகைப்பாடைந்த தரை கண்டு
பெற்று காண்பட்டு சுருக்குகிற்பாடுகள் கற்றுக் குறித்து
காண்போற்ற முனையை விளக்கும் வகைப்பாடைந்த நிர்ணயமைக்கப்

Emaication and fever were observed in 7 ½ finger breadth
measured which was infer in the above versus.

4. குறிப்பிட்டு கிளிமுகம் (7 ¼ Finger breadth)

டேனியல் கண்டுபிடிக்கப்பட்டு விளக்கும் வகைப்பாடான
மற்றும் முனையை விளக்கும் வகைப்பாடுகள் கற்றுக் குறித்து
காண்போற்ற முனையை விளக்கும் வகைப்பாடுகள் கற்று

This stanza denotes the aggravated pitha , which was the root cause
and also associated with anaemic manifestation.

ேல் கிளிமுகம் (7 Finger breadth)

திட்டம் முனையை கன்சான் குறித்து விளக்கும்
மற்றும் முனையை விளக்கும் வகைப்பாடுகள்
சுருக்கும் கண்டுபிடிக்கப் பெற்று விளக்கும் வகைப்பாடு
சுருக்கு கண்டுபிடிக்கப் பெற்று விளக்கும் வகைப்பாடு

The above versus infers that 7 finger breadth portrait Aggravated
pitham and, haemoptysis which was also a manifestation of kaasam.

The above observation study reveals that manikadai nool important
parameter in diagnosis.
SUMMARY

- The author had selected the disease kabha kaasam and to find the significance of Envagai thervugal in diagnosis.
- This disease is characterized by cough with expectoration, fevers, loss of appetite, Giddiness and emaciation.
- Kabha kaasam is one of 12 kaasam as per siddhar yugi munivar text.
- The author had reviewed the Literatures for aetiology, premonitory symptoms, symptoms classification, pathogenesis, Naadi Nadaigal and fatality of disease.
- The literary collection of astrology related to kaba kaasam has been collected.
- Literary collection about Envagai thervugal has been done and its significance had evaluated.
- Clinical standardization of Manikadai Nool has been done.
- Significance of Astrological in kabakaasam is dealt.

HIGHLIGHTS OF DISSERTATION TOPIC

1. Pranan, avalambagam got a chief role in the etiopathogenesis of kabakaasam.
2. The triad of pranan, kledhagam, Avalambagam, Anarpitham contributes the pathology of the topic.
3. ‘Karma’ play’s a major role in the etiology.
4. Ennvagai thervugal of diagnosis gives a detailed pathology about the disease.
5. The astropathological aspect of kabakaasam is explained with Horoscope’s.
6. *s*, are the supposed to contribute Immunity.


8. Comparision of Manikadai Nool had done for an attempt to standarized the Manikadai Nool.
CONCLUSION

“SIDDHANTHAM” means – a perfect knowledge of Truth where as modern science varies from time to time. According to Siddha – “A True Knowledge can obtained only when a physician’s is expertise in

The main barrier to the development of Siddha is the Lack of documentation hence, with a view to Enlighten the hidden truths of Siddha the author has prompted to document the observation and results of ENNVAGAI, THERVUGAL, JOTHIDAM, MANIKADAI NOOL. Naadi along with Neerkuri correlated with clinical symptoms of Kabakaasam useful in diagnosis to some extent only. But, Ennvagai thervugal is very significant in Evaluation of prognosis and Infering the Sathiya and asathiya Nilai.
The study on Kabakaasam may be correlated with pulmonary tuberculosis which had given relevenced modern clinical entity.

**Nutrition**

Adequate nutrition is an important feature though all stages of infection. Malnutrition appears to increase the risk for tuberculosis; persons with low body mass index are greatly more at risk for tuberculosis than are those with a high index. Additionally, among patients underweight at the time of diagnosis, those who increase their weight by 5% during the first 2 months of treatment have significantly less relapse than do patients who gain less than 5%. Nurses should take particular note of underweight tuberculosis patients, recognizing that being underweight is a risk factor for relapse and encouraging aggressive nutritional support.

Also, because functional recovery often lags behind microbiological cure, the aim of nutritional intervention should be to restore lean tissue. Nurses should also encourage patients to engage in physical activity to counter the loss of muscle mass and subsequent fatigue. Advocating for a nutritionist and physical therapist to evaluate a patient with tuberculosis to make patient-specific recommendations would be an appropriate action for nurses.

**Emotional Support and Education**

In addition to the direct responsibilities of nursing, many nurses are also a key source of emotional support for patients and patients’ families during times of illness. Perceived emotional support from nursing staff can improve adherence to therapy. Many patients with tuberculosis
experience feelings of guilt and face stigma, and patients’ family members often fear associating with the patients. Nurses can provide education to patients and patients’ families about transmission and treatment to help reduce misconceptions and can elicit conversations to communicate concerns. Encouragement combined with education can affect a patient’s adherence to therapy, as well as improve the patient’s mood and perception of the illness.
ANNEXURE
GOVT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.
DEPARTMENT OF PG NOI NAADAL

A STUDY ON DIAGNOSTIC METHODOLOGY OF KABA KAASAM IN THE CONTEXT OF ENNVAGAI THERVUGAL

FORM I
SCREENING AND SELECTION PROFORMA

5. Name: ________________  6. Age (years): □ 7. Gender: M □ F □  
10. Address:  

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

11. Contact Nos: ________________________________  
12. E-mail : ________________________________
6.3 SELECTION CRITERIA

INCUSION CRITERIA:

- Cough with expectoration
- Loss of appetite
- Loss of weight
- A positive AFB or Positive Chest X-ray

EXCLUSION CRITERIA:

- Associated with diabetes mellitus
- Associated with rhumatoid arthritis
- Extra Pulmonary tb
- Patients on Corticosteroid therapy

Date:                         Signature:
GOVT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.
DEPARTMENT OF PG NOI NAADAL

A STUDY ON DIAGNOSTIC METHODOLOGY OF KABA KAASAM IN THE
CONTEXT OF ENNVAGAI THERVUGAL

FORM I-A
HISTORY PROFORMA

1. Sl.No of the case: ________________

2. Name: _______________________ Height: _____ cms  Weight: _____ Kg

3. Age (years): _________

4. Educational Status:
   1) Illiterate  [ ]  2) Literate [ ]  3) Student [ ]  4) Graduate/Postgraduate [ ]

5. Nature of work:
   1) Sedentary work [ ]
   2) Field work with physical labour [ ]
   3) Field work Executive [ ]
   4) Farmers [ ]
   5) Work with cattles [ ]

6) Annual income of the family: ________________

7) Total number of member share the income: [ ]

8) Complaints and Duration: 
   ________________________________________________________________
9) History of present illness:

I. History of Present Absent
1. Cough

2. Expectoration

3. Hemoptysis

4. Breathlessness

5. Wheeze

6. Chest pain

II. History of Tuberculosis Present Absent
1. Evening rise of temperature
   night sweats

2. Anorexia

3. Weight loss

4. Pleurisy

5. Meningitis

6. Lymphadenopathy pastor in family

III. History of Occupational disease
1. Occupation

2. Residence

3. Near factory or mills Present Absent

IV. Allergic History Present Absent
1. Family History
   1. Asthma
   2. Hay Fever
   3. Eczema
2. Sinusitis

<table>
<thead>
<tr>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal discharge</td>
<td></td>
</tr>
<tr>
<td>Head ache</td>
<td></td>
</tr>
</tbody>
</table>

10) History of Past illness:

<table>
<thead>
<tr>
<th>Illness</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systemic hypertension</td>
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<tr>
<td>Exposure to tb</td>
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<td></td>
</tr>
<tr>
<td>Exposure to STD</td>
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<td></td>
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<tr>
<td>Diabetes mellitus</td>
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</tr>
<tr>
<td>Ishemic heart disease</td>
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</tr>
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<td>Dyslipidemia</td>
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<td>Jaundice</td>
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<td>Any surgeries</td>
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<tr>
<td>Any major illnesses</td>
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<td></td>
</tr>
<tr>
<td>Any accident / Blood transfusion</td>
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</tbody>
</table>

11) Habits:

1. Yes 2. No

<table>
<thead>
<tr>
<th>Habit</th>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Packet Per day</td>
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<td></td>
</tr>
<tr>
<td>Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beedi / Cigarette</td>
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<td></td>
</tr>
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<td>Alcoholic</td>
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</tr>
<tr>
<td>Regular / Occasional</td>
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</tr>
<tr>
<td>ml Per day / Year</td>
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<tr>
<td>Drug Addiction</td>
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</tr>
<tr>
<td>Betel nut chewer:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of diet</td>
<td>V</td>
<td>NV</td>
</tr>
<tr>
<td>Contact with infected humans/cattles</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12) **Personal history:**

Marital status: Married | | Unmarried |  |
| No. of children: Male: _____ | Female: _____ |

13) **Family history:**

| History of similar illness | Yes | No |
| Father |  |  |
| Mother |  |  |
| Others |  |  |

13. **GENERAL ETIOLOGY FOR KABA KAASAM:**

| Yes | No |
| Addiction to tobacco |  |  |
| Consumption of non-veg food |  |  |
| Sedentary life style |  |  |
| Eating spoiled food |  |  |
| Avoid eating during hungry |  |  |
17. CLINICAL SYMPTOMS OF KABA KAASAM:

- Increased sexual indulgence
- Chronic depression

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Present</th>
<th>Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough with expectoration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyspnoea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tachypnoea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of appetite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emaciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fever</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Constitutional Symptoms:**

- Night sweats
- Dyspepsia
- Irritability
A STUDY ON DIAGNOSTIC METHODOLOGY OF KABA KAASAM IN THE CONTEXT OF ENNVAGAI THERVUGAL

FORM II

CLINICAL ASSESSMENT

1. Serial No: ________
2. Name: ______________
3. Date of birth: __________
   D D  M M  Y E A R
4. Age: ______ years
5. Date: __________

GENERAL EXAMINATION:

1. Height: ________ cms.  BMI ______ (Weight Kg/ Height m2)
2. Weight (kg):
3. Built  Normal  Obese  Thin
4. Temperature (°F):
5. Pulse rate:
6. Heart rate:
7. Respiratory rate:
8. Blood pressure:
9. Pallor:
10. Jaundice:
11. Cyanosis:
12. Lymphadenopathy:
13. Pedal edema:
14. Clubbing:
15. Jugular vein pulsation:
1. Built and Nutrition
   1. Normal  
   2. Emaciated 
2. Nails
   1. Pallor  
   2. Clubbing  
   3. Cyanosis  
   4. Icterus 
3. Conjuctiva
   1. Pallor  
   2. Cyanosis  
   3. Icterus 
4. Spine
   Sciotic 
   Laxotic 
   Kyposis 
5. Stigma of tuberculosis
   a. Phlyctenular Conjuctiva 
   b. Scans and sinus in neck 
   c. Erythema Nodosus 
   d. Cutis Vulgaris 
   f. Serofulodeema 
6. Neck
   a. Thyroid 
   b. Tracheal tag 
7. Upper Respiratory tract
   a. Sinus tenderness Present 
   b. Throat 
   c. Tonsil 
   d. Posterior pharyngeal wall 
   e. Alae nasi 

VITAL ORGANS EXAMINATION
1. Normal  2. Affected
1. Heart 
   
2. Lungs 
   
3. Brain 
   
4. Liver

5. Kidney

6. Spleen

7. Stomach

SYSTEMIC EXAMINATION:
1. Cardio Vascular System

Respiratory System Examination
1. Inspection
   a. Shape
   b. Respiratory movement
      i. Respiratory rate
      ii. Rhythm
      iii. Character
      iv. Equality
         Accessory muscles of respiration
         Inter coastal retraction
   v. Mediastinum
      1. Trail sign
      2. Apex Impulse
       Normal
   vi. Miscellaneous
       Present  Absent

1. Scars
2. Sinuses
3. Visible pulsation
4. Dilated vein
5. Shiny skin over lower chest
III. Palpation

1. Chest movement
   Normal  ☐  Affected  ☐

2. Mediastinum
   Trachea  Normal  ☐  Deviated  ☐
   Apex beat  Normal  ☐  Deviated  ☐

3. Tactile vocal fremitus  Normal  ☐  Deviated  ☐

4. Tenderness over lower inter costal space  Present  ☐  Absent  ☐
   Palpable rales  ☐  ☐
   Palpable ronchi  ☐  ☐
   Palpable plural rub  ☐  ☐

IV. Percussion

   A. Anterior
      Kronig isthmus  _________
      Clavicular percussion  _________
      Intercostal resonance  _________
      Shifting dullness  _________

   B. Posterior  Normal  ☐  Abnormal  ☐

V. Auscultation

1. Breath sound  Normal  ☐  Diminish  ☐

2. Type  Vesicular  ☐  Bronchial  ☐

3. Foreign sounds
   Rales  ☐  Rhonchi  ☐  Pleural rub  ☐

4. Vocal resonance  Normal  ☐  Affected  ☐  _______

5. Miscellaneous
   1. Bronchophony  ☐  ☐
   2. Egophony  ☐  ☐
   3. Whispering pectoriloquy  ☐  ☐
   4. Succussion splash  ☐  ☐
   5. Coin test  ☐  ☐
<table>
<thead>
<tr>
<th>System</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Gastrointestinal System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Central Nervous System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Uro genital System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Endocrine System</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Musculoskeletal System</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# SIDDHA SYSTEM OF EXAMINATION

[1] ENNVAGAI THERVU [EIGHT-FOLD EXAMINATION]

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

(a) **Naadi Nithanam (Pulse Appraisal)**

1. **Kaalam (Pulse reading season)**

<table>
<thead>
<tr>
<th>Season</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kaarkaalam</td>
<td></td>
</tr>
<tr>
<td>(Rainy season)</td>
<td></td>
</tr>
<tr>
<td>2. Koothirkaalam</td>
<td></td>
</tr>
<tr>
<td>(Autumn)</td>
<td></td>
</tr>
<tr>
<td>3. Munpanikaalam</td>
<td></td>
</tr>
<tr>
<td>(Early winter)</td>
<td></td>
</tr>
<tr>
<td>4. Pinpanikaalam</td>
<td></td>
</tr>
<tr>
<td>(Late winter)</td>
<td></td>
</tr>
<tr>
<td>5. Ilavenirkaalam</td>
<td></td>
</tr>
<tr>
<td>(Early summer)</td>
<td></td>
</tr>
<tr>
<td>6. Muthuvenirkaalam</td>
<td></td>
</tr>
<tr>
<td>(Late summer)</td>
<td></td>
</tr>
</tbody>
</table>

2. **Desam (Climate of the patient’s habitat)**

<table>
<thead>
<tr>
<th>Climate</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Kulir</td>
<td></td>
</tr>
<tr>
<td>(Temperate)</td>
<td></td>
</tr>
<tr>
<td>2. Veppam</td>
<td></td>
</tr>
<tr>
<td>(Hot)</td>
<td></td>
</tr>
<tr>
<td>3. Vayathu</td>
<td></td>
</tr>
<tr>
<td>1.1-33yrs</td>
<td></td>
</tr>
<tr>
<td>2. 34-66yrs</td>
<td></td>
</tr>
<tr>
<td>3.67-100</td>
<td></td>
</tr>
</tbody>
</table>

3. **Vayathu (Age)**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 1-33yrs</td>
<td></td>
</tr>
<tr>
<td>2. 34-66yrs</td>
<td></td>
</tr>
<tr>
<td>3. 67-100</td>
<td></td>
</tr>
</tbody>
</table>

4. **Udal Vanmai (General body condition)**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Iyyalbu</td>
<td></td>
</tr>
<tr>
<td>(Normal built)</td>
<td></td>
</tr>
<tr>
<td>2. Valivu</td>
<td></td>
</tr>
<tr>
<td>(Robust)</td>
<td></td>
</tr>
<tr>
<td>3. Melivu</td>
<td></td>
</tr>
<tr>
<td>(Lean)</td>
<td></td>
</tr>
</tbody>
</table>

5. **Naadiyin Vanmai (Expansile Nature)**

<table>
<thead>
<tr>
<th>Nature</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Valivu</td>
<td></td>
</tr>
<tr>
<td>2. Melivu</td>
<td></td>
</tr>
</tbody>
</table>

6. **Panbu (Habit)**

<table>
<thead>
<tr>
<th>Habit</th>
<th>Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Thannadai</td>
<td></td>
</tr>
<tr>
<td>(Playing in)</td>
<td></td>
</tr>
<tr>
<td>2. Munnokku</td>
<td></td>
</tr>
<tr>
<td>(Advancing)</td>
<td></td>
</tr>
<tr>
<td>3. Pinnokku</td>
<td></td>
</tr>
<tr>
<td>(Flinching)</td>
<td></td>
</tr>
<tr>
<td>4. Pakkamnokku</td>
<td></td>
</tr>
<tr>
<td>(Swerving)</td>
<td></td>
</tr>
<tr>
<td>5. Puranadai</td>
<td></td>
</tr>
<tr>
<td>(Playing out)</td>
<td></td>
</tr>
<tr>
<td>6. Illaitthal</td>
<td></td>
</tr>
<tr>
<td>(Feeble)</td>
<td></td>
</tr>
<tr>
<td>7. Kathithal</td>
<td></td>
</tr>
<tr>
<td>(Swelling)</td>
<td></td>
</tr>
<tr>
<td>8. Kuthithal</td>
<td></td>
</tr>
<tr>
<td>(Jumping)</td>
<td></td>
</tr>
<tr>
<td>9. Thullal</td>
<td></td>
</tr>
<tr>
<td>(Frsiking)</td>
<td></td>
</tr>
</tbody>
</table>
10. Azhutthal (Ducking)  11. Padutthal (Lying)  12. Kalatthal (Blending)

13. Suzhalal (Revolving)

(b) Naadi nadai (Pulse Play)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Vali</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Azhal</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Iyyam</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Vali Azhal</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Azhal Vali</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Iyya Vali</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Vali Iyyam</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Azhal Iyyam</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Iyya Azhal</td>
<td></td>
</tr>
</tbody>
</table>

**II. NAA (TONGUE)**

1. **Maa Padinthiruthal (Coatedness)**

<p>| | | |</p>
<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Normal</td>
<td></td>
</tr>
</tbody>
</table>

Present

1. Niram (Colour) ___________
2. Vadivam (Shape) ___________
3. Idam (Space) ___________

2. **Niram (Colour)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Karuppu (Dark)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Manjal (Yellow)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Velluppu (Pale)</td>
<td></td>
</tr>
</tbody>
</table>

3. **Suvai (Taste sensation)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Pulippu (Sour)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Kaippu (Bitter)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Karippu</td>
<td></td>
</tr>
</tbody>
</table>

4. **Vedippu (Fissure)**

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

Fissure depth ___________

5. **Vai neer ooral (Salivation)**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Normal</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Increased</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Reduced</td>
<td></td>
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</tbody>
</table>

Colour ___________
Consistency ___________

6. **Koonuthal (deviation)**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Absent</td>
</tr>
<tr>
<td>2</td>
<td>Present</td>
</tr>
</tbody>
</table>
III. NIRAM (COLOUR)
1. Iyalbana Niram
      (Dark)  (Yellowish)  (Fair)
   4. Maaniram  □

2. Asadharana Niram
      (Dark)  (Yellowish)  (Fair)
   4. Maaniram  □  5. Sivathal  □

3. Colour Change in other external organ _______________

IV. MOZHI (VOICE)
1. Sama oli  □  2. Urattha oli  □  3. Thazhantha oli  □
    (Medium pitched)  (High pitched)  (Low pitched)

4. Sound produced in lung field during rest  □

V. VIZHI (EYES)
1. Niram (Venvizhi)  (Discolouration)
   1. Karuppu  □  2. Pazhuppu  □
   5. Local redness  □  6. Total redness  □

7. Any other Eye disease  □

2. Neerthuvam  (Moisture)
   1. Normal  □  2. Increased  □  3. Reduced  □

3. Erichchal  (Burning sensation)
   1. Present  □  2. Absent  □

4. Peelai seruthal  (Mucus excrements)
   1. Present  □  2. Absent  □

5. Any other eye diseases
   1. Present  □  2. Absent  □
### VI. MEI KURI (PHYSICAL SIGNS)

1. Veppam (Warmth)  
   - 1. Mitham (Mild)  
   - 2. Migu (Moderate)  
   - 3. Thatpam (Low)  

2. Viyarvai (Sweat)  
   - 1. Increased  
   - 2. Normal  
   - 3. Reduced  

3. Thodu vali (Tenderness)  
   - 1. Absent  
   - 2. Present  

### VII. MALAM (STOOLS)

1. Alavu (Quantity)  
   - Normal  
   - Increased  
   - Decreased  

2. Niram (Color)  
   - 1. Karuppu (Dark)  
   - 2. Manjal (Yellowish)  

3. Paluppu Manjal (Yellow in Brown)  
   - 4. Sivappu (Reddish)  
   - 5. Velluppu (Pale)  

3. Sikkal (Constipation)  
   - 1. Present  
   - 2. Absent  

4. Sirutthal (Poorly formed stools)  
   - 1. Present  
   - 2. Absent  

5. Kalichchal (Loose watery stools)  
   - 1. Present  
   - 2. Absent  

6. Seetham (Watery and mucoid excrements)  
   - 1. Present  
   - 2. Absent  

7. Vemmai (Warmth)  
   - 1. Present  
   - 2. Absent  

8. History of habitual constipation  
   - 1. Present  
   - 2. Absent  

9. Passing of  
   - a) Mucous  
     - 1. Yes  
     - 2. No  
   - b) Blood  
     - 1. Yes  
     - 2. No
c) Mucous with Blood 1. Yes 2. No

d) Presence of any food Particles 1. Yes 2. No

VIII. MOOTHIRAM (URINE)

(a) NEER KURI (PHYSICAL CHARACTERISTICS)

1. Niram (colour)

<table>
<thead>
<tr>
<th>Colour</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colourless</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milky purulent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>orange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greenish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>dark brown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bright red</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brown red or yellow</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Manam (odour)

<table>
<thead>
<tr>
<th>Odour</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Edai (Specific gravity)

<table>
<thead>
<tr>
<th>Gravity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal (1.010-1.025)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Specific gravity (&gt;1.025)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Specific gravity (&lt;1.010)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low and fixed Specific gravity (1.010-1.012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. **Alavu (volume)**

- **Normal (1.2-1.5 lt/day)**
  - Yes
  - No

- **Polyuria (>2lt/day)**
  - Yes
  - No

- **Oliguria (<500ml/day)**
  - Yes
  - No

5. **Nurai (froth)**

- **Clear**
  - Yes
  - No

- **Cloudy**
  - Yes
  - No

- **Colour of froth**
  - ________________________________

6. **Enjal (deposits)**

- **Yes**
- **No**

(b) **NEI KURI (oil spreading sign)**

1. **Aravam**
   - (Serpentine fashion)
2. **Mothiram**
   - (Ring)
3. **Muthu**
   - (Pearl beaded appear)
4. **Aravil Mothiram**
   - (Serpentine in ring fashion)
5. **Aravil Muthu**
   - (Serpentine and Pearl patterns)
6. **Mothirathil Muthu**
   - (Ring in pearl fashion)
7. **Mothisrathil Aravam**
   - (Ring in Serpentine fashion)
8. **Muthil Aravam**
   - (Pearl in Serpentine fashion)
9. **Muthil Mothiram**
   - (Pearl in ring fashion)
10. **Asathiyam**
    - (Incurable)
11. **Mellena paraval**
    - Slow spreading
12. **Others:** ___________________________
[2]. **MANIKADAI NOOL** (Wrist circummetric sign) :

Rt. Wrist ___________  Lt. Wrist ___________

[3]. **IYMPORIGAL /IYMPULANGAL**

(Penta sensors and its modalities)

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mei (skin)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Vaai (Mouth/ Tongue)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Kan (Eyes)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Mookku (Nose)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Sevi (Ears)</td>
<td></td>
</tr>
</tbody>
</table>

[4]. **KANMENTHIRIYANGAL /KANMAVIDAYANGAL**

(Motor machinery and its execution)

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kai (Hands)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Kaal (Legs)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Vaai (Mouth)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Eruvai (Analepy)</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Karuvaai (Birth canal)</td>
<td></td>
</tr>
</tbody>
</table>
[5]. YAKKAI (SOMATIC TYPES)

Vatha constitution

Pitha constitution
Kaba constitution

Lean and lanky built
Hefty proximities of limbs
Cracking sound of joints on walking
Dark and thicker eye lashes
Dark and light admixed complexion
Split hair
Clear words
Scant appetite for cold food items
Poor strength despite much eating
Loss of libido
In generosity

With eyes half closed
Thin covering of bones and joints by soft tissue
Always found with warmth, sweating and offensive body
odour

<table>
<thead>
<tr>
<th>Symptom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrinkles in the skin</td>
<td></td>
</tr>
<tr>
<td>Red and yellow admixed complexion</td>
<td></td>
</tr>
<tr>
<td>Easily suffusing eyes due to heat and alcohol</td>
<td></td>
</tr>
<tr>
<td>Sparse hair with greying</td>
<td></td>
</tr>
<tr>
<td>Intolerance to hunger, thirst and heat</td>
<td></td>
</tr>
<tr>
<td>Inclination towards perfumes like sandal</td>
<td></td>
</tr>
<tr>
<td>Slender eye lashes</td>
<td></td>
</tr>
<tr>
<td>Pimples and moles are plenty</td>
<td></td>
</tr>
<tr>
<td>Plumpy joints and limbs</td>
<td></td>
</tr>
<tr>
<td>Broad forehead and chest</td>
<td></td>
</tr>
<tr>
<td>Sparkling eyes with clear sight</td>
<td></td>
</tr>
<tr>
<td>Lolling walk</td>
<td></td>
</tr>
<tr>
<td>Immense strength despite poor eating</td>
<td></td>
</tr>
<tr>
<td>High tolerance to hunger, thirst and fear</td>
<td></td>
</tr>
<tr>
<td>Exemplary character with good memory power</td>
<td></td>
</tr>
<tr>
<td>More liking for sweet taste</td>
<td></td>
</tr>
<tr>
<td>Husky voice</td>
<td></td>
</tr>
</tbody>
</table>
RESULTANT SOMATIC TYPE: _____________________________

[6] GUNAM

1. Sathuva Gunam
2. Rajo Gunam
3. Thamo Gunam

[7] KOSHANGAL

1. Annamaya Kosham
   (Seven Udal thadukal)
2. Pranamaya Kosham
   (Pranan + Kanmenthereya)
3. Manomaya Kosham
   (Manam + Gnanendhireya)
4. Vingannamaya Kosham
   (Budhi + Gnanendhireya)
5. Anandamaya Kosham
   (Pranan + Suluthi)

[8] UYIR THATHUKKAL

A. VALI

<table>
<thead>
<tr>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
</table>
| 1. Praanan
    (Heart centre) | □ | □ |
| 2. Abaanan
    (Matedial of muladhar centre) | □ | □ |
| 3. Samaanan
    (Navel centre) | □ | □ |
| 4. Udhaanan
    (Forehead centre) | □ | □ |
5. Viyaanan  
(Throat centre)  

6. Naahan  
(Higher intellectual function)  

7. Koorman  
(Air of yawning)  

8. Kirukaran  
(Air of salivation)  

9. Devathathan  
(Air of laziness)  

10. Dhananjeyan  
(Air that acts on death)  

### B. AZHAL

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Anala pittham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Gastric juice)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Prasaka pittham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Bile)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Ranjaka pittham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Haemoglobin)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Aalosaka pittham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Aqueous Humour)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Saathaka pittham</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Life energy)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C. IYYAM

<table>
<thead>
<tr>
<th></th>
<th>1. Normal</th>
<th>2. Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Avalambagam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Serum)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Kilethagam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(saliva)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Pothagam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(lymph)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Tharpagam
   (cerebrospinal fluid)

5. Santhigam
   (Synovial fluid)

[9] UDAL THATHUKKAL
A. SAARAM
INCREASED SAARAM (CHYLE)
DECREASED SAARAM(CHYLE)

- Loss of appetite
- Excessive salivation
- Loss of perseverance
- Excessive heaviness
- White musculature
- Cough, dyspnea, excessive sleep
- Weakness in all joints of the body
- Loss weight
- Tiredness
- Dryness of the skin
- Diminished activity of the sense organs

SAARAM: NORMAL  INCREASED  DECREASED

B. CENNEER

INCREASED CENNEER(BLOOD)
DECREASED CENNEER(BLOOD)

- Boils in different parts of the body
- Anorexia
Mental disorder
Spleenomegaly
Colic pain
Increased pressure
Reddish eye
Redness of skin
Jaundice
Haematuria

Anemia
Tiredness
Neuritis
Lassitude
Pallor of the body

CENNEER: NORMAL  □ INCREASED  □ DECREASED  □

C. OON

INCREASED OON (MUSLE)
DECREASED OON (MUSLE)

Cervical lymphadenitis
Vernical ulcer
Tumour in face, abdomen,
thigh, genitalia

Hyper muscular in the cervical region

Inflammatory changes in skin

Impairment of sense organs

Joint pain

Jaw, thigh and genitalia gets shortened

OON: NORMAL INCREASED DECREASED

D. KOZHUPPU

INCREASED KOZHUPPU (ADIPOSE TISSUE)
DECREASED KOZHUPPU (ADIPOSE TISSUE)

Cervical lymph adenitis

Vernical ulcer

Tumour in face, abdomen, thigh, genitalia

Hyper muscular in the cervical region

Dyspnoea

Loss of activity

Pain in the hip region

Disease of the spleen
KOZHUPPU: NORMAL □ INCREASED □ DECREASED □

E. ENBU

INCREASED ENBU (BONE)
DECREASED ENBU (BONE)

Growth in bones and teeth □
Excessive hair growth □
Bones diseases □
Loosening of teeth □
Nails splitting □
Falling of hair □

ENBU: NORMAL □ INCREASED □ DECREASED □

F. MOOLAI

INCREASED MOOLAI (BONE MARROW)
DECREASED MOOLAI (BONE MARROW)

Heaviness of the body □
Swollen eyes □
Swollen phalanges □
chubby fingers □
Oliguria □
Non healing ulcer □
Osteoporosis □
Sunken eyes □

MOOLAI: NORMAL □ INCREASED □ DECREASED □
G. SUKKILAM / SURONITHAM

INCREASED SUKKILAM/SURONITHAM
(SPERM OR OVUM)
DECREASED SUKKILAM/SURONITHAM
(SPERM OR OVUM)

Infatuation and lust towards women / men
Urinary calculi

Failure in reproduction
Pain in the genitalia

SUKKILAM/ NORMA INCREASED DECREASED
SURONITHAM

10] MUUKUTRA MIGU GUNAM

I. Vali Migu Gunam  1. Present  2. Absent

1. Emaciation
2. Niram – blackish
3. Desire to take hot food
4. Shivering of body
5. Abdominal distension
6. Constipation
7. Insomnia
8. Weakness
9. Defect of sense organs
10. Giddiness
## II. Pitham Migu Gunam

<table>
<thead>
<tr>
<th>1. Present</th>
<th>2. Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Yellowish discolouration of skin</td>
<td></td>
</tr>
<tr>
<td>2. Yellowish discolouration of the eye</td>
<td></td>
</tr>
<tr>
<td>3. Yellow coloured urine</td>
<td></td>
</tr>
<tr>
<td>4. Yellowishness of faeces</td>
<td></td>
</tr>
<tr>
<td>5. Increased appetite</td>
<td></td>
</tr>
<tr>
<td>6. Increased thirst</td>
<td></td>
</tr>
<tr>
<td>7. Burning sensation over the body</td>
<td></td>
</tr>
<tr>
<td>8. Sleep disturbance</td>
<td></td>
</tr>
</tbody>
</table>

## III. Kapham Migu Gunam

<table>
<thead>
<tr>
<th>1. Present</th>
<th>2. Absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Increased salivary secretion</td>
<td></td>
</tr>
<tr>
<td>2. Reduced activeness</td>
<td></td>
</tr>
<tr>
<td>3. Heaviness of the body</td>
<td></td>
</tr>
<tr>
<td>4. Body colour – fair complexion</td>
<td></td>
</tr>
<tr>
<td>5. Chillness of the body</td>
<td></td>
</tr>
<tr>
<td>6. Reduced appetitie</td>
<td></td>
</tr>
<tr>
<td>7. Eraippu</td>
<td></td>
</tr>
<tr>
<td>8. Increased sleep</td>
<td></td>
</tr>
</tbody>
</table>
### 11. NOIUTRA KAALAM

<table>
<thead>
<tr>
<th>No</th>
<th>Season</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaarkaalam</td>
<td>Aug 15 - Oct 14</td>
</tr>
<tr>
<td>2</td>
<td>Koothirkaalam</td>
<td>Oct 15 - Dec 14</td>
</tr>
<tr>
<td>3</td>
<td>Munpanikaalam</td>
<td>Dec 15 - Feb 14</td>
</tr>
<tr>
<td>4</td>
<td>Pinpanikaalam</td>
<td>Feb 15 - Apr 14</td>
</tr>
<tr>
<td>5</td>
<td>Ilavanirkaalam</td>
<td>Apr 15 - June 14</td>
</tr>
<tr>
<td>6</td>
<td>Muthuvenirkaalam</td>
<td>June 15 - Aug 14</td>
</tr>
</tbody>
</table>

### 12. NOIUTRA NILAM

<table>
<thead>
<tr>
<th>No</th>
<th>Region</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kurunji</td>
<td>Hilly terrain</td>
</tr>
<tr>
<td>2</td>
<td>Mullai</td>
<td>Forest range</td>
</tr>
<tr>
<td>3</td>
<td>Marutham</td>
<td>Plains</td>
</tr>
<tr>
<td>4</td>
<td>Neithal</td>
<td>Coastal belt</td>
</tr>
<tr>
<td>5</td>
<td>Paalai</td>
<td>Desert</td>
</tr>
</tbody>
</table>
GOVT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.
DEPARTMENT OF PG NOI NAADAL
A STUDY ON DIAGNOSTIC METHODOLOGY OF KABA KAASAM IN THE
CONTEXT OF ENNVAGAI THERVUGAL
FORM-III
LABORATORY INVESTIGATIONS

1. O.P No: ________ Lab.No________ Serial No_______

2. Name: ________________

3. Age: _______ years

4. Date of assessment: ____________________

Urine Examination
6. Albumin __________

7. Sugar __________

8. Deposits _____________________

Blood
9. TC __________ Cells/cu mm

10. DC
   P__%        L____%        E____%        M_____%        B_____%

11. Hb _____ gms%

12. ESR At 30 minutes _______ mm at 60 minutes _______mm

13. Blood Sugar-(F) _____mgs% (PP) _____mgs%
14. Blood Urea ________ mgs%

15. Serum Cholesterol _______ mgs %

INVESTIGATION:

- Mantoux test
- Sputum for AFB
- Lung Biopsy
- X-ray
  - Chest
  - Ap
  - LA
  - PA
  - Lordotic
- CT
- MRI

Date:                                                 Signature of the Doctor
FORM IV A
INFORMED WRITTEN CONSENT FORM

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

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

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

Signature /thumb impression of the patient :
Date :
Name of the patient :

Signature of the investigator :
Date :

Head of the Department :
Date : 31.10.2010

அறு கிளை மாத்திய கல்லூரி, பாண்டியநகராட்சி
பெள இராம்புரம் - திருவள்ளுக்கு அலை
“ஆராய்ச்சி” - ரோட்டு கலனியா (சிறு பத்மா)
தேசிய ஆசிரியர் சத்துமி ஜூ ஆராய்
பெள் சன்: 32103007 (2010 – 2013)

அப்படி பட்டம்
அவர்பாரமாக சாக்கிறிலிணம்பாடு

வாக விழா அவ்வாக வந்து காலுகாலில் மிதிராஜாகத்துடன் திருவள்ளுக்கு
பிறும் காலப்பிள்ளை குடியுறுகருகின் வாக முதலில்தான் குறிப்பிட்டோம்.

விகிதம்: 
விளம்பம்:

திருவள்ளுக்கு வந்து

வாக விழா நூற்றாண்டு காலில் இருந்து மூன்று
எள்ளமாக வாக விழா பத்மா என்பது
பொன்னாது வெளியேற்றாக்கும் விழா அவர்பாரமாக சாக்கிறிலிணம்பாடு
இன்று விழா முதலில்தான் குறிப்பிட்டோம்.

விகிதம்: 
விளம்பம்:

குறிப்பிட்டோம்:

விகிதம்:
GOVT SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.
DEPARTMENT OF PG NOI NAADAL

A STUDY ON DIAGNOSTIC METHODOLOGY OF KABA KAASAM IN THE CONTEXT OF ENNVAGAI THERVUGAL

FORM - IV-E
PATIENT INFORMATION SHEET

PURPOSE OF RESEARCH AND BENEFITS:

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

STUDY PROCEDURE:

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

POSSIBLE RISK:

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

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

YOUR PARTICIPATION AND YOUR RIGHTS:

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

The Ethics committee cleared the study for undertaking at OPD Govt. Siddha Medical College, Palayamkottai, should any question arise with regards to this study you contact following person.
அவர் கிறித்துறை கல்லாலை, பாலம்பாரம் சாஸ்
மலிகுமார் விளக்கம் அனுப்புகிறது
“ஆலமர்பா” - சூட்டு கல்லாலை பயிர் பயிரை
சுற்றுச்சூழலுக்கு பயிர் வழி அனுப்பு
இன்று பார்வையில் கூறப்பட்டுள்ளது

அவர்கள் விளக்கங்களைப் பயன்படுத்தி:

காரணத்தில் பார்வையில் சேர்ந்தர்கள் அவற்றை விளக்கம் செய்திகளை பயன்பயிற்சி செய்யவும் கல்லாலை பயிர்பார்வையில் அனுப்புகிறது. இவ்வாறு பார்வையில் சுற்றுச்சூழலுக்கு பயிர் வழி அனுப்புக்கு ஒரு முக்கியமான பாதுகாப்பு அமைந்துள்ளது.

அமைந்து பாதுகாப்பு:

காரணத்தில் சேர்ந்தர்கள் பயிர்பார்வையில் பயிர் வழியில் அனுப்புகிறார்கள். சேர்ந்தர்கள் பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர் வழியில் பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வையில் அமைந்து பயிர்பார்வை�ில் அமைந்து பயிர்பார்வையில்
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- Roga Nirnaya saran
- Astanga Hridhyam
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- Dhanvanthiri vaithiyam
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- Text book of pars on eye disease
Muddy conjunctiva
Pallor
Reddish, dilated veins
Senile changes
Phlechynular conjunctivitis
Phlechynular conjunctivitis
Increased moisture
Dryness of eye

Vizhi Distribution

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Naa Changes

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- Glossitis: 7
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- Increased moisture: 6
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- K- Kabam
- KP-Kaba pitham
- P -Pitham
- NA -Not Affected
- KP -Kaba pitham
- PK -Pitha Kabam
- A - Affected
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