

**A STUDY ON**  
**THENDA VAATHAM**

*Dissertation Submitted To*

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

**Chennai – 32**

**In Partial fulfillment for The Award of Degree of**

**DOCTOR OF MEDICINE (SIDDHA)**

(Branch V - Noi Naadal)



**DEPARTMENT OF NOI NAADAL**

**GOVERNMENT SIDDHA MEDICAL COLLEGE**

**PALAYAMKOTTAI – 627 002**

**MARCH 2009**

# ACKNOWLEDGEMENT

The author just starts her gratitude to the almighty for making it possible to bring out this dissertation successfully. Along with God the author have to recognize her parents here.

The author thank to esteemed authorities of Tamil Nadu **Dr.M.G.R Medical University**, Chennai for granting her the opportunity to execute this research work in the department of Noi Naadal, Government Siddha Medical College, Palayamkottai

This study Thenda Vaatham is the outcome of her research work for M.D. Degree done under the supervision of professor **Dr.R.Devarajan M.D(s)**., Principal I/C and Head of the Post Graduate Department of Noi Naadal, Government Siddha Medical College, Palayamkottai.

The author express to thanks to our Vice Principal **Dr.Soundararajan M.D. (s)**., Government Siddha medical College Palayamkottai.

The author express her whole hearted thanks to her Lecturer **Dr.A.Vasuki Devi, M.D(s)**., for her valuable guidance for delivering this dissertation book in a successful manner, she inspired the author lot.

The author really fortunate and extremely happy in having as her lecturer **Dr.S.K.Sasi, M.D(s)**., to whom, the whole credit must go for developing the study. Author takes this opportunity to acknowledge her sincere thanks to her lecturer for the constant enthusiasm guidance rendered throughout this dissertation work.

The author would like to record her special thanks to **Dr.Rajasekar M.D.(s)**., whose inspiring words and encouragement in preparing this project

The author expresses her sincere thanks to **Dr.Raja Pandian M.B.B.S., D.C.H.**, Rajan Hospital, Ambasamudram for his help in this dissertation work.

The author also grateful and profusely thanks to **Dr.Paul Chandra M.B.B.S., D.G.O.**, Chandra Nursing Home, V.K.Puram, for her guidance.

The author also grateful to the lecturers and staffs of the Biochemistry Department and Clinical Pathology Department and technicians of Hospital Lab, Govt Siddha Medical College, Palayamkottai.

The author expresses her thanks to the Technicians of the Lotus Paramedical College Lab, V.K.Puram for their timely help for this dissertation work.

The author also grateful to the **Librarians**, Govt Siddha Medical College, Palayamkottai and District Central Library, Tirunelveli for providing her the necessary materials for the preparation of this dissertation.

The author would like to extend her special thanks to the **St. Jude's Computer Research Institute** especially **Mr.Gopal Krishnan** for his assist in bringing out the book successfully.

## INTRODUCTION

India, the land of “Unity in Diversity” popular not only for its tradition, heritage and culture but also famous for its traditional system of medicine called indigenous system of medicine. The unique nature of this system is its continuous serve to humanity in computing discuses and in maintaining its physical, mental and moral health, while many of these contemporaries had completed their forces long ago.

The term “Siddhar” has been derived from the word “Siddhi” which means accomplished achieved or perfected success and so it refers to one who had attained his end in spiritual goal, they were mystics, yogis, poets, devotees, and medical men of various combinations.

The siddha system of medicine is not only curative, it also possess preventive and rehabilitation and Rejuvenation aspects of its own kind than other systems of medicine. Siddhars are not only scientists they are social reformers, physicians and chemists, they heal, cure and solve the human problems by their “Supernatural Power” called Siddhi

“பார்ப்பா பூதமைந்து மண்நீர் தேயு பரிவாயுவாகாய  
மைந்தினாலே சேர்ப்பா சடமாச்சு”

- சித்த மருத்துவாங்கச் சுருக்கம்

According to this, human body is composed of five basic elements viz earth, water, fire, air, and aakaayam. Human body is functioning on the homeostasis of three vital forces such as Vaatha, Pitha and Kaba. Any dearrangements in the homeostasis may lead to diseased condition called pini or noi.

Siddhars are classified the diseases into 4448 types. Siddhars diagnosing the diseases by means of Envagai Thervu which includes Naadi, Neerkkuri and Neikkuri the “Precise Diagnostic Tool” of siddhars. The treatment aspect involves the neutralization of affected humors.

The author has selected “Thenda Vaatham” which comes under the types of vaatha diseases in “Yugi Vaithiya, Chinthamani” for dissertation work. This dissertation deals with the basic principles of siddha medicine, the etiology, pathology of the disease and its diagnostic measures in concluding the disease as “Thenda Vaatham” with clinical measurements.

## SIDDHA PHYSIOLOGY

Siddhars belived that five elements are the basic of the universe and every human being. Our ancient literature Tholkaapiyam also accepts the consepts of siddhars. The universe is a composition of five elements viz earth, air, water, ether and fire which are known as “Panchabootham” in siddha system. So the human body is a composition of this panchabootham.

“அண்டத்திலுள்ளதே பிண்டம்  
பிண்டத்திலுள்ளதே அண்டம்  
அண்டமும் பிண்டமும் ஒன்றே  
அறிந்துதான் பார்க்கும் போதே”

- சட்டமுனி

According to siddha physiology man is considered as the microcosm. Universe is considered as the macrocosm. It shows that the human body is the replica of the universe.

Vethas reveal that one of the five elements combined with the other four elements in different proportions to form the human body. The basic reason for the soul resting in uyirthathu or jeevathathu.

This uyirthathu divided into three thodas known as vaatham, pitham, kabam and acquires three characters (Mukkunam – Sathuva, rajo, thomal thereby it protects and develops the soul and body.

Each and every atom consists of 96 thathuvas. These 96 thathuvas are invisible to our naked eye until it is present in a single atom. Since it mingles or joins to form a multi cellular body and it gets larger size according to the shape and merges to act respectively.

Due to the combination of 96 thathuvas, soul originates, acquires, shape and multiplies to grow larger and finally gets a body to live and then performs its duties, multiplies its generations, gets its old ages and dies. Finally it reaches its initial stage where it was in primitive.

These 96 thathuvas are limited to all human beings in normal condition. This not only consists of the physical components of the human body but also the mental intellectual components like passions, qualities, knowledge, the functions of the sense organs, motor organs and their co-ordination.

The physiology of siddha system involves 96 basic factors, seven constituent elements, 14 reflexes, aru suvaigal, four udal thee and three udal vanmaigal.

“உறுதியாம் பூதாதி யோரைந்தாம்”

- வேதாந்த தத்துவக் கட்டளை

### **Thathuvas 96**

❖ Boothams	- 5
❖ Pori	- 5
❖ Pulan	- 5
❖ Kanmenthiriyam	- 5
❖ Gnanenthiriyam	- 5
❖ Antha Karanam	- 4
❖ Arivu	- 1
❖ Naadi	- 10
❖ Aasayam	- 5
❖ Kosam	- 5

❖ Aatharam	- 6
❖ Mandalam	- 3
❖ Dosham	- 3
❖ Edanai	- 3
❖ Gunam	- 3
❖ Vinai	- 3
❖ Raagam	- 8
❖ Avaththai	- 5

### **Thodam – 3 Uyir Thatthukkal – 3**

They are

Vaatha	→ Vin + Vali
Pitha	→ Thee
Kaba	→ Neer + Mann

They are

- 10 types of Vaatham
- 5 types of Pitham
- 5 types of Kabam

#### **1. Abanan (Keelnokkungal)**

Tendency to move downwards, responsible for defaecation, micturition, menstruation, ejaculation of semen and ova.

#### **2. Pranan (Uyirkkal)**

Regulates the respiratory system. It controls the knowledge, mind and five sensory organs

#### **3. Viyaanan (Paravukal)**

Spreads all over the body and is responsible for proper distribution of nutrition and for movements in all direction.

#### **4. Udhaanan (Melnokkunkal)**

It is responsible for nausea, vomiting, hiccup, cough and sneezing.

#### **5. Samaanan (Nadukkal)**

Responsible for proper digestion and it stabilizes the above said four vayus.

#### **6. Naagan**

Helps in opening and closing of eyes. Intelligence of an individual.

#### **7. Koorman**

Responsible for yawning, vision and closure of eyelids.

#### **8. Kirugaran**

It is responsible for salivation, nasal secretions, hunger, sneezing, cough and concentration on a particular thing.

#### **9. Deevadhathan**

Responsible for laziness, sleeping and anger.

#### **10. Dhananjayan**

After death it escapes on the third day through the head.

#### **Types of Pitham**

- ❖ Anilam - It controls the appetite and help in digestion
- ❖ Ranjagam - It gives colour to the blood.
- ❖ Saathagam - It has the property of fulfillment and controls the body.
- ❖ Aalosagann - It is located in the eyes and responsible for visual perception.
- ❖ Praasagam - It gives complexion to the skin

## **Kabam – 5**

- ❖ Avalmbagam – It is present in the lungs and is responsible for the basic function of the heart and other four types of kabam.
- ❖ Kilethagam – It is present in the Stomach. It makes the food wet and helps for digestion.
- ❖ Pothagam – It is present in tongue and is responsible for the sense of taste.
- ❖ Tharpagam – It is located in the head and keeps the eye cool.
- ❖ Santhigam – Located in the joints and responsible for free movements of the joints.

## **Udal Thathus – 7**

Saaram, Senneer, Oonn, Kozhuppu, Enbu, Moolai and Sukkilam or Suronitham.

The thathus maintain the function of different organs, systems and vital parts of the body. They play a very important role in the development and nourishment of the body.

The thathus are also part of the biological protective mechanism with the help of agni, they are responsible for the immune mechanism. When one thathu is defective, it affects the successive thathu, as each thathu receives its nourishment from the previous thathu.

- ❖ Saaram – contains nutrients from digested food and nourishes all the tissues, organs and systems.

- ❖ Seneer - governs oxygenation in all tissues and vital organs and maintains life.
- ❖ Oonn - covers the delicate vital organs, performs the movements of the joints and maintains the physical strength of the body.
- ❖ Kozhuppu - maintains the lubrication and oilness of all the tissues and gives energy to the body.
- ❖ Enpu - gives support to the body structure.
- ❖ Moolai - fills up the body spaces and carries motor and sensory impulses.
- ❖ Suronitham (or) Sukkilam - contains the ingredients of all tissues and are responsible for reproduction.

### **Vegams 14 – Urges**

Reflex is on involuntary response to stimulus. They are specific and predictable and are usually purposeful and adoptive. They depend upon an intact neural pathway between the point of stimulation and responding organ.

Our siddhars mention 14 vegams.

They are

- ❖ Vaatham - Flatus
- ❖ Thummal - Sneezing
- ❖ Siruneer - Urine
- ❖ Malam - Stool
- ❖ Kottavi - Yawning
- ❖ Pasi - Hunger
- ❖ Neer vetkkai - Thirst

❖ Kaasam	- Erumal
❖ Elaippu	- Fatigue
❖ Nithirai	- Sleep
❖ Vaanthi	- Vomit
❖ Kanneer	- Tear
❖ Sukkilam	-Semen
❖ Suvaasam	- Respiration

#### **Body fires 4**

The normal digestive fire is called as sadaraakkini and it is a combination of samana vayu, analapitham and kilethagam .

Analapitham is predominant while samaana vayu takes the saaram to various parts of the body and maintain the function of udhaanan and abaana vayus and kilethagam moistures the food in the digestive process.

1. Samaakkini
2. Mandhaakkini
3. Deekshakkini
4. Vishamaakkini

#### **Suvaigal 6 (Tastes)**

Six tastes are arises from the panchaboothams. Each taste is the combination of two boothams.

Inippu (Sweet)	-	Mann + Neer
Pulippu (Sour)	-	Mann + Thee
Uppu (Salt)	-	Neer + Thee
Kaippu (Bitter)	-	Vaayu + Aakaayam

Kaarppu (Pungent) - Vaayu + Thee  
Thuvarppu (Astringent) - Mann + Vaayu

### **Udal Vanmai**

Udal vanmai is of three types

1. Iyarkai Vanmai
2. Seyarkai Vanmai
3. Kaala Vanmai

#### **1) Iyarkai Vanmai**

It is considered three gunangal - Sathuva, Raso, Thamo gunagal. It denotes the natural immunity or stamina of the body at birth.

#### **2) Seyarkai vanmai**

Improving the health by nutritious food activities and medicine.

#### **3) Kaala Vanmai**

Development of immunity and stamina according to the age and environment.

## SIDDHA PATHOLOGY

Our siddhars says that each physician should have a perfect knowledge of pathology for treat the patient. Otherwise the treatment will fail. This said by our siddhar as.

“மதித்திடற் கருமை வாய்ந்த  
மாண்பரிகார மெல்லாந்  
துதித்திட வுணர்ந்தானேனுந்  
துகளறப் பிணியின் தன்மை  
பதித்திட வுணரா னாகிற்  
பயனுறானா காலானே  
விதித்திட பிணித் திறத்தை  
விளம்புது முதற்கண் மன்னோ”  
- சிகிச்சா ரத்ன தீபம்

Siddha pathology deals with the diseased condition of the body, which is due to food alterations, seasonal and environmental variations, alteration in the 7 physical constituent's withholding of the 14 reflexes and by personal behaviour. The disease is reflecting through the pulses. (i,e) the three humours. All the above factors are almost present in the pathogenesis of all the disease. So the author discusses in detail how they alter the physiology of the human body.

### Food Variations

“புளிதுவர் விஞ்சங்கறி யார்பூரிக் கும்வாதம்  
ஒளி யுவர்கைப் பேறில் பித்துச் சீறும் - கிளிமொழியே  
கார்ப்பிணிப்பு விஞ்சிற் கபம் விஞ்சு ஞ்சட்டிரதச்  
சேரப் புணர் நோயணுகாதே”

- Sour and astringent increases vaatham.
- Salt and bitter increases pitham.
- Pungent and sweet increases kabam

### Environmental variation

The place where the people are living is also responsible for a disease. Thinai are classified into 5 types

- Kurinji - Kaba diseases
- Mullai - Pitha diseases
- Neythal - Vaatha diseases
- Marutham - No diseases will occur.
- Paalai - Mukkuttra diseases.

### Seasonal variations

One year is classified into six seasons. Each are constituting two months. Alteration in characters of the three humours occurs due to seasonal variations.

Humours	↑	↑↑	N
Vaatham	Muthuvenil Kaalam	Kaarkaalam	Koodhir Kaalam
Pitham	Kaarkaalm	Koodhir Kaalam	Munpanikkaalam.
Kabam	Pinpanik Kaalam	Ilavenil Kaalam	Mudhuvenil Kaalam

↑ Thannilai valarchi, ↑↑ Piranilai valarchi, N - Normal

## Udal Thathukkal -7

The udal kattukal may be decreased or increased based on the nutrition that he gains or loses.

### ❖ Saaram

If **increased**, shows symptoms of increased kabam like decreased appetite, excess salivation and excessive sleeping.

If **decreased**, loss of weight, lassitude, dryness of the skin and the function of sense organs are diminished.

### ❖ Senneer

If **increased**, blood pressure increases with red eye, haematuria, boils, tumours, splenomegaly and jaundice.

If **decreased** there will be tiredness, dryness, anaemia and lassitude.

### ❖ Oon

If **increased**, excess growth around the cheek, face, abdomen thigh, genitalia etc.

If **decreased**, muscle wasting with lethargic sense organs.

### ❖ Kozhuppu

If **increased**, identical features of increased oon, like excess growth around the cheek, neck, face, abdomen, thigh and genitalia occurs.

If **decreased**, loin pain, emaciation and splenomegaly.

### ❖ Enbu

If **increased**, ossification and denitition are quickened.

If **decreased**, joint pain along with easy falling of nail, hair, and teeth.

❖ **Moolai**

If **increased**, heaviness of body, eye, swollen interphalangeal joints, oliguria and non-healing ulcers.

If **decreased**, osteoporosis and blurred vision.

❖ **Venneer**

If **increased**, excess sexual activity with calculi formation.

If **decreased**, there will be pain in the genitalia and failure to reproduce.

**Vegangal 14**

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

❖ **Vaatham - Flatus:**

If the abaanavaayn is suppressed, chest pain, ulcer-like pain, abdominal pain, body pain, constipation, dysuria and indigestion predominate.

❖ **Thummal - Sheezing**

If arrested leads to head ache, facial pain, and low back pain, neuritic pain in the sense organs are felt.

❖ **Siruneer - Urine**

If controlled it leads to urinary tract complications.

❖ **Malam - Faeces**

If suppressed, there will be pain aggravated in knee joint, head ache, general weakness, flatulence and other diseases may also originate.

❖ **Kottavi - Yawning**

If controlled it leads to indigestion and maeganoi.

❖ **Pasi – Hunger**

If ignored, all organs will get tired and they will be affected soon. Though patina, (ie) fasting is insisted, it is applicable only to a healthy normal person, allowing to take food once a day. Here the symptoms are due to prolonged fasting.

❖ **Neervetkai**

Without water, all cells of the body will get tired and pain may supervene.

❖ **Kaasam – cough**

If it is suppressed, it will aggravate the symptoms leading to chest pain.

❖ **Elaippu**

Without rest, it will lead to fainting and maega disease.

❖ **Nithirai**

All organs will get rest only during sleep. If disturbed, it will leads to headache, pain in the eyes, deafness and speech disturbances.

❖ **Vaanthi**

It suppressed, it will be lead to itching, anaemia, and eye diseases.

❖ **Kanneer**

If controlled, it leads to sinusitis, headache, eye disorders and chest pain.

❖ **Sukkilam**

If suppressed there will be joint pain, difficulty in urination, fever and chest pain.

### ❖ **Suvasam**

If suppressed, cough, abdominal discomfort and anorexia may arise.

### **Thodam 3- Humours:**

The three physical elements of the external world that is air, heat, water from the three fundamental principles on which the constitution of human being has been based. The three elements as they enter the body they are called tridhosam that is vaatham, pitham and kabam. The three humours maintain the human body through their combined functioning. Any imbalance in them bring about diseases.

#### **Features of Exaggerated vaatham**

Body pain, joint pain, pricking pain, astringent taste, darkening of motion and urine, difficulty in flexion and extension of limbs, generalized weakness, constipation and mental distress.

#### **Features of Decreased vaatham**

Pain in the body, low pitch voice, difficulty in doing work, impairment of intelligence, giddiness, syncope and symptoms of increased kaba.

#### **Features of Exaggerated Pitham**

Yellowish discolouration of eyes, skin, motion and urine, increased appetite, thirst, burning sensation all over the body, decreased sleep.

#### **Features of Decreased Pitham**

Manthakkini (ie) decreased digestion, cold, loss of appetite.

**Features of Exaggerated Kabam**

The body fire is decreased, increased salivation, feeling a sensation of body weight, becoming chill and pallor, dyspnoea cough, fullness of stomach and sleep supervenes.

**Features of Decreased Kabam**

Giddiness, dryness of joint, increased sweating and palpitation.

## AIM AND OBJECTIVES

### AIM

“வாதமலாது மேனி கெடாது”

In Siddha medicine, vaatham is considered as the most primitive cause of the disease. According to aetiology, several types of Vaatha disease are classified by our siddhars - “Yugi” has identified eighty types of vaatha disease. Thenda Vaatham is one among them which has been taken up for study in this dissertation.

“வாத முடனே வரிய கல்லடைப்பு  
குட்ட மேக மகோதரம் பகந்தரம்  
மூலரோகம் கிராணி ரோக  
எனுமிவை அட்ட மகா ரோகங்கள்”

- ராம தேவ சூத்திரம்.

As vaatham is considered to be one of the eight magaa rogangal, the author has choosen a type of vaatha disease as the dissertation topic.

To collect and analyse the literature in siddha system.

To study and evaluate the highlights of pathogenesis that occurs in Thenda Vaatham. It is helpful for the clear understanding of the disease.

To have a plan for further studies on this disease.

To achieve this aim the following have been drawn.

## OBJECTIVES

- ❖ To collect literatures about Thenda Vaatham Both (Siddha and Modern)
- ❖ To know the etiology, course of the disease Thenda Vaatham in general.
- ❖ To study the signs and symptoms, Pathology and complication of the disease on the basis of siddha aspect.
- ❖ To study the disease Thenda Vaatham on the basis of seven Physical constituents of the body, seasonal variations, age, sex, socio economic status, habits and family history.
- ❖ To support the study of disease by using modern parameters.
- ❖ To diagnose the disease Thenda vaatham by Envagai Thervugal mentioned in Siddha literatures.

## ELUCIDATION ABOUT THENDA VAATHAM

“வழுத்தவே மூலாதா ரத்தைப் பற்றி  
மருவியே மேலேறி முதுகுண் டாதல்  
விழுத்தவே சிரசில் வந்து வியர்வு மாகி  
விகுவாக நோவாகி மேனி கண்ணிப்  
பழுத்தவே உடம்பெங்கும் பஞ்சு போலாம்  
பாங்கான மலசலமு மஞ்ச ளாகும்  
குழுத்தவே தெண்டமாம் வாதந் தன்னைக்  
கூறினோங் குணமெல்லாங் கூர்ந்து பாரே”

“கூர்ந்திட்ட மலசலங்கள் துரித மானால்  
கொண்டடக்கிப் பின்புதான் கொடிதாய்த் தள்ளி  
ஊர்ந்திட்ட சரீரத்தி லுதர மீறி  
உறத்தேய்த்துத் தலையதனி லெண்ணெய் வார்க்கில்  
வார்த்திட்ட வழிநடக்கில் மெத்த வும்தான்  
வாதந்தா னுற்பவித்து நடைகொ டாமல்  
நார்த்திட்ட நரம்போடு எலும்பிற் சூழ்ந்து  
நனுகியே ஓடிநெஞ்சி லேறுந் தானே”  
பாடல் எண் - 288 ஞ 289 - யுகி வைத்திய சிந்தாமணி

### Meanings for words

\* தெண்டம்

- தண்டம்

\*\*தண்டம்

- Pestle, Body, Walking stick, rigid and stiff like  
a rod

\*\*தண்டகம்

- வீணா தண்டம் என்னும் முதுகெலும்பு Vertebral column,

## **\*\*தண்டக வாதம்**

அவயங்களைச் செயலறச் செய்து உடம்பைத் தண்டத்தைப் போல் வீழ்த்தி, நீட்டல், முடக்கல், அசைத்தல் முதலியவை இல்லாமல் சவத்தைப் போல் கிடக்கச் செய்யும் ஓர் வகை வாதநோய்.

A kind of Rheumatism characterized by great prostration in which the body is rendered like a log of wood, unable to stretch or fold the limbs and pass motion or urine. The whole body assumes a thorough rigidity as the stiffness appearing after death.

## **மூலாதாரம்**

- \*அடிப்படை – Fundamental cause Nerve plexus in the body described as a four petalled lotus situated between the base of the sexual organ and the anus. One of the aatharam.

ஆறு ஆதாரங்களுள் குய்யத்துக்கும்  
குதத்துக்கும் மத்தியில் நான்கிதழ்த்  
தாமரை போலுள்ள சக்கரம்

## **\*\*ஆறாதாரத்திலொன்று**

“கேளே மூலாதாரம் குதம் குய்யத்திற்கும்  
கொடியாக நடுவிருக்கும் பானத் தின்மேல்  
வேளேவீ ணாத்தண்டின் கீழிருக்கும்  
மிக் கநடு வேயோரங் குலப்பிர மாணம்”

The first chakra situated at the base of the spinal column and has the control of the excretory organs; the penis, the anus and the colon.

மருவி

\* **Combine or Join together – கலந்திருத்தல்**

To arise, To appear, To come near

\*\* Copulation

மேலேறி

\* **To rise up- மேற்கிளம்புதல்**

Shooting up, to float, to be superior

முதுகு

• **Back - The region of the spine**

**உடம்பின் பின்புறம்**

Middle place

சிரசு

\* **Head - தலை**

வியர்வு

\* **Sweat - வியர்வை**

விகுவாக

\* **Bad nature - கெட்ட குணம்**

நோவாகி

\* **Pain - வலி**

Hurt, Pity

மேனி

\* **Body - உடம்பு**

Colour

கண்ணி

\*\* **To become confused and turgid – நைதல்**

Getting over ripe

பஞ்சு போலாதல்

\*\* Weak - பலவீனப்பட்ட

பாங்கான

\* Nature - இயல்பு, Health

\*\* Good quality, Beauty, Side, Place

கூர்ந்திட்ட

\* To be abundant - கூர்மை

Excessive

\*\* To covet - To be strong wish for, Hanker after.

தூரிதம்

\* Speed, Quickness - வேகம்

\*\* Agitation of mind, Affliction, Sorrow

ஊர்ந்திட்ட

\* To move slowly

To spread, To extend over

உரத்தல்

\* To press out - அழுத்துதல்

\*\* To grow strong, becoming strong

வார்த்த

\* To appear, Encasing

\*\* Well being

மெத்தவும்

\* Abundantly - மிகவும்

\*\* Greatly

நடை

\* **Walk - act of walking** - காலாற்செல்கை

Occupation

\*\* Journey, Gate, Usage, Fashion, Custom,

Nature

கொடது

\* **Not permit**

நார்

\*\* **As a bond**

நெஞ்சு

\* **Chest - விசுத்தி**

நனுகி

\* **அகற்றி - Wide, Extent**

\* Denotes Tamil Lexicon Dictionary

\*\* Denotes T.V.Sambasivam Pillai Dictionary

## Meanings for Sentences

வழுத்தவே மூலாதா ரத்தைப் பற்றி

Pain arising from the sacroiliac joint

மருவியே மேலேறி முதுகுண் டாதல்

Pain rising up to the thoracic spine.

விழுத்தவே சிரசில் வந்து வியர்வு மாகி

Pain in the head and sweating

விசுவாக நோவாகி மேனி கண்ணிப்

Severe pain, body become contused

பழுத்தவே உடம்பெங்கும் பஞ்சு போலாம்

Body weakness

பாங்கான மலசலமு மஞ்ச ளாகும்

Yellow coloured urine and faeces

குழுத்தவே தெண்டமாம் வாதந் தன்னைக்

கூறினோங் குணமெல்லாங் கூர்ந்து பாரே.

These are all the symptoms of Thenda Vaatham

கூர்ந்திட்ட மலசலங்கள் துரித மானால்

கொண்டடக்கிப் பின்புதான் கொடிதாய்த் தள்ளி

Aggressive expulsion of urine and faeces due to

repeatedly controls urged urine and faeces

ஊர்ந்திட்ட சரீரத்தி லுதர மீறி

Bowel disturbances

உறத்தேய்த்துத் தலையதனி லெண்ணெய் வார்க்கில்

Forcible application of oil in the head

வார்த்திட்ட வழிநடக்கில் மெத்த வும்தான்

வாதந்தா னுற்பவித்து நடைகொ டாமல்

After oil application walk for long distance, vaatha

is produced abundantly leads inability to walk.

நார்த்திட்ட நரம்போடு எலும்பிற் சூழ்ந்து  
நனுகியே ஓடிநெஞ்சி லேறுந் தானே”

It affects the nerves, bones and chest also.

### **Meaning of this poem**

- Pain surges up from the sacroiliac region and ascends to involve the entire vertebral column
- Sweating
- Bodyache
- Fatigue
- Yellow coloured stool and urine
- Aggressive expulsion of urine and faeces due to repeatedly controls urged urine and faeces.
- It affects the nerves, bones and the chest.

## REVIEW OF LITERATURES

In siddha medical literatures the classification and description of the disease conditions under the heading **VAATHA NOIGAL** numbering about 80 with slight variations in the different texts regarding the number 80 is found in the following sources.

1.	Yugi vaithiya chinthamani- Perunool -800	80 types
2	Aayul vetham 1200	80 types
3	Thanvanthri vaithiyam	80 types
4	Jeeva Rakshamirtham	80 types
5	Theraiyar vaagadam	81 types
6	Anubava theva Ragasiyam	84 types
7	Ashtanga Sangiragam	85 types

In above all literatures, all the vaatha diseases are explained including Thenda vaatham.

### 1) According to **Thanvanthri Vaithiyam**

“ஆமகட்டனால் வாயு வதிகமாய் சிலேற் பணத்தைத்  
தாமகட்டாகச் சேர்த்துத் தடித்திடுஞ் சாரமெல்லாம்  
நோமக்கட்டான மேனி நுவலிளைப் பெயர்ப்புத் தோன்றுந்  
தாமக்கட்டான ரோகந் தண்டக வாதமாமே”

- Thanvanthri

ஆமத்துடன் (அபக்குவமான அன்னரசத்துடன்) வாயு அதிகரித்துக்கபத்துடன் சேர்ந்துஇசரீரத்தை ஸ்தூலிக்கச் செய்யும். சரீரம் வாட்டமடையும்.

- Generalised oedema

- Generalised weakness

2) According to **AGATHIYAR AAYULVETHAM -1200**

“தண்டு வாதத்தின் குணத்தைச் சாற்றக் கேளாய் மடமயிலே பண்டே தண்டு மிகவூதி பதறிப் பொருமிக் கொண்டிருக்கும்”

- Agathiyar

தண்டானது மிகவும் ஊதிப் போய் பருத்து பொருமிக் காணப்படும்.

- Pain in the vertebral column.

3) According to **SIKITCHARATHNA DEEPAM**

வாயுவானது மூலாதாரத்தைப் பற்றி மேலேறி முதுகிலிருந்து சிரசில் வந்து வியர்த்து நோயுண்டாக்கி சர்வாங்கத்தையும் நோயுறச் செய்வதுடன் மல சலம் மஞ்சள் வர்ணமாகவும் தேகத்தை தண்டகம் போல் நீட்ட விடாமல் செய்யும்.

- Pain in the Vertebral column

- Sweating

- Body ache

- Yellow coloured urine and faeces

- Body is rendered like a log of wood.

4) According to JEEVARATCHAMIRTHAM ANUPAVA  
VAITHIYA THEVA RAGASIYAM -PART I

இது எண்ணெய் வஸ்துஇ மந்தவஸ்துஇ சீதவீரிய வஸ்துஇ தயிரிஇ அதிகலவணம் இ பகல் நித்திரைஇ பதினாலு வேகத்தை மறித்தல் ஆகிய இவைகளினால் பிறந்து சப்ததாதுக்களிலும் வியாபித்து அவைகளைக் கலைத்துவிட்டு ஆமாசயஸ்தானத்தை அனுசரித்துச் சிலேஷ்ம பித்தங்களைத் தண்ணுடன் சேர்த்துக் கொண்டு அவயங்களின் செயலை மாற்றிவிடும். இதனால்

- |                             |                  |
|-----------------------------|------------------|
| - ரசாதி தாதுக்களில் மரத்தல் | - Numbness       |
| - சீதளம்                    | - Chillness      |
| - ஞாபக மறதி                 | - Loss of memory |
| - சுழலல் போலிருத்தல்        | - Giddiness      |
| - இளைப்பு                   | - Emaciation     |
| - அதிகவேதனை                 | - Severe pain    |
| - நீர்க்கட்டு               | - Anuria         |

என்னும் இக்குணங்களோடு தேகமானது தண்டத்தைப் போல் விழுந்து அசைதலும்இ நீட்டல்இ முடக்கலும் எழுதலும் இல்லாதிருக்கும் . இது தேகத்தை தண்டத்தைப் போல் நீட்டி விடுவதால் “தண்டகவாதம்” எனப் பேர் பெற்றது.

- Body is rendered like a log of wood.

5) According to ROGA NIRNAYA SAARAM

“தேகம் தண்டத்தைப் போல் விழுந்து அசைவில்லாமல் இருக்கும்.”

- T.R.Mahaadeva Pandithar

- Body is rendered like a log of wood.

6) According to **SEGARASA SEKARA VAIDHYAM-THANDU VAATHAM**

“தண்டிணிற்கடுத்துக் குத்தித் தடியென விறைத்து வீங்கிக்  
கொண்டிணிதுளைந்து சீறிக் கோதுறவளைந்து வாங்கும்  
கண்டினைக் கனியைப் பாகைக் கதித்திடும் வசனமின்னே  
விண்டிறற்றண்டுவாதக் குணமென விளம்பினாரே”

- Seetharam Prasath

1. முதுகந்தண்டில் வலி - Pain in the vertebral column
2. உடல் விறைப்பு - Body is rendered like a log of wood.
3. உடல் வலி - Body pain

7) According to **VAITHIYA SAARA SANGIRAHAM**

“தண்டுபொரு மிதடி சாரலை தண்டு வாதமென்றும்”

1. முதுகந்தண்டில் வலி - Pain in the vertebral column

8) According to **SAAMBA SIVAM PILLAI DICTIONARY**

அவயங்களைச் செயலறச் செய்து உடம்பைத் தண்டத்தைப் போல்  
வீழ்த்தி நீட்டல்து முடக்கல்து அசைத்தல் முதலியவை இல்லாமல் சவத்தைப்  
போல் கிடக்கச் செய்யும் ஓர் வகை வாத நோய்.

A kind of Rheumatism characterised by great prostration in which the body is rendered like a log of wood, unable to stretch or fold the limbs and pass motion or urine. The whole body assumes a thorough rigidity as the stiffness appearing after death.

## DETAILED PATHOLOGICAL VIEW OF DISSERTATION TOPIC

### Introduction about dissertation topic

The dissertation topic Thenda Vaatham comes under the vaatha diseases. So the author discuss about the Vaatham.

### Vaatham

Vaatham is the major vital force of the body. It is formed by vaayu and aakaayam(wind and sky). It prevails all over the body. It is expelled through faeces. It is the root cause of all diseases.

### Location

The vaatham lives in the place from Abaanan to navel.

“வளி முதலா எண்ணிய முக்குற்றமெல்லாம்  
வாழ்வதெனும் தேகமுற்றம் பம்பிப் பரந்து  
தெளிவுறச் சாற்றும் நாபிக்குக்குக் கீழ் வாதம்”

This also shows,

below novel in the place of vaatham.

“அறிந்திடும் வாதமடங்கும் மலத்தனில்”

- திருமூலர்

the vaatham lodges on faecal matter.

Generally Vaatham lives in

<b>Abaanan</b>	Nervous system
Edakalai	<b>Joints</b>
Kamakodi	Skin
Undiyin Keezh Moolam	Hair follicles
Hip region	Genetial organs
<b>Bones</b>	<b>Stools</b>
Muscles	

## Properties of Vaatham

“ஒழுங்குடன் தாதேழ் மூச்சோங்கி இயங்க  
எழுச்சி பெற எப்பணியுமாற்ற - எழுத்திரிய  
வேகம் புலன்களுக்கு மேவச் சுறுசுறுப்பு  
வாகளிக்கும் மாந்தர்க்கு செப்பு”

In normal conditions vaatha gives encouragement to mind, controls breathing , expels 14 veges, gives coordination to seven udal kattugal and gives energy to the physical body.

## Qualities of Vaatham

Kadinam	-	Hard
Varatchi	-	Dry
Elaesu	-	Light
Kulirchi	-	Cold
Asaithal	-	Movement
Anuthuvam	-	Subtleness

## Vaatham and Suvai

There are six types of tastes appreciable. They are sweet, salt, sour, bitter, pungent and astringent.

Some suvaigal will aggravate vaatham and some suvaigal may neutralize vaatham . Further if the vaatham is increased, this itself will cause a alteration of taste in tongue, which is appreciable by the patient. So, suvaigal holds a separate place in diagnosing.

“மாத்திய புளிப்பு மீறல் வந்திடும் வாதமாகும்”

- அகத்தியர் நாடி

“புளிதுவர் விஞ்சுங்கறியாற் பூரிக் கும்வாதம்”

- வெண்பா

Sour, astringent and pungent tastes raising the vaatha dosha.

The vin and vali forms the vaatham and this exaggerated vaatham can be neutralized by tastes like sweet, sour, and salt.

“வாதம் மேலிட்டால் மதுரம் புளி உப்பு”

- கண்ணுசாமியம்

The basic concept behind this, among the Panchapoothams as vin and vaayu forms vaatham; the other poothas forming tastes are advisable to neutralize it. In sweet, sour, and salt, the vayu and vin doesn't takes part.

Further the opposite qualities of vaatham, helps in neutralizing the exaggerated vaatham.

Miruthu - Softness

Pasumai - Greasy

Paluvu - Heavy

Akkini - Heat

Sthiram - Stable

Katti - Solid

### **Classification**

In classification, we can find different views regarding the number

In yugivaithya chinthamani , yugi says

“என்னவே வாதமது என்பதாகும்”

there are 80 types of vaatha. But in concluding section of the yugi vaithiya chinthamani, the number of vaatha diseases has been given as 84.

“ஆமப்பா வாதமதெண்பத்து நாலு

அதினுடைய குணா குணங்களடங்கலாக”

But in “Siddha Maruthauvam” says the number as 85, while describing the names and symptoms

In Agathiyar 2000,

“எண்பது வாதமாகு மிருவகைப் படுத்திக் காணின்  
நண்பறு அரைக்கு மேலே நாற்பது வாதமாகும்  
பண் சேரரைக்கு கீழே பத்து நான்காகு மென்று  
வண்டு சேர் குழலினாலே வாதத்தின் கூறுதானே”

40 types vaatha diseases are in the upper half and 40 in the lower half of the body and the total number is 80.

In Bohar Vaithiyam 700, says the number as 80

“வாச் சென்ற வாதம் எண்பதுவும் போகும்”

In Agathiyar Rathina Surukkam 500, says the number as 84.

“மற்றமே வாதரோகம் வகை எண்பது நாலே”.

### Functions of Vaatham

- Body ache
- Pricking pain
- Tearing pain
- Nerve weakness
- Shivering
- Mental distress
- Dryness
- Movements
- Weakness
- Joints pain
- Traumatic pain
- Dislocation of joint
- Pilo erectin
- Paralysis of limbs
- Polydypsia
- Severe pain in calf and thigh muscles
- Bony pricking pain.
- Anuria and constipation
- Unable to do flexion and extension of the limbs
- All tastes to be like astringent
- Darkness of skin, eyes and urine.
- Excess salivation
- Weakness of organs

## AETIOLOGY

In yugi vaithiya chinathamani and other literatures the author can not find any specific causes for Thenda vaatham. But in general causes for all types of vaatha diseases have been described. These are

“பகரவே வாதமது கோபித் தப்போ  
பண்பாகப் பெண்போக மதுதான் செய்யில்  
நகரவே வெகுதூர வழிநடக்கில்  
நளிதான காற்றுமே பனிமேற் பட்டால்  
மிகரவே காய்கள்கனி கிழங்கு தன்னை  
மிகவருந்தி மீறியே தயிர்தான் கொண்டால்  
முகரவே முதுகெலும்பை முறுக்கி நொந்து  
முழங்காலும் கணைக்காலும் கடுப்புண் டாமே”

- ❖ Sexual act, during abnormally increased condition of vaatha
- ❖ Walking for a long distance
- ❖ Exposure to Chillness

Excessive intake of curd, tubers, and fruits

“என்னவே வாதந்தா னெண்பதாகும்  
இகத்திலே மனிதர்களுக் கெய்யும் வாறு  
பின்னவே பொன்தனையே சோரஞ் செய்து  
பெரியோர்கள் பிராமணரைத் தூடணித்தும்  
வன்னதேவச் சொத்தில் சோரஞ் செய்து  
மாதாபிதா குருவை மறந்த பேர்க்கும்  
கன்னவே வேதத்தை நிந்தை செய்தால்  
காயத்திற் கலந்திடுமே வாதந் தானே”

- ❖ Breach of trust
- ❖ Abusing the pious, elderly people , the priests and the holy sprits
- ❖ Exploitation of charitable properties
- ❖ Ingratitude toward mother, father and teacher

“தானென்ற கசப்போடு துவர்ப்பு றைப்பு  
 சாதகமாய் மிஞ்சுகிலும் சமைத்த வன்னம்  
 ஆனென்ற வாறினது புசித்த லாலும்  
 ஆகாயத் தேறலது குடித்த லாலும்  
 பானென்ற பகலுறக்க மிராவி ழிப்பு  
 பட்டினியே மிகவுறுதல் பார மெய்தல்  
 தேனென்ற மொழியார் மேற் சிந்தை யாதல்  
 சீக்கிரமாய வாதமது செனிக்குந் தானே”

- ❖ Excessive intake of bitter foods, astringent foods and punget foods.
- ❖ Intake of dry and old cooked rice.
- ❖ Drinking raw rain water.
- ❖ Sleeping during day time.
- ❖ Awake during night
- ❖ Starvation
- ❖ Lifting of heavy loads and
- ❖ Sexual preoccupations

“தானான தந்தவாயு வின்தன் னோடு  
 தாக்கான வாதந்தா னெண்ப தாகும்  
 ஆனான வரன்றனையே மிதியா மாந்தர்  
 அகதிபர தேசியர்கட் கன்னமீயார்

கோனான குருமொழியை மறந்தபேர் கள்  
கொலைகளவு பொய்காமங் குறித்த பேர்க்கு  
ஊனான சடந்தன்னில் வாதம் வந்து  
உற்பவிக்கும் வேதத்தி னுண்மை தானே”

- ❖ Disobedient attitude towards god,
- ❖ Refusing food for destitutes and sanyasins
- ❖ Disregarding the advice of priests,
- ❖ Engaging in murdering ,stealing and justful activities and lieing

#### According to Agathiyar Kanma Kaandam - 300

“நூலென்ற வாதம் வந்த வகைதானேது  
நூண்மையாய்க் கன்மத்தின் வகையைக்கேளு  
காலிலே தோன்றியது கடு யதே  
கைகாலில் முடக்கியது விருட்சமான  
குழந்தை மரந்தனை வெட்டமேல் தோல்  
நாலிலே சீவசெந்து கால் முறித்தல்  
நல்ல கொப்பு தழை மறித்தல் நலித்தல் காணே”

In siddha system, many diseases are due to kanma, which means the good or bad committed by an individual in his previous and present births. The genetic dispositions of certain diseases are probably the result of kanma. According to the above versa, Vaatha disease may also be precipitated by kanma.

#### According to Para Rasa Sekaram

“ தொழில் பெறு கைப்புக் கார்த்தல் துவர்த்தல் விஞ்சுகினுஞ்சோறும்  
பழைய தரம் வரகு மற்றைப் பைந்தினை யருந்தினாலும்  
எழில் பெறப் பகலுறங்கி இரவினிலுறங்கா தாலும்  
மழைநிகர் குழலினாளே வாதங் கோபிக்குங் காணே

காணவே மிகவுண்டாலும் கருது பட்டினி விட்டாலும்  
மானனையர் கண்மோக மறக்கினு மிகுந்திட்டாலும்  
ஆணவ மலங்கடம்மை யங்ஙனே விடாத தாலும்  
வானுதன் மடநல்லாலே வாதங் கோபிக்குங் காணே”

“பாரினிற் பயப்பட்டாலும் பலருடன் கோபித்தாலும்  
காரெனக் கருதியோடிக் கழுமரத் துரத்தினாலும்  
ஏர்பெறு தனது நெஞ்சின் மிகத் துக்க மடைந்திட்டாலும்  
பாரிய காற்றினாளும் படரினும் வாதங் காணும்  
காலங்கள் மாறியுண்ணும் காரியத்தாலுந் தண்ணீர்  
சாலவே யருந்தினாலுந் சந்தியிலுட் கார்ந்தாலும்  
கோலமாம் புளிப்பு நெய்யைக் குறைவற வருந்தினாலும்  
வாலவார் முலைநல் லாளே வாதமுற் பவிக்குங் காணே”  
”உற்பவித் தெழுமப் போதே யுயர் புறந் துடியைப்பற்றித்  
தெற்பறக் குடைந்து நோவுஞ் செய்து மேல் நோக்குமாகில்  
விற்பொலி நுதலினாளே மேவிங் குணங்கடம்மில்  
ரொற் பெறு வாதம் வந்து தோன்றுமென் றறிந்து கொள்ளே  
தெரிந்து முன் சொன்ன வண்ணஞ் செய்யகா லடியைப் பற்றி  
மரந்தனைப் போற்றி மிர்த்து மற்றுமேல் நோக்குமாகில்  
அரண்றனைத் துதியா மாந்தரனுசரிக் கின்ற கோயில்  
சரிந்திடுங் குழலாய் வாதங் குடிபுருஞ் சாறுங்காலே” !

1. Excessive intake of foods with taste of kaippu, karppu and thubarppu
2. Due to food toxicity
3. Cereals like varagu
4. Day time sleeping
5. Sleeplessness at night
6. Excessive eating
7. Fasting

8. Increased sexual activities
9. Constipation
10. Fear
11. Anger
12. Excessive sorrow
13. Polluted air
14. Alteration of diet habits, timing of food
15. Excessive intake of water
16. Increased intake of pulippu
17. Increased intake of ghee

For this dissertation work, the author consider all the causes for vaatha diseases which is mentioned in all the above literatures.

## Pathogenesis of Thenda Vaatham

### Siddha Aspect

#### AETIOLOGY →

- ❖ Dietary Changes
- ❖ Seasonal Changes
- ❖ Hereditary
- ❖ Environmental Changes
- ❖ Suppression of 14 Urges
- ❖ Excessive intake of curd, tubers and roots.
- ❖ Walking for a long distance
- ❖ Exposure to chillness

#### DISTURBANCES IN MUKKUTTRAM → UDAL THATHUKKAL → THENDA VAATHAM

##### Vaatham increased

- ❖ Praanan - Dyspnoea, Loss of appetite
- ❖ Abaanan - Loss of appetite, constipation
- ❖ Udhaanan - Dyspnoea
- ❖ Viyaanan - Fatigue, inability to walk
- ❖ Samaanan - Disturbances of other Vaayus.
- ❖ Devathathan - Fatigue.

##### Kabam increased

- ❖ Avalambagam - Dyspnoea
- ❖ Kilethagam - Loss of appetite, fatigue.
- ❖ Tharpagam - Sweating in the Head
- ❖ Santhigam - Pain in the spine, Restriction of movements.

##### Pitham decreased

- ❖ Anilam - Loss of appetite
- ❖ Ranjagam - Pallor of the skin
- ❖ Prasakam - Dryness of the skin
- ❖ Saathakam - Inability to walk.

- ❖ Saaram - Fatigue
- ❖ Senneer- Fatigue, Pallor of the skin
- ❖ Oon - Pain in the spine, inability to walk.
- ❖ Kozhuppu - Emaciation
- ❖ Enbu - Pain in the spine, Restriction of movements.
- ❖ Moolai - Erosion and Sclerotic changes in the disc
- ❖ Sukkilam/ Suronitham - Decreased sexual desire

## **THEORETICAL VIEW OF DISSERTATION TOPIC**

### **Anatomy of vertebral column:**

The vertebral column forms back bone of the body. It forms a part of the axial skeleton. It is made up of 33 pieces of vertebrae and in intervening intervertebral discs.

**Length:** It is 60 -70 cm. There are 7 cervical vertebrae 12 Thoracic vertebrae and 5 Lumbar vertebrae.

Five pieces of sacral vertebrae unit to form sacrum. Four pieces of coccygeal vertebrae unit to form the coccyx.

### **Curvatures of the vertebral column:-**

Vertebral column is not straight. Its curvatures can be better appreciated from the side. The curvatures are classified into primary and secondary curvatures.

- **Primary Curvatures:-**

The thoracic and sacral curvatures are the primary curvatures. They are present at the time of birth.

- **Secondary Curvatures:**

The cervical and lumbar curvatures appear late due to functional needs. They are the secondary curvatures. The cervical curvature appears when the infant holds its head up after the third month and the lumbar curvature develops due to standing and walking. The lumbar curvature is also convex forwards and it appears by first year.

**Joints of the vertebral column:**

The vertebrae from the second cervical to the first sacral inclusive are articulated to one another by a series of cartilaginous joints between the vertebral bodies and a series of synovial joints. They are united by anterior and posterior longitudinal ligaments and by inter vertebral discs of fibrocartilage.

**Intervertebral joints:**

Adjoining vertebrae are connected to each other at three joints. There is median joint between the vertebral bodies and two joints – right and left between the articular processes.

The joints between the articular processes are plane synovial joints. The joint between the vertebral bodies is a symphysis. (Secondary cartilaginous joint). The surfaces of the vertebral bodies are lined by thin layers of hyaline cartilage. Between these layers of hyaline cartilage there is a thick plate of fibrocartilage which is called the intervertebral disc.

**Intervertebral discs:**

These are fibrocartilaginous disc which intervene between the bodies of adjacent vertebrae and bind them together. Their shape corresponds to that of the vertebral bodies between which they are placed. The thickness of the disc varies in different regions of the vertebral column and in different parts of the same disc. In the cervical and lumbar regions the discs are thicker in front than behind, while in the thoracic region they are of uniform thickness. The discs are thinnest in the upper thoracic region, and thickest in the lumbar region.

The discs contribute about one fifth of the length of the vertebral column. The contribution is greater in the cervical and lumbar regions than in the thoracic region.

Each disc is made up of the following three parts:

- Nucleus pulposus.
- Annulus fibrosus.
- Cartilage plate.

### **Nucleus pulposus**

Is the central part of the disc. It is soft and gelatinous at birth. It is kept under tension and acts as a hydraulic shock absorber with advancing age, the elasticity of the disc is much reduced.

### **Annulus fibrosus:**

It forms the peripheral part of the disc. Fibrous rings arranged concentrically around nucleus pulposus. It provides resilience to the intervertebral disc. It is firmly attached to the bodies of the adjacent vertebrae.

### **Cartilage plate:**

They are situated on either side of the Nucleus pulposus. They are representing non -ossified parts of the vertebral epiphyseal plate.

### **LIGAMENTS OF THE VERTEBRAL COLUMN:**

Apart from the intervertebral disc and the capsules around the joints between the articular processes, adjacent vertebrae are connected by several ligaments. They are

1. The anterior longitudinal ligament.
2. The posterior longitudinal ligament
3. The intertransverse ligaments.
4. The interspinous ligaments.
5. The supraspinous ligaments.

# **PHYSIOLOGY**

Physiology is defined as a branch of science dealing with the study of normal functions of living organisms.

## **Physiology of the vertebral column**

### **Functions**

1. It forms the strong pillar on the back of the neck and trunk.
2. It protects the spinal cord and meninges.
3. It supports the body weight. It transmits the body weight to the pelvic -girdle.
4. It acts as a shock absorber.
5. Muscles and fascia are attached to it.
6. It forms the central axis of movement of the trunk.

### **Movements:**

1. Flexion
2. Extension
3. Lateral Flexion
4. Rotation

Flexion and extension movements are taking place only in the cervical region, lumbar region and thoraco lumbar region.

### **Intervertebral Discs**

Their physical characteristics permit them to serve as shock absorbers when the load on the vertebral column is suddenly increased, as when one is jumping from a height. Their elasticity allows the rigid vertebrae to move one upon the other. Unfortunately their resilience is gradually lost with advancing age..

The semifluid nature of the nucleus pulposus allows it to change shape and permits one vertebra to rock forward (or) backward on another, as in flexion and extension of the vertebral column.

# **ANKYLOSING SPONDYLITIS**

It is a chronic progressive and crippling disease affecting the spine. The exact etiology is unclear. Ankylosing spondylitis has been found to be more prevalent in certain races and hence shows a genetic predisposition. It is related to certain tissue types of the human leucocyte antigen (HLA) system. The majority of ankylosing spondylitis patients are found to belong to HLA B<sub>27</sub> group.

## **Alternative names**

Marie strumpell disease

Rheumatoid spondylitis

Ankylopoietica

Pocker back

Bamboo spine

Spondylitis and

Spondylo arthropathy

## **Definition**

Ankylosing - Immobility and consolidation.

Spondylitis - Inflammation of one or more vertebrae.

Ankylosing spondylitis - chronic inflammatory disease that affects the joints between the vertebrae of the spine and the joints between the spine and the pelvis. It eventually causes the affected vertebrae to fuse or grow together. This results pain and stiffness in the neck and back.

## **Causes:**

- ❖ Genetic predisposition is important.
- ❖ The disease is much more common in family members than in general population.
- ❖ Typically occurs in HLA - B<sub>27</sub> positive subjects (90%) and in half of their first degree relatives (53%).
- ❖ Since classic ankylosing spondylitis is sometimes associated with genitourinary or bowel infection.

## **Clinical Features**

- It occurs in 3<sup>rd</sup> and 4<sup>th</sup> decades of life
- More common in males than females
- Male, female ratio is 3:1
- The onset is usually insidious over months or years.
- Pain in the spine
- Body Stiffness
- Fatigue
- Pleuritic chest pain

## **Pathogenesis**

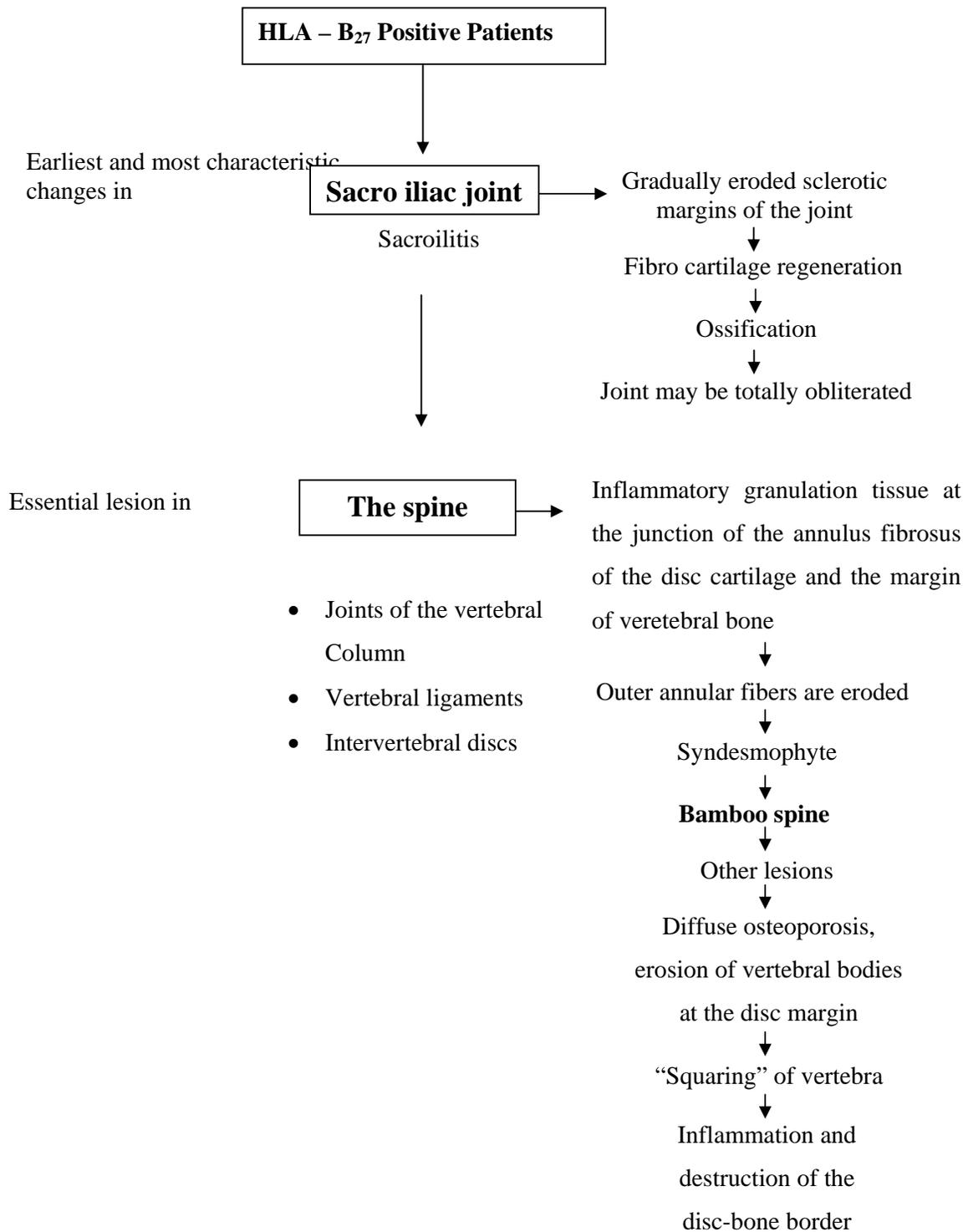
- The pathogenesis of Ankylosing spondylitis is incompletely understood.
- A number of features of the disease implicate immune-mediated mechanisms, including elevated serum levels of Ig A and acute phase reactants, inflammatory histology, and close association with HLA - B<sub>27</sub>.

- No specific event or exogenous agent that triggers the onset of disease has been identified.
- Overlapping features with reactive arthritis and inflammatory bowel disease suggest that enteric bacteria, particularly “Klebsiella Pneumonia” are common in Ankylosing spondylitis patients.
- Furthermore, antigenic interrelatedness between B<sub>27</sub> and certain enteric bacteria has been documented, but it is not yet known whether these factors contribute to the pathogenesis of Ankylosing spondylitis.
- Evidence that B<sub>27</sub> plays a direct role is provided by finding that rats transgenic for B<sub>27</sub> spontaneously develop spondylitis, along with colitis, peripheral arthritis and other lesions characteristic of the spondyloarthropathies.

### **On examination**

The movements of the whole spine are limited, the sacrospinalis muscles are in spasm, but there is no point of localized tenderness in the spine. There is tenderness over one or both sacroiliac joints. The chest expansion is diminished to less than 5 cms due to the involvement of the costovertebral joints one of the last joint to be affected is the temporo mandibular joint.

## Pathology



## **Complications**

- Spinal Fracture
- Involvement of cervical spine leads to quadriplegia
- Cauda equino syndrome
- Anterior uveitis.
- Conjunctivitis.
- Prostatitis.
- Amyloidosis.
- Slowly progressive upper pulmonary lobe fibrosis.
- Cardiac conduction disturbances

## **Diagnosis**

- Diffuse pain in the spine
- Limitation of all spinal movements
- Diminished chest expansion.

## **Investigation**

- Blood
  - Raised ESR and Anaemia
- X-ray
  - Spine – Squaring of vertebra or Bamboo Spine
- CT
- MRI

# EVALUATION OF DISSERTATION TOPIC

## MATERIALS AND METHODS

The Disease Thenda Vaatham has been dealt in the book of “Yugi Vaidhya Chinthamani”.

### Selection of patients

For this clinical study 20 patients of both sex at different age groups suffering from Thenda Vaatham were selected in the out patients department of Government Siddha Medical College, Palayamkottai and guided under the supervision of professor and Lecturer.

A detailed **clinical history** was taken from the patients are

- Pain and Stiffness in the back
- Nature of occurrence
- Mode of onset and
- Severity

In this study, detailed **history** was taken on

- Occupation
- Personal history
- Family history
- Repeated past history and
- Diet habits

Special attention was made to enquire about

- Trauma and
- Psychological stress

The following “**Siddha Methods**” of diagnosis were also employed. They are

- Nilam
- Paruvakaalam
- Poriyalarithal
- Pulanalarithal

- Vinaathal
- Mukkutra Nilai
- Examination of Seven Udal Thathukkal
- Envagai Thervugal.

## **LABORATORY INVESTIGATIONS**

In all patients of Thenda Vaatham, the following modern laboratory investigations available at the Government Siddha Medical College, Palayamkottai were done.

### **BLOOD**

- Total White Blood Corpuscles (WBC)
- Differential WBC count
- Erythrocyte sedimentation Rate.
- Haemoglobin Estimation.
- Blood sugar
- Blood Urea
- Serum cholesterol

### **URINE**

- Albumin
- Sugar
- Deposits

### **MOTION**

- Ova
- Cyst

## **RADIOLOGICAL FINDINGS**

In all the patients clinically diagnosed as Thenda Vaatham, X-ray of Sacro iliac joint, Lumbo-sacral (Antero-posterior and Lateral views) and cervical (Lateral view) were taken and the opinion of the Radiologist was obtained.

## **OBSERVATION AND RESULTS**

1. Sex distribution
2. Age distribution
3. Kaalam
4. Paruvakaalam
5. Thinai
6. Occupational status
7. Socio economic status
8. Precipitating factors
9. Mode of onset
10. Clinical manifestations
11. Conditions of Mukkutram – Vaatham, Pitham and Kabam
12. Conditions of Udal thathukkal
13. Conditions of Envagai thervugal

**1. Table 1 :** Illustrates **SEX DISTRIBUTION** and its relative percentage.

S.No	SEX	No. OF CASES	PERCENTAGE
1	Male	12	60

For this dissertation study, 20 patients were selected, out of these, twelve patients (60%) were males. From the above table, it is clear, Males were mostly affected.

**2. Table - 2** illustrates the **AGE DISTRIBUTION** and its relative percentage

S.NO	AGE GROUP IN YEARS	NO.OF CASES	PERCENTAGE
1	31-40	10	50
2	41-50	3	15
3	51-60	3	15
4	Above 60	4	20

Among 20 patients,

- ❖ 50% of cases were observed in the age group between 31-40 Years.
- ❖ 15% of cases were observed in the age group between 41-50 Years.
- ❖ 15% of cases were observed in the age group between 51-60 Years.
- ❖ 20% of cases were observed above 60 Years.

The above table makes clear that 60% of cases were between 31-50 years and 40% of cases were above 50 years.

3. **Table - 3** - Illustrates “KAALAM”

<b>S.NO</b>	<b>KAALAM</b>	<b>NO.OF PATIENTS</b>	<b>PERCENTAGE</b>
1	Pitha Kaalam (34-66 Years)	17	85
2	Kaba Kaalam	3	15

It is obviously seen that most of cases (85%) were in the “ Pitha Kaalam”.

4. **Table -4** Illustrates the **SEASONAL INCIDENCE** of the disease.

<b>SL.NO</b>	<b>PARUVA KAALAM</b>	<b>MONTHS</b>	<b>NO.OF PATIENTS</b>	<b>PERCENTAGE</b>
1	Muthuvenil Kaalam	Aani, Aadi	14	70
2	Kar Kaalam	Aavani, Purattasi	3	15
3	Elavenil Kaalam	Chithirai, Vaikasi	3	15

- ❖ 70% of cases were admitted in Muthuvenil Kaalam.
- ❖ 15% of cases were admitted in Kar kaalam.
- ❖ 15% of cases were admitted in Elavenil Kaalam.

5. **Table - 5** Illustrates the “THINAI”

<b>SL.NO</b>	<b>THINAI</b>	<b>NO.OF CASES</b>	<b>PERCENTAGE</b>
1	Marutham	15	75
2	Kurinji	5	25

- ❖ 75% of cases from Maruthanilam.
- ❖ 25% of cases from Kurinji

**6. Table - 6** Illustrates the patient's OCCUPATION,

SL.NO	OCCUPATION	NO.OF CASES	PERCENTAGE
1	House Wife	8	40
2	Coolies	5	25
3	Drivers	4	20
4	Others	3	15

From the above table, it was observed

- ❖ 40% of cases were House Wife.
- ❖ 25% of cases were coolies.
- ❖ 20% of cases were Drivers.
- ❖ 15% of cases were others.

**7. Table - 7** Illustrates the SOCIO-ECONOMIC status

SL.NO	SOCIO-ECONOMIC STATUS	NO.OF CASES	PERCENTAGE
2	Poor	15	75
2	Middle Class	5	25

From the above, it is clear that poor class were mostly affected.

**8. Table - 8** Illustrates the PRECIPITATING FACTORS.

SL.NO	PRECIPITATING FACTORS	NO.OF CASES	PERCENTAGE
1	Occupation	6	30
3	Age Factor	6	30
2	Trauma	4	20
4	Idipathic	4	20

**9. Table -9 Illustrate the MODE OF ONSET**

<b>SL.NO</b>	<b>MODE OF ONSET</b>	<b>NO.OF CASES</b>	<b>PERCENTAGE</b>
1	Gradual	12	60
2	Acute	8	40

Most of the cases had gradual onset of Thenda vaatham.

**10. Table - 10 Illustrates the CLINICAL MANIFESTATIONS.**

<b>SL.NO</b>	<b>SIGNS AND SYMPTOMS</b>	<b>TOTAL NO.OF CASES</b>	<b>PERCENTAGE</b>
1	Diffuse pain in the back	20	100
2	Tenderness over the sacroiliac joints	15	75
3	Constipation	15	75
4	Whole spinal movements limited	10	50
5	Diminished chest expansion	10	50
6	Curvature of spinal deformities	3	15

- ❖ 100% of cases had diffuse pain in the back.
- ❖ 75% of cases had tenderness over the sacroiliac joints and constipation.
- ❖ 50% of cases had limited whole spinal movements to bend forward and backward and diminished chest expansion.
- ❖ 15% of cases had curvature of spinal deformities,

## 11. CONDITIONS OF MUKKUTRAM

**Table 11 : VAATHAM - Increased**

SL.NO	VAATHAM	NO.OF CASES	PERCENTAGE
1	Praanan	20	100
2	Abaanan	20	100
3	Viyaanan	20	100
4	Samaanan	20	100
5	Devathathan	20	100
6	Uthaanan	15	75
7	Kirukaran	15	75

- ❖ Derangement of Praanam, Abaanan, Viyaanan, Samaanan and Devathathan were found in 100% of cases.
- ❖ Derangement of Uthaanam and Kirukaran were found in 75% of cases.

**Table 12 : KABAM - Increased**

SL.NO	KABAM	NO.OF.CASES	PERCENTAGE
1	Avalambagam	20	100
2	Kilethagam	20	100
5	Santhigam	20	100
3	Pothagam	15	75
4	Tharpagam	15	75

- ❖ Avalambagam, Kilethagam Santhigam were affected in 100% of cases.
- ❖ Pothagam and Tharpagam were affected in 75% of cases,

**Table 13 : PITHAM - Decreased**

SL.NO	PITHAM	NO.OF CASES	PERCENTAGE
1	Anila Pitham	20	100
2	Saathaga Pitham	20	100
3	Ranjaga Pitham	10	50
4	Aalosaga Pitham	10	50
5	Prasaga Pitham	10	50

- ❖ Anila Pitham and Saathaga Pitham were affected in 100% of cases.
- ❖ Ranjaga pitham, Aalosaga Pitham and Prasaga pitham were affected in 50 of cases.

## 12. CONDITIONS OF UDAL THATHUKKAL

**Table - 14**

SL.NO	UDAL THATHUKKAL	NO.OF CASES	PERCENTAGE
1	Saaram	20	100
2	Senneer	20	100
3	Oon	20	100
4	Kozhuppu	20	100
5	Enbu	20	100
6	Moolai	15	75
7	Sukkilam / Suronitham	15	75

- ❖ Saaram, Senneer, Oon, Kozhuppu and Enbu were affected in 100% of cases.
- ❖ Moolai and Sukkilam / Suronitham were affected in 75% of cases.

### 13. CONDITIONS OF ENVAGAI THERVUGAL:

Table - 15 illustrates the conditions of Envagai Thervugal.

SL.NO	ENVAGAI THERVUGAL	NO.OF CASES	PERCENTAGE
1	Naa	10	50
2	Niram	10	50
3	Mozhi	-	-
4	Vizhi	13	65
5	Sparisam	20	100
6	Malam	10	50
7	Moothiram	9	45
8	Naadi - Vaathakabam	20	100

- ❖ Naa was affected in 50% of cases,
- ❖ Niram was affected in 50% of cases,
- ❖ Vizhi was affected 65% of cases,
- ❖ Sparisam was affected in 100% of cases,
- ❖ Malam was affected in 50% of cases,
- ❖ Moothiram was affected in 45% of cases,
- ❖ In 100% of cases, Naadi was vaathakabam.

Neikuri showed that the oil dropped into the urine spreaded like a snake with muthu indicating the predominance of vaathakabam

**Table-16 Laboratory Investigations**

Case. No	TC Cells cu.mm	Haematological Report					Hb %	Bio Chemical		Urine Analysis			Stools Examination	Radiological findings
		DC %			ESR			Sugar mgs%	Urea mgs %	Alb	Sug	Dep	Ova / Cyst	
		P %	L %	E %	½ hr mm	1hr mm								
1	7600	54	32	4	20	40	63	110	25	Nil	Nil	NAD	Nil	AS
2	8600	54	30	2	6	12	74	110	32	Nil	Nil	NAD	Nil	AS
3	8800	56	35	4	45	85	65	100	30	Nil	Nil	NAD	Nil	AS
4	9400	65	32	3	10	21	66	100	34	Nil	Nil	NAD	Nil	SC
5	8300	60	38	2	9	18	68	110	19	Nil	Nil	NAD	Nil	WDS
6	8400	54	49	3	2	5	62	110	34	Nil	Nil	NAD	Nil	AS with BS
7	8500	56	32	4	10	20	65	90	32	Nil	Nil	NAD	Nil	LS
8	8400	56	38	2	10	20	68	120	25	Nil	Nil	NAD	Nil	S
9	8200	54	34	4	8	16	70	100	27	Nil	Nil	NAD	Nil	S
10	9200	60	32	4	60	130	75	100	28	Nil	Nil	NAD	Nil	LS
11	7800	60	36	2	5	10	76	100	30	Nil	Nil	NAD	Nil	DP
12	9400	58	38	4	5	10	74	90	26	Nil	Nil	NAD	Nil	WDS
13	7400	58	34	4	18	36	70	95	28	Nil	Nil	NAD	Nil	DP
14	8400	54	30	2	6	12	70	100	27	Nil	Nil	NAD	Nil	LS
15	8800	58	34	8	5	10	82	95	30	Nil	Nil	NAD	Nil	LS
16	7900	62	34	4	6	12	68	120	28	Nil	Nil	occ. epi. cells	Nil	LS
17	8600	58	36	4	22	24	68	95	28	Nil	Nil	NAD	Nil	SI
18	8600	56	34	2	6	12	68	80	38	Nil	Nil	NAD	Nil	DP
19	8800	58	49	3	2	5	85	120	32	Nil	Nil	occ. puscells	Nil	LS
20	9600	54	38	2	9	18	68	90	36	Nil	Nil	NAD	Nil	LC

**AS – Ankylosing spondylitis**

**WDS – Widening of the disc space**

**S – Scoliosis**

**LS – Lambar Spondylosis**

**SI – Sacroilitis**

**LC – Ligamental calcification**

**SC – Spondylytic changes**

**AS with BS - Ankylosing spondylitis with Bamboo spine**

**DP – Disc prolapse**

## Differential Diagnosis

அசுவதம்ப வாதம்

“வாதமா யுடல்வெளுத்து வடிவெல் லானோம்  
மயக்கமோ டிருமலா மீளை யுண்டாம்  
நேதமாய் நெஞ்சடைத்துப் பொறிக லங்கும்  
நெருப்பாக உடல்காணு நெடுமூச் சுண்டாம்  
கோதுதான் மயக்கத்தில் மருத்தி னீட்டால்  
குளிர்ச்சியாய்க் கோபிக்குங் கூச்ச ண்டாம்  
பாதந்தான் நிமிருண்டாய் முட்போ லாகும்  
பருத்தஆ சுவதம்பம் பகர லாமே”.

In Asuvathamba vaatham, eventhough pain in the spine, body stiffness and body ache are associated with pallor of the body, giddiness, cough with expectoration, fever and chillness are present. The special symptoms of Thenda Vaatham such as inability to walk, restricted chest movements are not present.

வாதஸ்தம்பம்

“உற்பவிக்கும் வாதமது எழுந்து பொங்கி  
உயர்காலின் புறவடியைக் குடைந்து பற்றித்  
தெற்பவிக்கும் வீக்கமாய்ச் செழும்ப லுண்டாய்த்  
தேகமெங்கும் நோவாகித் திமிரு மாகி  
விற்பவிக்கும் வில்லுபோல் விதன மாகி  
மிடுக்கான மாந்தனைப் போல்விதன மாகிப்  
பற்பவிக்கும் பரன்றனையே நினையா மூடர்  
படுகின்ற வாதஸ்தம் பமுமாம் பாரே”

In Vathasthambam, eventhough pain in the spine, body stiffness and body ache are associated with pain in the posterior upper part of the leg and swelling are present. The special symptoms of Thenda Vaatham such as inability to walk, restricted chest movements are not present.

<b>Disease</b>	<b>Positive symptoms</b>	<b>Negative symptoms</b>
Asubathamba vaatham.	Pain in the spine Body stiffness Pallor of the body	Cough Fever
Vathasthambam	Pain in the spine Body stiffness Bodyache	Pain in the posterior upper part of the leg. Oedema

## DISCUSSION

Yugi muni has classified the diseases into two types. They are

1. Functional disorders
2. Organic invasions

The functional units of our body are the three vital humours which are vaatham, pitham and kabam. Any disturbances in the vital humours will affect the function of the organs.

Vaatham is the initiator of all activities of our body. It is important in the communication network of the body, from sense organ to brain and tissue to tissue and cell to cell.

**Thendavaatham** is one of the vaatha diseases affecting the vertebrae. It is characterized by diffuse back pain with stiffness and involves sacroiliac joints and ascends to involve the entire vertebral column.

The research evidence of this disease is found in Yugi's classification of vaatha diseases in the Yugi vaidhya chinthamani, in which the aetiology and the clinical features are dealt with. This dissertation work includes a research collection of views both Siddha and Modern Science.

Among 20 cases diagnosed clinically in the out patient department as Thedavaatham, as per the symptomatology and the "Envagai Thervu" and other siddha methods of diagnosis and also modern radiological findings.

## **Age and sex distribution :**

Among the 20 cases, 60% were males and 40% females and they belong to different age groups from 30-70 and the highest incidence of onset of a disease occurs between 30-40 yrs.

## **Kaalam :**

“வாதமாய் படைத்து பித்த வன்னியாய்க் காத்து சேத்தும  
சீதமாய்த் துடைத்து”

According to this concept 85% of cases were noted in the pithakaalam (34 to 66 years).

## **Paruvakaalam:**

15% of cases were affected in kaarkaalam, 15% of cases were affected in Elavenil Kaalam, 70% of cases were affected in Muthu Venilkaalam.

According to Siddha System

“முதுவேனிற்காலத்தில் வாதம் பெருகி அவ்வாத மிகுதியால்  
வன்மையுள்ள வாதப் பிணிகள் வலுக்கும”.

As said in the literatures, maximum number of Thenda vaatham patients were affected in muthuvenil kaalam (Aani and Aadi).

## **Thinai**

75% of cases were from maruthanilam and 25% of cases from kurinji. Marutham is the area, where the severity of the disease is less,

but this incidence may be due to the alteration in the food, habit and other activities.

### **Socio- Economic Status:**

75% of cases were belonging to poor class. 25% of cases were belonging to middle class family. Poor patients were mostly affected because of unhygeine and lack of nutritious food.

### **Aetiology:**

Most of the patients were affected by HLA B27 antigen. Some patients were affected by trauma, physical strain and age factor.

### **Clinical manifestations:**

Cent percent of patients had diffuse back pain, 75% cases had tenderness over the sacro iliac joints, 75 of cases had constipation, 50% of cases had whole spinal movement's limitation, 15% of cases had curvature of spinal deformities and 50% of cases diminished chest expansion.

### **Uyir thathukkal:**

Uyir thathukkal constitute three vital humours mentoend in siddha system namely vaatham, pitham and kabam.

### **Disturbances in vaatham :**

- ❖ **Praanan** was affected in 100 % of cases and produces dyspnoea.

- ❖ **Abaanan** was affected in 100% of cases and produces loss of appetite.
- ❖ **Viyaanan** was affected in 100 % of cases and produces fatigue and difficulty in walking.
- ❖ **Udhaanan** was affected in 75% of cases and produces dyspnoea
- ❖ **Samanan** was affected in 100% of cases and produces loss of appetite
- ❖ **Kirukaran** was affected in 75% of cases and produces altered sense of taste and excessive salivation.
- ❖ **Devathathan** was affected in 100% of cases and produces fatigue

#### **Disturbances in kabam :**

- ❖ **Avalambagam** was affected in 100% of cases and produces dyspnoea
- ❖ **Kilethagam** was affected in 100% of cases and produces fatigue and loss of appetite.
- ❖ **Pothagam** was affected in 75% of cases and produces altered sense of taste.
- ❖ **Tharpagam** was affected in 75% of cases and produces sweating in head.
- ❖ **Santhigam** was affected in 100 % of cases and produces pain in the spine and restriction of the movements.

#### **Disturbances in pitham:**

- ❖ **Anilam** was affected in 100% of cases and produces loss of appetite.

- ❖ **Ranjagam** was affected in 100 % of cases and produces pallor of the skin.
- ❖ **Alosagam** was affected in 50% of cases and produce disturbances in forward vision.
- ❖ **Prasagam** was affected in 50% of cases and produces dryness of the skin.
- ❖ **Saathagam** was affected in 100 % of cases and produces difficulty in walking.

### **Udal thathukkal / Udal kattugal:**

Saaram, Senneer, Oonn, Kozhuppu, Enbu, Moolai and Sukkilam or Suronitham are the 7 udal thathukkal.

1. **Saram** was affected in 100% cases and produces fatigue.
2. **Senneer** was affected in 100% cases and produces pallor of the skin.
3. **Oon** was affected in 100% of cases and produces pain in the spine.
4. **Kozhuppu** was affected 100 % of cases and produces emaciation.
5. **Enbu** was affected in 100% of cases and produces pain in the spine and restriction of the movements.
6. **Moolai** was affected in 75 % of cases and produces erosion and sclerotic changes in the disc.
7. **Sukkilam / Suronitham** was affected in 75% cases and produces decrease sexual desire.

## **Envagai thervugal**

The important criteria for the diagnosis of the disease are envagai thervugal. This constitutes Naadi, Naa, Niram, Mozhi, Vizhi, Sparism, Malam and Moothiram.

### **❖ Naadi**

20 patients showed vaathakabam naadi.

### **❖ Naa**

Naa was affected in 50% of cases. Tongue was coated and pale in colour due to constipation and anaemia respectively.

### **❖ Niram**

Niram was affected in 50% of cases, due to anaemia.

### **❖ Mozhi**

Mozhi was normal.

### **❖ Vizhi**

Vizhi was affected in 75% of cases due to anemia.

### **❖ Sparism**

Sparism was affected in 100% of the cases, which show joint tenderness and warmth over the inflamed joints.

### **❖ Malam**

Malam was affected in 50% of cases and constipation was present in some cases.

### **❖ Moothiram**

Moothiram was affected in 45% of cases which produces incontinence of urine.

Neerkuri and neikuri were noticed in all the 20 cases and neerkuri was found to be normal.

Neikuri showed that the oil dropped into the urine was spreading like a snake with muthu.

### **Laboratory investigations:**

Routine examination of blood, urine and stools were done. Examination of stools showed no abnormalities.

In the blood 50% of cases had increased ESR and 50% of cases had decreased Hb%.

Blood sugar, Blood urea, Serum cholesterol were also done. The patients were also subjected to radiological investigations.

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

In all the patients clinically diagnosed as Thenda Vaatham.

X-ray of sacro iliac and lumbo sacral joint (Antero - posterior view and Lateral view). Patients had different abnormalities. i.e sacro illitis, erosions and sclerosis, widening of joint space and bony ankylosis supervene.

In mild cases, sacro iliac abnormalities were present. Computed tomography (CT) and Magnetic Resonance imaging (MRI) can detect early stage abnormalities of Ankylosing Spondylitis.

## CONCLUSION

- ❖ The disease Thenda vaatham was taken for the clinical study with reference in Yugi Vaidhya Chinthamani. The disease is correlated with Ankylosing Spondylitis in allopathic view. The clinical diagnosis was done on the basis of clinical features described in “Yugi vaidhya chinthamani - 800”.
- ❖ The aetiology, pathology, pathogenesis, clinical features, classification and prognosis of the disease were collected from a number of literatures both in Siddha System as well as in modern system of medicine.
- ❖ For this study twenty cases were diagnosed clinically in the out patients and inpatients ward.
- ❖ The selection of cases was carried out under the supervision of professor, and Lecturers of Post Graduate Noi Naadal Department.
- ❖ A case sheet proforma was prepared with particular reference to focusing Siddha and modern clinical parameters.
- ❖ Separate case sheets were maintained for each patient and monitoring of vital signs, symptoms and signs and they are recorded in data.

- ❖ From this study the following data were clear, that the disease was more common in males (60%).
- ❖ Maximum incidence of age was between 3<sup>rd</sup> and 5<sup>th</sup> decade. i.e in Pithakaalam (85%). The incidence of the disease was higher in summer (Muthuvenil column- 70%).
- ❖ Routine blood examination, Estimation of Blood Sugar, Blood Urea, Serum Cholesterol and investigation of urine, motions were also considered for diagnosis.
- ❖ Siddha diagnosis was made with the help of Envagai thervugal especially with Naadi and Neikuri.

# NEIKURI

Case No : 17



Case No : 6



# PROTOCOL

“A STUDY TO DIAGNOSE **THENDA VAATHAM** THROGUH  
SIDDHA DIAGNOSTIC METHODOLOGY”

BY

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## 1. BACKGROUND

### THENDA VAATHAM

Thenda Vaatham is one of the vali disease in which the vali humour is abnormally changed

According to the literature Yugi Vaithiya Sinthamani, Thenda Vaatham has been mentioned as.

“வழுத்தவே மூலாதா ரத்தைப் பற்றி  
மருவியே மேலேறி முதுண் டாதல்  
விழுத்தவே சிரசில் வந்து வியர்வு மாகி  
விகுவாக நோவாகி மேனி கண்ணிப்  
பழுத்தவே உடம்பெங்கும் பஞ்சு போலாம்  
பாங்கான மலசலமு மஞ்ச ளாகும்  
குழுத்தவே தெண்டமாம் வாதந் தன்னைக்  
கூறினோங் குணமெல்லாங் கூர்ந்து பாரே.

“கூர்ந்திட்ட மலசலங்கள் துரித மானால்  
கொண்டடக்கிப் பின்புதான் கொடிதாய்த் தள்ளி  
ஊர்ந்திட்ட சரீரத்தி லுதர மீறி  
உறத்தேய்த்துத் தலையதனி லெண்ணெய் வார்க்கில்  
வார்த்திட்ட வழிநடக்கில் மெத்த வும்தான்  
வாதந்தா னுற்பவித்து நடைகொ டாமல்  
நார்த்திட்ட நரம்போடு எலும்பிற் குழ்ந்து  
நனுகியே ஓடிநெஞ்சி லேறுந் தானே”

It shows symptoms such as pain which surges up from the sacroiliac region and ascends to involve the entire Vertebral column, Sweating, Bodyache, Pallor, Yellow coloured stool and urine, Aggressive expulsion of urine and faeces due to repeatedly controls urged urine and faeces. It affects the nerves, bones and the chest.

## **2. AIMS**

### **a. Primary Aim**

To diagnose the Thenda Vaatham through Envagai thervu along with abnormalities of Mukkutram and Udalthathukkal.

### **b. Secondary Aim**

To evaluate the etiology, Pathology and to analyse the state of curability in Thenda Vaatham through Age, Naadi, Nilam, Kaalam, Neerkkuri, Neikkuri, Manikkadai Nool and Sothidam.

## **3. POPULATION AND SAMPLE**

Thenda Vaatham (as explained above the poem) patients, satisfying the inclusion and exclusion criteria mentioned below.

The sample consists of Thenda vaatham Patients attending the O.P department of Government Siddha Medical College, Palayamkottai, under the guidance of Faculties and Head of the Department of Post Graduate, Noi Naadal Department.

## **4. SAMPLE SIZE**

A sample size of 30 patients will be taken for detailed study.

## **5. INCLUSION CRITERIA**

- Complaints – more than 1 year.
- Willing to give Blood, Urine specimen and X-ray for investigation whenever required.

## **6. EXCLUSION CRITERIA**

- Lumbar Spondylosis

- Ankylosing spondylitis associated with T.B.Spine.

## **7. CONDUCT**

Thenda Vaatham patients satisfying the inclusion and exclusion criteria will be included in this study. Envagai thervu, Nilam, Kaalam, Sothidam and Manikkadai Nool of the Patients will be noted.

## **8. FORM**

Form – Diagnostic Proforma for Thenda Vaatham

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