A STUDY ON
KALANJAHÅ PADAI

Dissertation Submitted To
THE TAMIL NADU DR.M.G.R Medical University
Chennai – 32

For the Partial fulfillment for The Award of Degree of

DOCTOR OF MEDICINE (SIDDHA)
(Branch – III, SIRAPPU MARUTHUVAM)

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March - 2008
INTRODUCTION

The skin is a protective covering of the body. It, with all its specialised derivatives makes up what is called the integument [Latin- covering], which covers the entire surface of the human body.

The human skin shows wide regional variations in structure like scalp, face, earlobes, back, palms and soles etc., In thickness of the skin the number of sebaceous glands, collagen fibre and vasculature.

Diseases of the skin are a common occurrence. About 10-20% of patients seeking medical advice suffer from skin diseases. While infections are more common in the tropics, chemical and psychogenic dermatoses are common in western countries. Diseases of the skin account for a great deal of misery, suffering, incapacity and economic loss. Besides this, they are a great handicap in society because they are visible.

According to Siddha system, our human body is made up of pancha-boothas. It leads to 96 thathuvas. The entire universe is also made up of pancha boothas. So any change in the cosmos will reflect in the human body. This was quoted in Sattamuni Gnanam by Sattamuni as follows,

அரேன்குறிச் லகணத்து பிரேவாம்
பிரேவாம் லகணத்து ஆரேவாம்
ஆரேவாம் பிரேவாம் லகணத்து
ஆரேவாம் பிரேவாம் லகணத்து

- சல் உதைன்
Pancha boothas give birth to seven thatus of body. This was quoted by Thirumoolar in Thirumandhiram as,

“இருவர் பூச்சி இந்துக்கு தையை வெள்ள
செல்லியுள்ள நீரை வரும் மேற்க
பழைய கச்சித்து பாறையை தந்தி
சுட்டு வருமல் துண்டுகுறிருப்பே”

- மிளகுதொண்ணே

Among the pancha bootha, earth and fire together gives birth to the thathu ‘Thol’ (skin).

According to great Yugimuni, skin disorders are classified into 18 varieties. Yugi had not explained “Kalanjaga padai” as a separate disease. Instead he had made just mention in the vatha diseases as kalanjaga vatham which resembles “virpodaga kuttam”. The clinical features of Kalanjaga padai correlated with Psoriasis as described in Modern dermatology.

Siddhars had explained the line of treatment into two major modes, one is internal medicine and other is external medicine. As per the Siddha medicine, both internal and external medicines are 32 in numbers.

“இருவர் பூச்சி இந்துக்கு சிங்கித்து தந்தி
செல்லியுள்ள நீரை வரும் மேற்க
சுட்டு வருமல் துண்டுகுறிருப்பே”

- கோவௌந்தன் குறுகுமாம்

From the above stanza, it is ideal to choose herbal preparations. The author had selected Neeradimuthu Rasayanam as internal medicine and Aadutheendalpalai vembu thylam as external medicine.
Moreover, it is important to reduce mental stress, which is the main aggravating factor of Psoriasis. Life style modifications, Yoga therapy, transitional meditations, diet modifications etc., are given special emphasis to reduce the mental stress.
AIM AND OBJECTIVES

1. To collect the various Siddha literatures and modern text books as literal evidences regarding disease “Kalanjaga padai”.

2. To expose the talent of Siddhars in diagnostic principle.

3. To know the extent of correlation of aetiology, classification, symptomatology and diagnostic methods.

4. To have an idea of an incidence of Kalanjaga padai with reference to age, sex, socio-economic status, habits, and family history related to any psychosomatic problems and paruva kaalams (Seasons).

5. To have a complete study of the disease, under the topics of mukkutram, poripulangal, udal kattugal, enn vagai thervugal etc., in order to evaluate the pathology of Kalanjaga padai.

6. To have a detailed clinical investigation and to utilize the possible diagnostic tools in the confirmation of the diagnosis and prognosis of the disease.

7. To have a clinical trial Kalanjaga padai with NEERADIMUTHU RASAYANAM as internal medicine and AADUTHEENDAPALAI VEMBU THYLAM as external application.

8. To study the biochemical analysis and pharmacological analysis of the selected drugs.

9. To highlight the factors like land where they live, climate changes, diet and mental stress of human beings. To make an awareness among the patients in order to avoid further recurrence of the disease.
REVIEW OF LITERATURE

SIDDHA ASPECTS

In the Siddha medicine, the pancha bootha (five elements) are elaborately described. Our body which is formed by the combination of five boothas. “Thol”(skin) is a part of Prithvi. Skin is the largest organ in our body. It has got a lot of functions, each of which is important for the normal physiological functioning of whole human body, are regulation of body temperature, excretion, protection from pathogens etc.,

According to the Siddha text "Siddha maruthuvanga surukkam" skin is divided in to six types. They are

- Skin containing water.
- Skin having blood.
- Skin which produces sirangu.
- Skin which produces kuttam.
- Skin producing tumour.
- Skin which produces severe pain during an injury.

Man is very much influenced by his environment. Since skin serves as a link between man and Universe, it is the first organ to be influenced by the change also, since it is related intimately to the mind, it responds even to the slightest change in mind. Any disease affecting the skin causes a socio economic problem, mental torture and social stigma to the patient.
**Definition (iyal)**

Kalanjaha padai is a non contagious, non infectious, inflammatory disease of the skin characterized by well defined dry erythematous plaques with large adhered silvery or ivory mica like scales.

**Aetiology (Noi varum vazhi)**

Among the available Siddha literatures only Yugi Vaithiya Chinthamani and Thirumoolar Vaithiyam are the sources of informations on aetiology and clinical features of the eighteen types of skin diseases. There is no specific obvious information about the specific factors causing Kalanjaha padai.

Thirumoolar quotes as,

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"பாலை மாச்சுத்திரி கிணற்காலிகள் கிளாக் கீசியா

பாசு கி கரும் பாசு பாலிக் கருறும்

மாலையூம் கிருந்துப்பூர் யுருவு பாலிக்

கூட்டி கோற்று பாலுத்து பால்சையாவாய்"
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- குறிப்பிட்டு

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“தீர்ச்சி கிணற்காலிகள் பாலகு முடிக்கு

கீர்தீஸ்வரம் கிருந்துப்பூர் யுருவு பாலிக்”
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- குறிப்பிட்டு

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”கீர்தீஸ்வரம் முடிக்கு முடுகு முடுகும் முடுகும்

மாலையூம் பிண்ணண்ணூர் கிணற்காலிகள்

மாலையூம் பிண்ணண்ணூர் கிணற்காலிகள்

பாலை மாச்சுத்திரி கருறும் கிணற்காலிகள்
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- குறிப்பிட்டு
The text book of “Sirappu Maruthuvam” describes the following aetiological factors of Kalanjaha padai,

- புந்தாங்க திருமாண்க யாதாரம் குடும்பகுதியம் - of unknown aetiology and may be genetic

- சுல்புத் துப்பில் - Tonsillitis

- புந்தாங்க சுருக்காள் - Respiratory diseases

- வித்துண்டு - Allergic disorder

- பாசு அழக்கக்கள் - Psychological disturbances

- ஆறிருங்கு - Depression, anxiety

- காலஸ்தம்பாக்களில் - due to changes in humidity

- கர்நிள் சூறாநற்பு (red oxide of copper)

- பிளாஸ்டிக்கான்கள் துப்பில் சூறாநற்பு (polio vaccine)

- சுல்புத் சூறாநற்பு (chloroquine)

In Siddha system of medicine chronic skin diseases are brought under the clinical entity kuttam. The ancient texts describe that eighteen types of kuttam.
Thirumoolar quotes as follows:

“அல்லாஹ் நி காவுமாள் நி ஹீ சகா
 சிலங்காறுநால் காவு வயலிய நச்சுப்பொருங்கதும்
 பாதனாம் கிளையும் நி ஹீ சகா
 குளும் எகாதிராவாதம் புர்க்கவன் வயலும்
 குறிப்பிடும் கிளையும் புர்க்கவன் வயலும்
 காலாக்கிய கிளையும் காலாக்கிய வயலும்
 செய்த கிளையும் கருணாபாயன் சகாலநாளிலோ”

“சிலாச்சியும் தீராய சிலாச்சியும் குளுத்துறைகள்
 கான்கள் கிளையும் குளும் எகாதிராவாதம்
 பாதனாம் பெச்சுண்ணும் பெச்சுண்ணுமறைநீர்
 சிலாச்சியும் புர்க்கவன் சகாலநாளிலோ”

Kuttam is named a common word of chronic skin lesion as for the Siddha text books.

Agasthiar had mentioned kanmam is the main cause for kutta noi.

Kanmavaralaru (Psycho social cause)

“புகவிலைச்சாரங்கள் விளை நடுக்கள் குக்குச்சுக்கும்
 பாதகத்துக் குத்துத்தை கிளையுமளை
 2-வாணியச்சாரக்குறிப்பிள் கருணா நாய்
 2-சாணியம் கருப்பங்கள் புரத்திய பேய்த்தை
 காலியச்சாரங்கள் கிளையுமளை காலாக்கிய வயலும்
 காலியச்சாரங்கள் புர்க்கவன் காலனாளுக்கு
 அந்தோசையும் கருணாபாயன் அர்த்தவை வயலும்
Thirumoolar has mentioned that the skin diseases are manifested in three ways,

1. Venereal origin and other mega diseases
2. Insect bites.
3. Infections and infestations.

In Yugimuni 800 he mentions,

"ஆப்கினேங்க்க பாதிப்புக்காக காந்தமையும்
அமைனாது பாதிப்புக்காக காந்தமை
சுருக்கத்து தோற்றாவது தனிக்குது
செய்தி காந்த தனிக்குத் தனிக்கு
சுருக்கத்து பாதிப்புக்காக காந்தமை
செய்தி காந்த பாதிப்புக்காக காந்தமை
அமைனாது பாதிப்புக்காக காந்தமை
அமைனாது பாதிப்புக்காக காந்தமை
அமைனாது பாதிப்புக்காக காந்தமை
அமை

- புரீந்திபேராசு 800

Yugimuni strongly described only psycho-social factors are the main causes. They are stress inducing factors. He has attributed the following causes.
• Misbehavior in the temple.
• Sacrilege towards God.
• Humiliating the elders.
• Breech of trust.
• Paying low wages to workers.

The main factors behind the reasons are manifestation of stress which can be considered as precipitating factor. The psychic tranquility of the individual depends upon the harmony of social movements.

Hereditary also plays an important role in breeding Kalanjaha padai which appear in generations affecting several siblings and in such families the condition tends to be severe and persistent.

In Yugi Chinthamani, among the eighteen types of skin disease three types seen to be variants of Kalanjaha padai. But no description is available in the Siddha classics under Kalanjaha padai.

Out of the eighteen types of kuttam, 3 types have similarities with Kalanjaha padai and out of this three, one type is closely related with Kalanjaha padai.
CLINICAL FEATURES

Thethuru kuttam

"Thethuru kuttam is characterized by:

- Annular erythematous lesions with the appearance of washed leather
- Itching, oedema of the body and plugging of hairs

Kajasarma kuttam

"Kajasarma kuttam is indicated by:

- Blackish discolourations of the body, itching, oedema of the toes

Under Thethuru kuttam, annular erythematous lesions with the appearance of washed leather are described. Itching, oedema of the body and plugging of hairs are the characteristic clinical features of this entity.

Blackish discolourations of the body, itching, oedema of the toes are indicated.
**Virbodaga kuttam**

"पुरे संक्रमण सर्पिलकाम तीसरात्मकान

मात्र तत्परांत ही काम तत्कालिनी पढ़ाई

तत्परांत ही शीताकाम ही तपायकामी

ही लुप्त से तरंग तत्कालिनी पढ़ाई

क्षेत्रस्त तत्कालिनी पढ़ाईपूर्वक

तत्कालिनी सर्पिलकाम पढ़ाईपूर्वक

क्षेत्रस्त तत्कालिनी पढ़ाईपूर्वक

क्षेत्रस्त तत्कालिनी पढ़ाईपूर्वक"

An Erythematous lesion in the skin with plaques of silvery scales is described. The lesions are described to be extensive. Usually these entities are associated with anxiety and despair.

The oedema and plugging of hairs are not noticed in practice as it is in the case of *Thethuru kuttam*.

The blackish discoloration of the body, oedema of the toes is noticed in practice as in Kajasarma kuttam. It is seen only in the complication stage of Kalanjaha padai.

So the clinical features of Virbodaga kuttam are ascertained to be closely to Kalanjaha padai.

In the text *Siddha Maruthuvam Sirappu* authored by Sri. Dr. R. Thiagarajan, clinical features are described as,
• The skin lesions are red in colour with raised margins and white ivory or silvery rough thick scales, on removing the scales pin point blood-stained spots occurs.
• The lesions vary in size either thin or thick layers.
• In children these lesions may be like water drops.
• In severe cases lesions occur in the face, scalp and sometimes all over the body.

IN A CHRONIC CASE:
• The skin lesion occurs in the extensor aspect of forearm.
• In some cases these lesions appear over the palms and soles.
• In some cases these lesions appear all over the body.
• The lesions are coin shaped and there may be small pus formed lesions are found.
• In obese women, the lesions may occur over navel, inguinal region and axilla with discharge. Due to sweating, itching may be associated. The borders of the lesions are not to be demarcated clearly.
• One fourth of the patients have lesions over nails which are pink coloured and associated with ridges.
• 7 % of the patients have associated joint involvement which will manifest as Psoriatic Arthropathy.
ARThROPATHY

If the patient suffers from repeated episodes of Kalanjaha padai it may be associated with painful joints known as Kalanjaha vatham.

“Yugimuni” describes the clinical features of “Kalanjaha vatham” as follows,

“அலந்தக்கன் காத் குள்ளின் கரைக்குறும்பே. முன்னேற்றக் கரை முறையில் கொள்ளுக விளக்கம்
நந்த கனிமக்கல் காத் விளக்கம்
தனுருவம் பரப்பள்ளி குண் கும்
சுருக்கம் சுருக்கம் போன விளக்கம்
அராதனம் சிவராதனம் வேளாண்மை
அராதனத்தின் மேலாண்மை
குழியி கண்டகாத்தோம் வேளாண்மை.”

- புது காண்டாய்ச் சிவராதனம் பகுதி - 259

NOI KANIPPU (Diagnosis)

Piniyari muraimai is a method of diagnosing a disease. It is based upon three main principles. They are,

- Poriyalarithal (Inspection)
- Pulanalarithal (Palpation)
- Vinathal (Interrogation)

Physicians 'pori' and 'pulan' are used as tools for examine the 'pori pulan' of the patient. The above principles correspond to the methodology of 1. Inspection, 2. Interrogation 3. Palpation in modern medicine, in arriving a clinical diagnosis of the disease.
1. PORIYALARITHAL

Pori is considered as the five senses of perception namely,

- Nose
- Tongue
- Eye
- Skin
- Ear

'Poriyalarithal' is examining the pori of the patient by the physician for diagnosing.

2. PULANALARITHAL

'Pulan' is five object of senses. They are

- Smell
- Taste
- Vision
- Sensation to touch
- Hearing

'Pulanalarithal' means examining the 'pulan' of the patient by the physician for diagnosing purpose.

3. VINATHAL

Vinathal is gathering the informations regarding the history of the disease, its clinical features etc., from the patient or his immediate relatives who are taking of him, when the patient is not in a position to speak or the patient is a child.
ALAVAIGAL (logics)

Alavaigal are used in clinical diagnose of a disease

"அலவைகள் பயன்படுத்தப்பட்டபோது சமயங்கள் விளக்கம் ஆகியவற்றை வாக்குவதற்கான
உதவவும் விளக்கப்பட்டுள்ளன. குறித்து ஒன்றுகளை எடுக்கைப் பயன்படுத்தலாம்
காலம் காணும் வழியாக அவை உள்ளார் அல்லாமல் அவை அறியக்கூடாதேயால்
அலவைகள் காணக்கூடம், வேறு வரையறை வேறு வரையறை நிற்பறித்தேன்"

- கேமநாராயாசரா அத்தோம் வரை 6

Alavai divided in to ten types. They are,

- Observation - காண்டதள்
- Inference - குறித்து
- Authority, Literature - புதுமை
- Preception - ஆய்வும்
- Presumption - அதிகம்
- Comparison - காண்பதம்
- Inference by elimination - பார்க்குவது
- Probability - இயல்லு
- Tradition - செய்ய
- Natural Inference - தீசல்

The above mentioned "ten alavaigal" are included in three alavaigal.

They are,
• **Kaandal (Inspection by Siddha method)**

   Through 'kaandal' the physician can directly see the patient, hear all the complaints and at length concludes a diagnosis.

• **Karuthal (Through Siddha Investigation)**

   Through envagai thervu and neerkuri as well as neikuri, we can diagnose a disease by karuthal.

• **Urai (Text's evidence - Siddhar's)**

   Comparative study of the signs and symptoms of the patient with the reference of books and come to a diagnosis.

**Ennvagai thervugal (eight diagnostic tools)**

   Siddhars have developed a unique method of diagnosing the disease by “Ennvagai thervugal'

   “தாசம் வானிலை வாதம் பெரும் வெய்வு நீள்

   முட்டு வைக்குறிக்கு மொத்தங்கற்று”

   - வென்ற தொலை வென்ற தொலை தலைம் (ஆக்சும் பக்கம்)

   “செவ்வகத்து பெரும் வலள் நீள் நிலைசு மய்யு”

   - தலைது

   Hence the diagnosis is made by the following

   1. Naadi (Pulse)  5. Mozhi (voice)
   2. Sparisam (sensation to touch)  6. Vizhi (eyes)
   3. Naa (tongue)  7. Malam (Faeces)
   4. Niram (colour)  8. Moothiram (Urine)
Kalanjaha padai in relation with envagai thervugal

1. Naadi (pulse)

Naadi is responsible for the existence of life and can be felt one inch proximal to the wrist on the radial side by means of palpation with the tips of index, middle and ring fingers corresponding vatham, pitham and kabam respectively.

The three humours vatham, pitham and kabam exist in the ratio 1:1/2:1/4 normally. Derangement in these ratios leads to various disease entities.

The three "Uyir thathukal" are formed by the combination of three nadigal with three vaayu.

- Idakalai + Abanan – Vatham
- Pingalai + Piranan – Pitham
- Suzhimunai + Samanan – Kabam
In Kalanjaha padai the following types of naadi were observed.

They are,

a. Vatha kabam and
b. Pitha kabam

2. Sparisam (sense to touch)

This reveals about the warmth, chillness, dryness, roughness of the skin, oozing, sweating, tenderness, fissures, depigmentation changes in the skin, swelling, emaciation, etc.,

In Kalanjaha padai thickness, roughening, dryness, pin point bleeding, silvery or mica like or ivory colour dry scales in skin may be noticed.

3. Naa (Tongue)

The colour, dry or wet, coated or not, excessive salivation, redness, ulceration, fissure, pallor, yellowish discoulouration, any malignant outgrowth, predominant taste in tongue, speech and deviation of the tongue, along with the conditions of the teeth and gums are to be noted.

In Kalanjaha padai, tongue coating like flour (खाद संस्वर) may be noticed in some cases may be due to habitual constipation.

4. Niram (colour)

Changes in the colour of the skin, teeth, eyes, nails and lips due to vatham, pitham, kabam, hypo and hyper pigmentation are to be noted. In Kalanjaha padai, erythematous lesions, pin point bleeding after removing the scales may be noticed.
5. Mozhi (voice)

Examination of mozhi includes clarity of speech any speech disturbances, crying, high or low pitched voice, slurring or incoherent speech, scanning speech, talk included by hallucination, undue argument, breathlessness, nasal or hoarseness of voice, wheezing. In Kalanjaha padai no change is seen regarding speech.

6. Vizhi (eyes)

The motor and sensory activities are to be noted. Also any abnormal colour change indicating vatham, pitham, kabam and mukkutram. Hyperemia, ulceration, bluish discolouration, response of pupil, pallor, protrusion, sunken eyes, sharpness of vision, excessive lacrimation, angle of eye, subconjunctival bleeding, visual disturbances are to be noted. In Kalanjaha padai burning sensation was reported in some cases.

7. Malam (faeces)

Colour, froth, solidity, semisolid or liquid quantity, odour, frequency, constipation, presence of mucus, blood and undigested matter in the stool are to be studied. In some of the cases of Kalanjaha padai habitual constipation was reported.

8. Moothiram (urine)

Collection of urine for the determination of neerkuri and neikuri is a special diagnostic method.
Neerkuri and Neikuri

"அற்கரு ஸ்ரீலேவம் இறைவிக்கவும்
அரணர் அய்வகம் இரண்டு குறிப்பிட்டு
சாற்று மருந்திணி பருவம் கொண்டு
அங்கு காற்று காப்பில் காணிகள்
நூர்குரி மூந்து முன்னையான கேள்வி"  

- குற்ற பக்தமாகவே குற்றம்

Prior to the day of urine examination the patient was instructed to take a balanced diet and quantities of food must be proportionate to his routine in take. The patient could have no disturbed sleep. After waken up in the morning, the first urine voided was collected in a clear wide mouthed glass container and is subjected to analysis of "neerkuri and neikuri" with in one and a half hour. Then neerkuri is to be found out by,

Neerkuri

"மார்க்சே மருந்திணி பசை மேலும் முள்ளு குறிக்கீதம்
நூர்குரி வெற்றல் முற்பாகத்து பதிவு"  

- குற்ற பக்தமாகவே குற்றம்

Voided urine has the following characters:

- Niram : Colouration
- Edai : Specific gravity
- Manam : Smell
- Nurai : Frothy nature
- Enjal : Quantity of urine voided
Apart from these, the frequency of urination, abnormal constituents such as protein, presence of blood, pus, renal calculus, crystals etc., also to be found out.

In Kalanjaha padai patient, straw or hey coloured urine is noticed. Scanty micturition can be noted in some cases.

Neikuri:

The speciality of neikuri is stated in the following verse:

“நீகறிய பூச்சியா மாலைந்த நீகறி பாலையுள்ள கொள்ளுதலை
நீகறிய மாலைந்த நீகறி பாலையுள்ள கொள்ளுதலை
நீகறிய மாலைந்த நீகறி பாலையுள்ள கொள்ளுதலை
நீகறிய பூச்சியா மாலைந்த நீகறி பாலையுள்ள கொள்ளுதலை
நீகறிய பூச்சியா மாலைந்த நீகறி பாலையுள்ள கொள்ளுதலை

-கௌராவைகள் செய்யப்பட்டு விளக்கம் புகழ்பெயர்க்கிறது

The collected specimen as said above is to be analysed by following method. The specimen is kept open in a glass dish or china clay container. It is to be examined under direct sunlight, without shaking of the vessel. Then add one drop of gingelly oil at a distance of 1/2" or 3/4" height observe keenly the direction it spreads with in few minutes, and conclude the diagnosis as follows:
Oil spreads like a snake       Vatha neer
Oil spreads like a ring      Pitha neer
Oil kept remaining as such and
Floating like a pearl    Kaba neer
Ring in the snake       Thontha Neer
snake in the ring
pearl in the snake
pearl in the ring

Paruvakaalam (season)

The whole year is constituted by 6 seasons. They are

1. Karkaalam     - Aavani- purattasi     - August - September
2. Koothir kaalam   - Iyppasi - karthigai    - October - November
3. Munpani kaalam  - Markazhi- Thai     - December - January
4. Pinpani kaalam   - Masi- Panguni     - February- March
5. Elavenil kaalam  - Chithirai - Vaigasi   - April- May
6. Mudhuvenil kaalam  - Aani - Aadi      - June - July

In each and every season, routine changes will occur in the land, normal biological functions of individual, living things, plants, animals, human beings,
which will modify the normal physiology and make them susceptible to certain specific disease.

Kabam gets Thannilai valarchi in pinpani kaalam and Vetrunilai valarchi in Elavenil kaalam. Pitham gets Thannilai valarchi in Kaar kaalam and Vetrunilai valarchi in Koothir kaalam, Vatham gets Thannilai valarchi in Mudhuvenil kaalam and Vetrunilai valarchi in Kaar kaalam.

**Nilam (land)**

It is divided into five types

<table>
<thead>
<tr>
<th>S. No</th>
<th>Nilam</th>
<th>Land Area, it concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kurinchi</td>
<td>Mountain region and surroundings</td>
</tr>
<tr>
<td>2.</td>
<td>Mullai</td>
<td>Forest regions and surroundings</td>
</tr>
<tr>
<td>3.</td>
<td>Marutham</td>
<td>Cultivating regions and surroundings</td>
</tr>
<tr>
<td>4.</td>
<td>Neithal</td>
<td>Sea and Coastal regions</td>
</tr>
<tr>
<td>5.</td>
<td>Palai</td>
<td>Desert land only</td>
</tr>
</tbody>
</table>

**Udal kattugal.**

Our body consists of seven udal kattugal, gives strength and structure to our body.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Udal Kattugal</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saaram</td>
<td>It gives strength to the body and mind</td>
</tr>
<tr>
<td>2</td>
<td>Senneer</td>
<td>Saaram after absorption is converted into senneer. It is responsible for knowledge, strength, boldness and healthy complexion.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3.</td>
<td>Oon</td>
<td>Gives structure and shape to the body and is responsible for the movements of the body.</td>
</tr>
<tr>
<td>4.</td>
<td>Kozhuppu</td>
<td>Lubricates the organs and proceeds on its own works.</td>
</tr>
<tr>
<td>5.</td>
<td>Enbu</td>
<td>Protects the vital organs and used for movements and nominates body structure.</td>
</tr>
<tr>
<td>6.</td>
<td>Enbu Moolai</td>
<td>Present inside the bones and it gives strength and maintains the normal condition of the bone.</td>
</tr>
<tr>
<td>7.</td>
<td>Sukkilam / Suronitham</td>
<td>Responsible for the reproductive function of species.</td>
</tr>
</tbody>
</table>

In the case of Kalanjaha Padai, out of seven udalkattugal saaram, senneer and enbu are commonly affected.

Saaram : Dryness, roughness, tiredness
Senneer : Dryness, Paleness of the skin
Enbu : Pain in the knee joints

**MUKKUTRAM**

Human body is influenced by Thridoshas (ie) Vatham, Pitham and Kabam. They are responsible for normal physiological condition of the body.
VATHAM

Vatham is a kinetic energy which influences all motions.

Vatham is located in the abanan, faeces, idakalai, spermatic cord, iliac bone, skin, nerves, joints, hair follicles, muscles, bone, ear and thigh.

<table>
<thead>
<tr>
<th>S. NO</th>
<th>Name</th>
<th>Location</th>
<th>Physiological Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Piranan</td>
<td>Heart and Lower respiratory tract to Upper respiratory tract.</td>
<td>Controls knowledge, mind and five objects of sense, useful for breathing</td>
</tr>
<tr>
<td>2</td>
<td>Abanan</td>
<td>Lower abdomen and extremities</td>
<td>Responsible for urination, expels faeces, delivering foetus, discharge sperm and menstruation.</td>
</tr>
<tr>
<td>3</td>
<td>Viyanan</td>
<td>Mainly at heart</td>
<td>Responsible for movements of all parts of the body and used to feel the sensation</td>
</tr>
<tr>
<td>4</td>
<td>Uthanan</td>
<td>Chest</td>
<td>Responsible for vomiting, cough, hiccough, sneezing.</td>
</tr>
<tr>
<td>5</td>
<td>Samanan</td>
<td>Stomach</td>
<td>Aids for proper digestion. It controls the activity of other vaayus.</td>
</tr>
<tr>
<td>---</td>
<td>---------</td>
<td>---------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>6</td>
<td>Naagan</td>
<td>Eyes</td>
<td>Responsible for opening and closing of the eyes.</td>
</tr>
<tr>
<td>7</td>
<td>Koorman</td>
<td>Heart and Eyes</td>
<td>Responsible for vision and yawning and controls lacrimation</td>
</tr>
<tr>
<td>8</td>
<td>Kirukaran</td>
<td>Throat</td>
<td>Responsible for salivation nasal secretion and appetite</td>
</tr>
<tr>
<td>9</td>
<td>Thevathathan</td>
<td>Eruvai&amp; Karuvaai</td>
<td>For laziness, sleeping and anger</td>
</tr>
<tr>
<td>10</td>
<td>Thananjeyan</td>
<td>Nose</td>
<td>Responsible for bloating of the body after death. It escapes on the third day after death, through the cranium when it bursts.</td>
</tr>
</tbody>
</table>
In the case of Kalanjaga padai,

Abanan : Habitual constipation
Viyanan : Erythematous plaques in the affected areas of skin
Samanan : Due to other vaayus, it is affected
Koorman : Insomnia like condition

The above vaayus are affected commonly.

**PITHAM:**

Pitham is responsible for all the transformation. Pitham is located in urinary bladder, heart, head, pingalai, umbilicus, abdomen, piranan, blood, sweat, skin and eye.

Pitham is classified into 5 types. They are,

1. Analaga pitham : Responsible for digestion of food
2. Ranjaga pitham : Responsible for colour of blood
3. Sathaga pitham : Located in heart and is responsible for normal activities of the body
4. Aalosaga pitham : Responsible for normal vision
5. Prasaga pitham : Responsible for the complexion of skin

In the case of Kalanjaha padai,

1. Ranjagam : Paleness of the skin, conjunctiva and tongue
2. Sathagam : Difficulty to do the routine works properly and sluggishness
**KABAM:**

Stabilizes, maintains and lubricates all movements.

Kabam is found in samanan, semen, brain, head, tongue, nose, bones, bone marrow, fat, nerves, chest, blood, large intestine, eye, stomach and pancreas.

Kabam is classified into 5 types, they are,

1. **Avalambagan**: Heart is the centre for avalambagam. It controls all other forms of kabam.

2. **Kiletham**: Stomach is the centre for kiletham. It gives moisture and softness to the ingested food, and helps for digestion.

3. **Pothagam**: Tongue is the centre for pothagam and it is responsible for the sense of taste.

4. **Tharpagam**: Head is the centre for tharpagam. It gives cooling effect to eyes.

5. **Santhigam**: It lies in the joints and is responsible for the locomotive action of movable bony joints.

In the case of Kalanjaha padai,

Tharpagam : Burning sensation in the eye

Santhigam : Pain in knee joints, elbow and inter phalangeal joints.
UDAL VANMAI (Body Immunity)

The Udal Vanmai is classified into 3 types. They are,

- Iyarkai Vanmai
- Seyarkai Vanmai
- Kaala Vanmai

IYARKAI VANMAI

Natural immunity of the body itself by birth.

SEYARKAI VANMAI

Improving the health by intake of nutritious food materials, activities and medicines.

KAALA VANMAI

Development of immunity according to age and the environment.

When Udalvanmai is affected there may be a possibility of Kalanjaha Padai.

Line of treatment

In accordance with the Siddha system of medicine, certain basic principles are developed before starting the specific drug therapy. These procedures are initially followed to balance, the deranged kutrams ie. Vatham, pitham and kabam. They are purgation, vomiting and application of drugs on the eyes to balance the deranged vatham, pitham and kabam respectively. This can be understood by the following verbs,
In addition to this following medications are practiced in the Siddha system.

- **Aha marunthugal (Internal medicines)**
- **Pura marunthugal (External medicines)**
- Restriction regarding food habits and routine day to day life style.
- **Sirappu Maruthuvam** - a special feature of Siddha medicine like Pranayamam, Yoga.

**AHA MARUTHUVAM**:

These are to administer rejuvenating drugs adopted for every one healthy life **Neeradimuthu Rasayanam** -500mgs two times a day with hot water.

**PURA MARUTHUVAM**:

**Aadutheendapalai vembu thylam** - applied as an external application

**Restriction Regarding Food and Habits**

1. Avoid Karappan food Items

   "அஹா மருந்துகள் பயன் காணும் காற்று வாழ்
   புரா மருந்துகள் வைணவியன் காற்று வாழ்
   சிரப்பு மருந்து வைணவியின் செலவில் சிரப்பு மருந்து
   நிர்ணயங்கள் குடும்பம் பிறகுக்கும்”

   - முன்னேற்ற வல்ல முதலியலை
2. Avoid bitter guard, guava, egg, fish, chicken
3. Obese must be restricted.
4. Avoid alcohol, smoking etc.
5. Should not be mentally stressed and strained.
6. Since it is a chronic and not a life threatening disease, it should not be loaded with heavy drugs.
7. The medications should calm the mind just free from stress and strain.
8. The patches should be washed with lukewarm water, to remove the scales everyday early morning. After the bath, external applications are to be applied there after.

**SPECIAL NON-DRUG THERAPEUTICS**

Several special medicaments of non-drug therapeutics like Yoga, Pranayamam, Asanas, Kalpa medicines are employed in Siddha system. These are employed during diseased state and for the prevention of diseases during healthy days.

In Kalanjaha padai, patients are also advised to follow Pranayamam, Yoga and Asanas for the early cure, in order to avoid the remissions and exacerbation of this disease.

**PRANAYAMAM**

It is a form of Kayakalpa method. By practicing this one can prevent any disease. This is explained in the following verse,
YOGA:

Yoga is maintained by the body in a particular posture for a particular period of time. This is totally different from the ordinary exercise. Yoga vitilises, both physical body and the mental set-up unlike exercise which tones only the muscles.

The common benefits are,

- It tones the internal organs
- It prevents obesity and disease
- It maintains normal circulation to all the organs of the body.
- It is very safeguard for all the vital organs.
- It avoids laziness, enhances pure mind and cleverness and memory power.

There will be no problems like psychomotive disturbances if practised daily.

ASANAS

Regarding skin disease the following Asanas can be advised

1. புருஷசதகம்
2. கல்லானலசதகம்
3. மாவடோட்டிய அதாரம்
1. பாதுகாப்பு

சிற்றுத்திகள் ஆய்வகமில் புதுக்குறிகள் மற்றும் குறிப்பிட்டத்தகை குழி ஓர் போன்று, இழைப்படுத்தல் மற்றும் இழை போன்ற விளக்கங்களைக் கூறுவது என்பது குற்றங்களை இழை விளக்கங்களைப் போன்று விளக்கமாகும். இத்தகை இழை இழை என்றும் மேல் குற்றிகளிடம் குற்றிகளே.

2. சாதாரணகாலமான

மனிதருக்கு பிற்கு சுமார் சுமார் வருமாறு குழிப்போன்ற ஒரு மாணிக்கு விளக்கமும், இழைப்படுத்தல் மற்றும் குற்றங்கள் தோன்றும் போன்று நேரமும் நேரமும்.

நீச்சு, இளை, செய்து எடுத்து விளக்கச்செய்யவேண்டும்.

உதவிக்கதை வழக்கமணிந்தே.

- ஆண்டை தலை வருமாறு குற்றிகளே.

3. முன்னாள் கலந்தது அசோத

மனிதர்கள் பிற்கு சுமார் சுமார் வருமாறு, குற்றங்கள் சுமார் சுமார் போன்று தோன்றும்.

துரது குற்றிகளே போன்று. புதுக்குறிகளையும் குற்றங்களே போன்று.

PATHIYAM

Disease mainly occur due to wrong diet habits. Siddhars stressed this in every aspect of treatment and prevention from further occurrences. This view is well understood in this verse.

"மருத்தியே சுமார் சுமார் வருமாறு
நேரமும் நேரமும் போன்று.

- இத்தோன்றே
During diseased states, diet restrictions or pathiyam are strictly to be followed. These are to be administered to normalize the deranged doshas and for the good manifestation of given medicines to be more effective. This is given in the verse,

“பதியி பூச்சியினின் மூன்று வாத்திருந்து இருந்து
பதியி பூச்சியின் மூன்று வாத்திருந்து - பதியி பூச்சியின்
பதியி பூச்சியின் செய்யாது அது மூன்று - அது விலைந்து
பதியி பூச்சியின் மூன்று வாத்திருந்து பார்”.

- உகிகைமுன் மோதும்பா அனைத்து

So it is very essential to adhere pathiyam strictly for the early cure of the disease.

**DIET**

Food habits that reduce the vatha, pitha, kaba to the normal level has to be taken. Patients are strictly convinced to avoid all the non-vegetarian items except goat’s flesh. Avoidence of the following food items were also strictly advised.

- Agathi Keerai - Leaves of sesbania grandiflora
- Seeni avaraikai - Cynampsis psoratoides
- Pagarkai - Bitter guard
- Poosanikai - Great pumpkin
- Perum payaru - Cow – gram
- Solam - Maize
- Kanam - Horsegram
- Motchai - Flac bean
- Elumichan pazham - Lemon (citrus medica)
MODERN ASPECT

SKIN

ANATOMY

The skin is a large organ of the human body. Forming a major interface between man and his environment. It covers an area of approximately 2m² and weighs about 4kg. The structure of human skin is complex consisting of a number of layers and tissue components.

The superficial epithelial layer – EPIDERMIS

Underlying connective tissue layer – DERMIS or CORIUM

Subcutaneous layer – HYPODERMIS

Epidermis

The epidermis is formed of non vascular stratified epithelium. Its usual thickness is between 0.07mm and 0.12mm. It is divisible into two main systems,

1. Keratinising or malphigian systems which forms the bulk.
2. Pigmentary system produces pigment.

Epidermis composed of the following layers from base to the surface.

1. Stratum Germinatum (Basal cell layer)

This is the deepest portion of the epidermis and consists of a single layer of keratinocytes.

2. Stratum malphigii (Prickle cell layer)

This layer is composed of several layers of polygonal prickle cells, which possess tonofilament contain PAS positive material that is precursor of keratin.
3. **Stratum Granulosum (Granular cell layer)**

   This layer consists of 1 to 3 layers of flat cells containing keratohyaline basophilic granules which are PAS negative.

4. **Stratum lucidum**

   It is a pale wavy looking layer, formed by many layers of flattened and closely packed cells devoid of nuclei.

5. **Stratum corneum (Horny layer)**

   Most superficial layer, consists of many layers of non-nucleated flattened cornfield cells.

**Dendritic cells of epidermis**

These are melanocytes, langerhans cells and indeterminate cells.

**Basement Membrane**

The junction of the epidermis and dermis is formed by basement membrane. It allows movement of cells and nutrients between the dermis and epidermis.

**Dermis**

The dermis consist of 2 parts,

1. Superficial papillary dermis
2. Deeper reticular dermis
The dermis is composed of fibro collagentic tissue containing blood vessels, lymphatics and nerves. Besides these structures, dermis contain appendages or adnexal structure

DERMAL APPENDAGES

1. Sweat glands

These are of 2 types:

Eccrine and Apocrine.

Eccrine glands

They are coiled tubular glands distributed all over the skin except on the beds of nails, margins of lips and the glans penis. But are most numerous in the palms, soles and axillae.

Apocrine glands

They are tubular glands with large lamina. They occur in the axillae, areola and nipples of breasts, umbilicus, the anus and the genitalia. Their secretion is odoriferous with a secondary sexual significance.

2. Sebaceous glands

They are scattered all over the integument except palms and soles. Meibomian gland, mammary glands and smegma glands of the penis are modified sebaceous glands.

3. Hair

Hair is found on every part of the body except on the palms and the soles, the dorsal surface of the terminal phalanges, lips, inner surface of the labia, inner surface of the prepuce and the glans penis.
A hair is composed of a root, the part embedded in the skin and a shaft the portion projecting from the surface. Hairs differ in length, thickness and colour in different parts of the body and in different races.

4. Nails

The nails are thickness of the deeper part of the stratum corneum. The nail is composed of keratinised clear horny cells.

Blood vessels:

The blood supply of the skin originates from a large number of anterior forming anastamosis in the deepest part of the cortex. From here single vessels run upwards and from a second network in the upper cortex. Finally terminal arterioles ending in capillary loops, which drain into connecting venules. The blood is returned to the large veins in the subcutaneous tissue.

Lymphatics:

The skin contains a rich network of lymphatics, which drain into a few large vessels in the hypodermis.

Nerve Supply:

The nerve supply of the skin consists of a motor sympathetic portion derived from the sympathetic ganglia and sensory spinal portion arising from the dorsal route ganglia. The sympathetic fibers innervate the blood vessels, erector pilorum muscles and apocrine duct.
## Physiological Functions of the Skin

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PSORIASIS

Definition

Psoriasis is a common, genetically determined, inflammatory skin disorder of unknown cause which in its most usual form is characterized by well-demarcated raised red scaling patches that preferentially localize to the extensor surfaces.

**PSORIASIS** the word comes from ancient Greece and means “to itch”. Red eruptions appear on the surface of the skin and begin to itch. These areas form plaques over the reddened lesions. The plaques resemble multilayered scales of skin. Psoriasis varies in intensity from a few random spots to a massive out break covering the entire body and requiring hospitalization. Psoriasis has a tendency to be genetically inherited.

Recently it has been classified as being an auto immune disorder (the body’s immune system turning on itself). This disorder can originate in juveniles or not be evident until adulthood, it has been reported to initiate as early as birth or not occur until very late in life. Once Psoriasis begins there are only remissions and relapses of varying degrees of intensity.

Historical Aspects of Psoriasis

The earliest descriptions of what appears to represent Psoriasis are given at the beginning of medicine in the Corpus Hippocratium. This work was edited in Alexandria 100 years after the death of Hippocrates (460 -377 B.C). Hippocrates used the terms Psora and Lepra for conditions that can be recognized as Psoriasis.
Later Celsus (25 B.C) who translated the writings of Tiberius Claudius Menekrates (the personal physician of Emperor Tibericus) in the Greek, described among 40 different dermatoses a form of impetigo that was interpreted by R. William (1757-1812) as being Psoriasis. William separated two diseases as Psoriasiform entities, a discoid lepra Graeconum and a polycyclic confluent Psora leprosa which later was called Psoriasis. In 1841 dermatologist Ferdinand Non Hebra (1816-1880) unequivocally showed that William's lepra Graeconum and Psora leprosa were one disease that had caused much confusion because of differences in the size distribution growth and involution of lesions.

**Aetiology:**

Exact cause of Psoriasis is unknown. Hypothesis of aetiology.

- Hyperplastic epidermis
- Immunological defects
- Biochemical abnormalities
- Increased epidermal proliferation / inflammatory component
- Alteration in skin content.
- Infection (retro viruses)

**Psoriasis a disease with Genetic Predisposition**

Numerous studies over many years support the finding that genetic predisposition, an inherited tendency to develop the disease which has a major role in the pathogenesis of Psoriasis. Genetic predisposition does not mean a 100 percent guarantee that the disease will appear; other initiating factors such as
injury or infection may act together with the disease process. Supporting evidence for genetic predisposition includes,

1. There is a higher-than-average incidence of Psoriasis in relatives of people with Psoriasis, indicating “familial tendency” to develop the disease; however in some people with Psoriasis no family history is evident.

2. There is an increased incidence of Psoriasis in children when one or both parents have Psoriasis.

3. In studies of identical and non-identical twins, Psoriasis is much more likely to appear in both identical twins than in both non-identical twins a finding that also confirms that more than one gene must be inherited to establish genetic predisposition for Psoriasis.

4. There is higher than expected frequency of certain white cell antigens (class I human Leucocyte Antigens or HLA's) on cells of people with Psoriasis and their close relatives; this finding also supports Psoriasis inheritability and also suggests that the gene(s) involved in Psoriasis may be some chromosome that holds the genes for HLA. There are many types of HLA in the HLA complex and studies have shown that HLA type may be associated in some degree with timing of disease onset, type of Psoriasis and severity of disease.

Psoriasis Triggers:

A trigger is usually needed to make Psoriasis appear whether it is for the first time or the thirtieth.
Common Psoriasis Triggers are:

(a) Infection:
- Candida albicans (thrush)
- Human Immuno deficiency virus (HIV)
- Staphylococcal skin infections (boils)
- Streptococcal pharyngitis (strep throat)
- Viral upper respiratory condition

(b) Reaction to certain medications:
- Anti-malarial drugs.
- Beta-Blockers (used to treat high blood pressure)
- Cortico steroids(to treat Psoriasis – overuse/with drawal)
- Indomethacin (NSAID – to treat arthritis)
- Lithium (to treat manic depression / other psychiatric conditions).

(c) Skin injury:

People with psoriasis often notice new lesions 10 to 14 days after the skin is cut, scratched, rubbed, or severely sun burned. This is called “KOEBNER'S PHENOMENON” and is named after Dr. Koebner who in the 19th century observed that a patient developed new lesions in areas where his horse bit him.

A wide range of traumas and skin conditions are known to trigger “KOEBNER’S PHENOMENON”:
Skin trauma:

- Acupuncture
- Bites
- Bruises
- Burns
- Chafing
- Chemical irritation
- Cuts and scrapes
- Pressure against skin
- Shaving
- Sunburn and peeling
- Adhesive tape on the skin
- Tattoos
- Vaccinations
- Others

Skin conditions:

- Boils
- Dermatitis
- Herpes blisters
- Lichen planus
- Scabies
- Vitiligo
- Others
(d) Stress:
- Isolated from the society because of skin changes
- Difficulty in activities of daily living because of Psoriasis
- Time-consuming treatment
- Spending money for treatment
- Ineffective treatment
- Stressful event (etc).

(e) Weather:
- Cold winter – trigger psoriasis
- Hot / sunny – help clear psoriasis
- Air conditioning – trigger psoriasis

(f) other triggers:
- Hormones
- Smoking
- Heavy drinking

Pathogenesis

Accelerated epidermopoiesis has been considered to be the fundamental pathological event in Psoriasis. The transit rate of Psoriatic keratinocyte is increased and the deoxyribo nucleic acid synthesis time is decreased. It has been suggested that it is the heightened proportion of epidermal cells participating in the proliferative process rather than the actual rate of epidermopoiesis, that is the
basic fault in Psoriatic lesions. The result in either case is greatly increased production of keratin.

The earliest histologic change was a inflammatory perivascular upper dermal infiltrate, with only epidermal acanthosis and parakeratosis after the transformation of the lesion into a scaly papule.

Polyamines are significantly increased in Psoriatic lesions. There is an increased production of the leucotrienes and 12-hydroxy eicosatetraenoic acid, both of which are chemotactic for polymorphonuclear leukocytes.

**The Arachidonic acid cascade**

The complexity of the pattern of inducers of inflammation is nowhere better shown than in the production of leucotrienes, prostaglandins and eicosatetraenoic acid from arachidonic acid. Arachidonic acid is obtained from dietary sources, membranes of red meat, green leafy vegetables, corn and safflower oil. Its products are central to the aggravation of Psoriasis by trauma and to the pathogenesis of Psoriatic lesions.

Psoriasis is associated with different HLA antigens. They are B13 or B17 has a five fold risk of developing Psoriasis. In Pustular Psoriasis HLA- B27 may be seen whereas B13 and B17 are increased in Guttate and Erythrodermic Psoriasis. In palmoplantar Psoriasis, there is an increased proportion of persons having HLA-B8, Bw 35. - Cw7, and -DR3.
Farber affirms an abnormal nucleoprotein metabolism in the incomplete keratinization process in Psoriasis. In the stratum corneum the free amino acids are low, with an accumulation of MPS and of free and esterified choline. DNA and RNA accumulate and pentose, purines, uracil and organic phosphates are also increased.

There is prominent neutrophil response in psoriatic lesions. How this relates to findings of increased plasminogen activator activity in psoriatic skin or to the enhanced physiologic functions. Both Psoriasis and Reiter's disease occur with increased frequency in patients with AIDS. Also interleukin-2 therapy for malignancy may induce Psoriasis.

(Reference - Text book of Dermatology-fitz patrik)

Weddell showed that there is a profuse hyperplasia of nerve endings beneath and into the lesions of Psoriasis.

**Histopathology:**

The histopathology appearance of Psoriasis is distinctive but not specific. Main feature may be subdivided into

- Epidermal thickening
- The inflammatory component
- The vascular component

**a) Epidermal Thickening:**

- Epidermis shows marked exaggeration of the rete pattern.
- Elongation of epidermal down growths with bulbous club-like
enlargement of their ends.

- Many mitotic figures can be seen
- Rate of epidermal cell production increased.
- The turn-over time of psoriatic epidermis and stratum corneum is very much shortened than normal epidermis.

b) The inflammatory component:

- Desiccated polymorphonuclear leukocytes – Munro microabscesses.
- Epidermis is oedematous/infiltrated by inflammatory cells.
- Dermis also contains many inflammatory cells mostly lymphocytes.
- Leukotriene B4 – seen in psoriatic stratum corneum.

c) The vascular component:

- Papillary capillaries are dilated and tortuous
- Larger gaps between the endothelial cells
- Abnormal capillaries.

Cell Systems involved in Pathogenesis of Psoriasis

Keratinocytes

A characteristic feature of involved skin of Psoriatic subjects is hyper proliferation. There is two fold increase in proliferative cell population and 100 percent of the germinative cells of the epidermis appear to enter the growth fraction compared with 60 to 70 percent for normal subjects.
T cells

Numerous T cells are present in psoriatic lesions predominantly surrounding the vessels of the upper dermal plexus.

Granulocytes

Formation of spongiform microabscesses (Munromicro abscesses) filled with granulocyte is a hallmark of Psoriasis. The presence of these cells in psoriatic lesions variable and becomes more pronounced with disease activity (eg) in acute or pustular Psoriasis.

Endothelial cells

Changes in the dermal capillary endothelium have been implicates at the site of primary defect. Hyper proliferation of endothelial cells is most pronounced in the tortous dilated capillaries at the advancing edges of a lesion.

Mast cells

Mast cell densities are increased in lesional psoriatic skin compared with normal or uninvolved psoriatic skin.

Fibroblasts

Fibroblasts are potent producers of cytokines and lipid mediators that could affect the epidermis as well as the inflammatory reaction.
CLINICAL FEATURES

The lesions

- Well demarcated margin and is raised above the skin surface (plaque)
- Plaques vary enormously in size and shape
- They often start out discoid but end up polycyclic

Sites Affected

- Extensor aspects of trunk and limbs preferentially. Sometimes flexor aspects also affected.
- Knees, elbows, scalp are frequently affected.
- Nails are often affected and may show – “thimble pitting”, separation of the nail plate from the nail bed (anycholysis) subungual debris, brownish – black discolourations and deformities of the nail plate.
- Major body folds in elderly who are over weight (flexor aspects)
- Groins, genitalia, axillae
- Infra mammary folds in women.
- Skin of abdominal folds/ umbilicus.
- Scalp margin, paranasal folds, retro auricular folds.

CLINICAL VARIANTS OF PSORIASIS

Guttate Psoriasis

- Guttate Psoriasis, named for its droplet –shaped lesions.
- More Common in children and young adults.
• Guttate lesions range in diameter from 0.1 cm to 1 cm.

• They are predominate on the trunk and proximal areas of the extremities and are more likely to involve the face.

• Often it develops some two or four weeks after an episode of tonsillitis or pharyngitis, mostly due to beta-haemolytic streptococci.

• Represent acute flare of pre-existing chronic plaque type Psoriasis.

**Plaque – type Psoriasis (Psoriasis vulgaris)**

• Occurring in 75% to 80% of all psoriasis patients.

• Lesion is well demarcated, red – violet round or oval plaque.

• Lesion is 1 cm or larger in diameter and surrounded by white silvery scales, which overlie bony prominences.

• In darkly pigmented patients, lesions are hyperpigmented with various shades of brown or black, which are accentuated by chronic rubbing or scratching.

• Symmetry of distribution of skin lesions is the rule in plaque type psoriasis.

• Face is frequently spared. Most commonly involved areas are elbows, knees, scalp, sacrum, umbilicus, intergluteal cleft and genitalia.

• 70% of patients complain of pruritus, skin pain, or burning, especially when the scalp is involved.
PUSTULAR PSORIASIS.

It is characterized by sterile pustules either generalized or localized to palms and soles.

(a) **Localized Pustular Psoriasis (Palmoplantar Pustulosis)**
- Yellowish white, sterile pustules on the central parts of the palm and soles.
- Older lesions take on a brownish appearance and later are shed in a scale at the surface.
- Lesions are observed in all stages of development, including vesicles, vesicopustules, frank pustules and dried brown maculopapules.
- The disorder is resistant to treatment and is subject to relapses and remission over many years.

(b) **Generalized pustular psoriasis (Von Zumbusch)**
- Characterized by fiery – red, irregular patches with round, arcuate, serpiginous borders that are studded with myriad 1m.m to 2 m.m superficial pustules.
- Severe systemic upset, a swinging pyrexia, arthralgia and a high polymorpho nuclear leuco cytosis, hypocalcaemia, hypoalbuminaemia accompanying the skin disorder.
- The skin patches have a predilection for flexural or skin – fold areas such as armpits, groin, or under breasts but may occur anywhere.
- The tiny pustules coalesce into lakes of pus, desquamate, and form new pustules as the borders moves in waves every 24 to 72 hours.
(C) Other rare variants of pustular psoriasis

1. Acrodermatitis Continua (Dermatitis repens)

Recalcitrant pustular erosive disorder on the fingers and toes around the nails and occasionally elsewhere

2. Pustular bacteriod

Sterile pustules suddenly appear on the palms and soles after an infection.

3. Subcorneal pustular dermatosis

There is generalized eruption of sterile superficial pustules.

ERYTHRODERMIC PSORIASIS

Plaque type Psoriasis progress to erythrodermic Psoriasis in which the plaque – like appearance disappears and the skin is universally red and scaly.

- Concomitant Psoriatic arthropathy is common
- Heat loss (because of increased blood supply to skin)
- Water loss leads to dehydration because of the disturbed barrier function of the abnormal stratum corneum.
- Hyperdynamic circulation
- Risk of high cardiac output failure
- Loss of protein, electrolytes, metabolites via the shed scale and exudates and may develop deficiency states
- Depressed because of malaise, pruritis and discomfort

NAPKIN PSORIASIS

Infantile napkin dermatitis sometimes takes on Psoriatic lesions develop on the scalp and trunk.
NAIL PSORIASIS

- Finger nails are affected more than toe nails
- Pitting of nail plate. The pits tend to be large, deep and randomly dispersed on the nail plate.
- Small red spots in the lanula or yellow-brown spots (“oil droplet sign”) in the nailbed correspond to early guttate lesions of Psoriasis.
- The distal nail plate may separate from the nail bed (onycholysis)
- Chronic inflammation of the nail matrix may lead to scarring and permanent dystrophy, mimicking onychomycosis, especially when toe nails are affected.

Terms describing Morphologic features of Psoriasis

Psoriasis ostracea

Old patches may be thickened and tough and covered with lamellar scales like outside of an oyster shell.

Psoriasis guttata

The lesions are the size of water drops.

Psoriasis follicularis

Tiny scaly lesions are located at the orifices of the pilosebaceous follicles.

Psoriasis figurate, Psoriasis annulata & psoriasis gyrate

The lesions have curved linear patterns produced by central involution.

Psoriasis dicodiea

In this type central involution does not occur and solid patches persist.
Psoriasis rupioides

In this type crustaceous lesions occur resembling syphilitic rupia.

Psoriasis flexura

Better known as inverse Psoriasis and is found in intertriginous area.

Volar Psoriasis

On palms and soles.

Systemic Association of Psoriasis

Inflammatory Bowel Disease

The strong linkage of HLA-B 27 to ankylosing spondylitis and ulcerative colitis and the increased frequency of this haplotype in patients with psoriasis and arthritis (about six times normal) suggest that ulcerative colitis should be seen more frequently in patients with psoriasis. The frequency of psoriasis among patients with ulcerative colitis and crohn’s disease is respectively, 3.8 and 7.6 times normal.

Oclusive Vascular Disease

Investigators to propose an association between Psoriasis and large vessel disease. Current evidence suggests that patients with Psoriasis especially males have an increased incidence of occlusive vascular disease (Thrombophlebitis, Myocardial infarction, pulmonary and cerebral vascular accidents).
Systemic effects of Psoriasis

Generalized pustular Psoriasis described by Von Zumbusch, is the form associated with systemic findings. This form of Psoriasis appears as waves of sterile pustules on an erythematous skin, characteristically short episodes of fever 39\(^0\) to 40\(^0\)C followed by another wave of new pustules. In addition to fever there are systemic signs of disease such as weight loss, muscle weakness, leucocytosis, hypocalcemia and an increased sedimentation rate. In patients with pustular Psoriasis, arthropathy is common as it the HLA – B27-haplotype.

Studies of approximately 500 patients suggest that patients with Psoriasis have a normal risk of systemic cancer and possibly increased risk of cutaneous cancer.

Diagnosis of Psoriasis Is Based Upon

- Family History of Psoriasis
- Typical distribution of the lesion on scalp, elbows, knees, front of legs and nails
- Well defined non-indurated, dry erythematous areas with silvery layer
- The candle-grease sign
- Auspitz sign
- Koebner’s phenomenon
- Little or no itching
Severity of psoriasis

- Extensive plaque type psoriasis involving 20% or more of the body surface area (BSA)
- Psoriatic erythroderma
- Generalized pustular psoriasis

A broader definition of severe disease include

- Disabling plaque type Psoriasis involving the face, genitalia, hands and feet
- Psoriasis complicated by medication, such as rotational therapy or by a need for medication withdrawal, such as that caused by flare due to systemic corticosteroids.
- Disabling psoriatic arthritis with skin disease of any extent.

COMPLICATIONS OF PSORIASIS

Complications are infrequent

- Psoriatic arthritis can cause disability
- Exfoliative dermatitis
- Eczematous lesion caused by scratching and infection
- Lichenification brought by scratching

PROGNOSIS

Psoriasis can be controlled satisfactorily. General health and longevity are unaffected. The clinical course of the lesion is chronic with various periods of remissions (weeks to years). The whole position should be explained to the
patient. He should be encouraged for persisting towards the treatment until the lesions have disappeared. Psoriasis does not leave scars. The nail gradually assumes the normal appearance. The palmar and nail psoriasis are more resistant to the treatment.

**Common Laboratory Abnormalities in Psoriasis**

- Elevated Uric acid
- Mild anemia
- Negative nitrogen balance
- Increased sedimentation rate
- Increased-α2 Macro globulin
- Increased IgA levels and increased quantities of immune complexes.

**Serum Uric acid**

Serum uric acid is elevated in 30-50 percent of patients with Psoriasis. This is thought to be caused by the increased epidermal proliferation seen in Psoriasis and it is associated with break down of DNA. Elevated Uric acid levels increase the risk of gouty arthritis and there are reported cases of typical gouty arthritis with Psoriasis.

**Haematologic findings**

**Folate metabolism**

It is not uncommon for patients with Psoriasis to present with mild anemia. Although the anemia is usually categorized as anemia of chronic disease, there is evidence of folate and iron abnormalities.
Iron metabolism

Iron content in normal stratum corneum is 26 μg/g and the normal loss of stratum corneum per day approaches 1g. In Psoriasis the iron loss approach 50 gms. The mean iron content of the shed stratum corneum of involved sites in patient's with Psoriasis is two times normal. These calculations suggest that up to 2.5 mg of iron can be lost per day via desquamation.

Protein loss

Negative nitrogen balance, defined as protein loss exceeding nutritional requirements, may be reflected in serum albumin levels. Although the pathologic significance is unknown, hypoalbuminemia has been noted in patients with severe psoriasis.

Serum proteins

Patients with Psoriasis have increased levels of C-reactive protein and α2 macro globulin and generally their sedimentation rates are elevated. Recently it has been observed that serum IgA levels and IgA immune complexes are elevated in patients with Psoriasis.
DIFFERENTIAL DIAGNOSIS

Psoriasis must be differentiated from Seborrheic dermatitis, Pityriasis rosea, Lichen planus, Eczema, Psoriasiform syphilis, and Lupus erythematoses.

SEBORRHEIC DERMATITIS

In Psoriasis lesions are on the extensor surfaces, especially of elbows, knees and on the scalp, whereas in seborrheic dermatitis, scalp is involved there is a predilection for the eyebrows, nasolabial angle, the ears, the sternal region and the flexures. The scales in Psoriasis are dry, silvery and shiny, whereas those in seborrheic dermatitis are greasy and lusterless. On removal of the scales in Psoriasis there is a oozing of blood from the capillaries (Auspitz sign) whereas this does not occur in seborrheic dermatitis.

PITYRIASIS ROSEA

In pityriasis rosea, the eruption is located on the upper arms, trunk and thighs and the duration is a matter of weeks. There are oval, rose coloured patches that centrally show a crinkling of the epidermis and on almost perceptible scaling, often of colarette type. The onset with the herald patch and the tendency of the subsequent lesions to arrange themselves so that their long diameters are parallel to the direction of the rib, helps to distinguish between pityriasis rosea and psoriasis.

LICHEN PLANUS

Lichen planus affects chiefly the flexor surfaces of the forearms and wrists and the shins and ankles. The patches are pruritic and thickened. Often the violaceous colour is pronounced, but at other times the patches are a dirty brown
colour, only distinguished from psoriasis by close examination, which reveals that the scaling is not at all micaceous, but scanty and tightly adherent at the edge of the patch. The scalp is much less frequently involved, and the nails are not pitted as in psoriasis, but longitudinally ridged and thickened with pterygium a characteristic finding.

ATOPIC DERMATITIS

In atopic dermatitis the distribution is usually not on the extensor surfaces of elbows and knees and exudation and a slight greyish scaling, accompanied by severe itching are present.

PSORIASIFORM SYphilIS

The psoriasiform syphilis, has infiltrated patches of copper coloured papules, often arranged in a configurate manner. The scales are brownish and sparse. Serologic tests for syphilis are positive; a general adenopathy and often mucuous patches, condylomas and other symptoms of late secondary syphilis are present. Itching is usually absent.

LUPUS ERYTHEMATOSUS

In lupus erythematosus, the lesions are discrete plaques, usually on the face, scalp associated with atrophy, scaling and alopecia. Rarely face is affected in psoriasis. The scales of lupus erythematosus are greyish and adherent. Removal of the scale the undersurface is seen to be papillous due to the projecting follicular plugs. There is a psoriasiform subset of subacute cutaneous lupus erythematosus that may be distinguished by its location on the upper trunk, arms, legs, face and by other signs of Lupus erythematosus such as photosensitivity.
PSORIATIC ARTHRITIS (Arthropathic psoriasis)

Psoriatic arthritis is a destructive arthropathy and enthesopathy (tendinitis, dactylitis and fascitis) with some clinical features in common with rheumatoid arthritis. It is an autoimmune disease.

Symptoms of Psoriatic arthritis

- Symmetrical involvement of the small joints of hands, feet, wrists, ankles in patients with psoriasis.
- No obvious skin findings.
- Minimal scaly red skin on the scalp, in the belly button, or between the buttocks.
- Nail abnormalities.
- Conjunctivitis
- Iritis
- Inflammation of muscles and tendons, especially in heel, sole of foot.

Patterns of Psoriatic arthritis

(a) Asymmetrical Oligoarticular arthritis

- Arthritis that involves a few joints but not necessarily the same joints on both sides of the body or other similar joints on the same side of the body.
- Usually, fingers and toes are affected, first fingers have a “Sausage” appearance (Called dactylitis).
- Usually, fewer than 5 joints are affected at any particular time.
(b) **Symmetrical Polyarthritis**
- Arthritis that involves the same joints on both sides of the body.
- Hands, wrists, ankles and feet may be involved.

(c) **Distal interphalangeal arthropathy**
Arthritis in the joints at the ends of the fingers and toes.

(d) **Arthritis mutilans**
A long term psoriatic arthritis in which the joints are severely damaged and deformities can be seen/ especially in the hands and feet.

(e) **Spondylitis**
Inflammation of the vertebrae in the spine with or without inflammation of the sacroiliac joint and inflammation of the hip.

(f) **Juvenile psoriatic arthritis**
This often occurs in 9 to 10 year old girls.
MATERIALS AND METHODS

The study on Kalanjaha padai was performed in Government Siddha Medical College Hospital, Palayamkottai. All the cases were treated in both out patient and in patient ward, Post Graduate Department of Sirappu Maruthuvam.

Selection of Cases

The cases were selected according to the symptoms and signs mentioned in the various Siddha literatures including Sirappu Maruthuvam. Certain criteria were followed for case selection. They are,

Inclusive Criteria

- Family history of Psoriasis
- Pre dispositions to Psoriasis
- Typical Extensor Distribution
- Flexural Psoriasis
- Volar Psoriasis –Psoriasis in toes & nails
- Psoriatic Arthropathy

Exclusive Criteria

- Erythrodermic Psoriasis
- Pustular Psoriasis
- Psoriasis with Secondary Infections
- Psoriasis with Complications

According to the above criteria, 75 cases were selected both out patient and in patient. They belong to the age group between 13 and 80 in both sex.
Priority of admission was given according to the clinical findings. Confirmation of diagnosis was made, by conducting all the necessary investigations in Siddha as well as in Modern Medicine Methodology. 20 cases were treated as In-patient.

**Method of case Selection**

**Diagnosis Method:**

- Siddha diagnosis was made with the help of following Methods.
  1. Poriyaal arithal
  2. Pulanaal arithal
  3. Vinaathal
  4. Envagai Thervugal(Including neerkuri, neikuri)
  5. Thinaigal
  6. Paruvakaalangal

  (Those are already discussed under review of literature)

- Modern Medicine diagnosis was made with the help of following methods.

**General Examination**

- Anaemia
- Jaundice
- Cyanosis
- Clubbing
- Pedal Oedema
- Significant lymphadenopathy
Temperature
Respiratory rate
Heart rate
Pulse rate
Blood Pressure

**Skin Examination**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Site</td>
<td>-</td>
</tr>
<tr>
<td>Colour</td>
<td>-</td>
</tr>
<tr>
<td>Size</td>
<td>-</td>
</tr>
<tr>
<td>Shape</td>
<td>-</td>
</tr>
<tr>
<td>Border</td>
<td>-</td>
</tr>
<tr>
<td>Itching</td>
<td>-</td>
</tr>
<tr>
<td>Erythema</td>
<td>-</td>
</tr>
<tr>
<td>Macule</td>
<td>-</td>
</tr>
<tr>
<td>Papule</td>
<td>-</td>
</tr>
<tr>
<td>Auspitz Sign</td>
<td>-</td>
</tr>
<tr>
<td>Koebner’s Phenomenon</td>
<td>-</td>
</tr>
<tr>
<td>Candle Grease Sign</td>
<td>-</td>
</tr>
</tbody>
</table>
Lab Investigations:

Blood : Total WBC Count

Differential count of WBC

Erythrocyte sedimentation rate

Haemoglobin percentage

Blood Sugar

Blood Urea

Serum Cholesterol (LDL & HDL)

Urine : Albumin

Sugar

Deposit

Motion : Ova

Cyst

Skin scrapping test for fungus.

Selection of drug and its administration

Selection of drug was made from the elaborate study of various Siddha literatures and finally the drug were selected from Siddha Vaithya Pathartha Guna - Vilakkam Kannusamyam Pillai and Gunapadam mooligai.

The trial medicines are “NEERADIMUTHU RASAYANAM” as internal medicine and “AADUTHEENDAPALAI VEMBU THYLAM” as external medicine.
Pharmacological analysis of the trail drug was done at the Department of Pharmacology, Government Siddha Medical College, Palayamkottai. The details are given in Annexure.

Bio-chemical analysis was done at the Department of Bio-chemistry, Government Siddha Medical College, Palayamkottai. The details are given in Annexure.

All the 20 in-patients were treated in the IP ward in the duration of 7 to 48 days. After reducing the severity of symptoms, patients were follow up as out patient.

**CASE PROFORMA:**

They symptoms and signs of Psoriasis, history of present and past illness, Personal history, Nutritional history, Family history, menstrual history, Habits, Laboratory investigations and management were systematically recorded in a proforma.
OBSERVATIONS AND RESULTS

1. Sex Distribution:

For the study of Kalanjaha Padai 20 patients were selected of which 13 cases were males the rest 7 were females.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Sex</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Male</td>
<td>13</td>
<td>65%</td>
</tr>
<tr>
<td>2.</td>
<td>Female</td>
<td>7</td>
<td>35%</td>
</tr>
</tbody>
</table>

2. Age Distribution:

Out of the 20 cases taken for clinical trial ie. six groups of agewise distribution follows:

<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>18 – 30</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2.</td>
<td>31 – 40</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>3.</td>
<td>41 – 50</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>4.</td>
<td>51 – 60</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>5.</td>
<td>61 – 70</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>6.</td>
<td>71 – 80</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>

3. Kaalam distribution:

According to Siddha literature human life can be classified in to three periods each having approximately 33 years of age with respect to vatha, pitha and kaba dosha dominance one by one respectively.
Considering this into account, twenty cases admitted in the ward were arranged serially in percentage wise.

<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>Vatha Kaalam</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>(1-33 years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Pitha Kaalam</td>
<td>14</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>(33-66 years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Kapha Kaalam</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>(66 – 99 years)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparing pithakaalam cases very few cases of vatha and kaba kaalam cases were reported during this study.

4. Occupational status:

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Nature of Work</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Farmer</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>2.</td>
<td>Driver</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>3.</td>
<td>House wife</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>4.</td>
<td>Ryot</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>5.</td>
<td>Coolies</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>6.</td>
<td>Student</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>7.</td>
<td>Building workers</td>
<td>4</td>
<td>20%</td>
</tr>
</tbody>
</table>

As per the occupational chart, the routine day to day work of the individuals was given as above, comparing others, Farmers and building workers were complained of this diseases in heavy.
5. Diet habits:

When the cases, admitted for clinical trial were enquired about their daily dietary habits it was entered following.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Diet Type</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Vegetarian</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2.</td>
<td>Mixed diet</td>
<td>18</td>
<td>90%</td>
</tr>
</tbody>
</table>

6. Seasonal references:

An annual term consists of (12 months of a year) a classification which includes six paruvakaalams in respect of solar changes. When the 20 cases of clinical trial were enquired about the seasonal state, during the timing of occurrence and severity of the disorder. 50% cases at pinpanikaalam.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Paruva Kaalam</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kaar (Avani - Puratasi)</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Aug 16 – Oct 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Koothir (Ayppasi - Karthigai)</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Oct 16 – Dec 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Munpani (Markazhi – Thai)</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Dec 16 – Feb 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Pinpani (Massi – Panguni)</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Feb 16 – Apr 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Elavenil (Chithirai – Vaikasi)</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td></td>
<td>Apr 16 – June 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Muthuvenil (Aani &amp; Aadi)</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td>June 16 – Aug 15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Thinai reference:

Living area on the whole earth is divided into five lands. According to the following table as it influences very much for the well being and robust condition of human race except one (ie) desert land.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Thinai</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Kurinji (Hill area)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Mullai (Forest area)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Marutham (Fertile land)</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>4.</td>
<td>Neithal (Costal area)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Palai (Desert)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8. Socio economic condition:

Out of the 20 cases taken most of them were from poor section of the society such as daily wages and slum dwellers. (75%).

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Socio Economic condition</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poor</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>2.</td>
<td>Good</td>
<td>5</td>
<td>25%</td>
</tr>
</tbody>
</table>
9. Physical constitution (yakkai ilakkanam)

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Yakkai ilakkanam</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thontha Udal</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>2.</td>
<td>Kaba &quot;</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>3.</td>
<td>Pitha &quot;</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>4.</td>
<td>Vatha &quot;</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>

Among the 20 cases the majority were thontha udal

10. Gunam (Quality and Character):

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Gunam</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sathuva Gunam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Rajo Gunam</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>3.</td>
<td>Thamo Gunam</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

11. Family history

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Family history</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Positive (either parents or grand parents)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Negative ((not related with heredo familial)</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>
12. Triggering factors:

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Triggering factors</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Infection</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Reaction to certain medication</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Skin injury</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>4.</td>
<td>Psycho – somatic</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>5.</td>
<td>Hormones</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Alcohol</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>7.</td>
<td>Smoking</td>
<td>5</td>
<td>25%</td>
</tr>
</tbody>
</table>

From the above table 35% were alcoholic, 25% were smokers and 25% due to psychosomatic causes.

13. Clinical features

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Clinical features</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Red patches with ivory (silvery) scales</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2.</td>
<td>Scalp</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>3.</td>
<td>Auspitz sign</td>
<td>18</td>
<td>90%</td>
</tr>
<tr>
<td>4.</td>
<td>Koebner’s phenomenon</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>5.</td>
<td>Nail changes</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>6.</td>
<td>Palm and sole lesion</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>
14. Distribution of Tridosha

a. Table illustrating the derangement of vatham

According to the Siddha theory the three chief constituents of the body viz, vatha, pitha and kaba and its classification changes from the normal state to pathological state due to varied etiology. Hence the derangement of doshas in Kalanjaha padai is illustrated in the following table.

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of Vatha</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Piranan</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Abanan</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>3.</td>
<td>Udhanan</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Viyanan</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>5.</td>
<td>Samanan</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>6.</td>
<td>Nagan</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.</td>
<td>Koorman</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8.</td>
<td>Kirukaran</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9.</td>
<td>Devathatham</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>10.</td>
<td>Thananjayan</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table illustrating the derangement of Pitha

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of Pitha</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Analagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Ranjagam</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>3.</td>
<td>Sathagam</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>4.</td>
<td>Alosagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Pirasagam</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table illustrating the derangement of Kaba

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of kaba</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Avalambagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Kilethagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Pothagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Tharpagam</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>5.</td>
<td>Santhigam</td>
<td>5</td>
<td>25%</td>
</tr>
</tbody>
</table>

15. Udal kattugal

The seven thathus which contribute the body for the structure and function get altered accordingly in pathological conditions. Hence in Kalanjaha padai patients the following observations were tabulated as follows.
<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Name of Udal kattugal</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Saaram</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2.</td>
<td>Senneer</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>3.</td>
<td>Oon</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Kozhuppu</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Enbu</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>6.</td>
<td>Moolai</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7.</td>
<td>Sukkilam /Suronitham</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

16. Ennvagai thervugal

In Siddha system of Science the eight types of investigations are emphasized much for clinical approach and diagnosis of the disease. Hence the rules were strictly followed and the observation were tabulated

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Ennvagi thervugal</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Naa</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Niram</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>3.</td>
<td>Mozhi</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Vizhi</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>5.</td>
<td>Sparisam</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>6.</td>
<td>Malam</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>7.</td>
<td>Moorthiram</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8.</td>
<td>Naadi</td>
<td>Vaatha kabam</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pitha kabam</td>
<td>11</td>
</tr>
</tbody>
</table>
Regarding Ennvagai thervugal niram and sparisam were affected in all the patients (100%) malam (constipation) was affected in the 10 cases (50%) regarding naadi the 9 patients had vaatha kabam (45%) and the 11 cases had pitha kabam (55%) and vizhi in the 3 cases.

17. Neerkuri, and the neikuri reference

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Type of Test</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Neerkuri-Straw coloured/heycolour</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2.</td>
<td>Neikuri</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Muthothunitral</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>2. Spread like ring</td>
<td>9</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>3. Spreading like a serpent</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

18. Duration of illness

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Duration of illness</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Below 1 month</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>2.</td>
<td>Between 1-6 month</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>3.</td>
<td>Between 6-12 month</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>4.</td>
<td>1-3 years</td>
<td>4</td>
<td>20%</td>
</tr>
</tbody>
</table>

Duration of the sufferings were reported above 6 months-50% the next is below six months.
Result after treatment

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Result</th>
<th>No.of Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Good</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>2.</td>
<td>Fair</td>
<td>14</td>
<td>70%</td>
</tr>
<tr>
<td>3.</td>
<td>Poor</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>

Out of the 20 cases, 20% of the cases were found good relief and 70% fair.
DISCUSSION

It is a well known fact that each and every case with the disease Kalanjaha padai is specific by nature. This being the fact, it can be clearly understood that there can be no specific and definite way of treating the disease in a uniform manner. Any attempt made to evaluate the nature of the disease leading to the way of treatment is itself an achievement. In this way the present Kalanjaha Padai is a disease causing social and psychological embarrassment by the nature of producing skin lesions with silvery mica like scales although it is not a life threatening disease. So the patients are anxious and pray for quick and permanent remedies. Siddha system envisages many remedies in this direction.

Kalanjaha Padai, as per its characteristics, resembles Psoriasis Vulgaris in modern medicine. Red raised plaques with silvery scales which bleed pinpointly on removing them are found all over the body. These are the clinical features described in Siddha system of medicine. It is not contagious according to Siddha literature.

The Siddha aspects of Kalanjaha padai are discussed in various Siddha texts. The author has taken this evidence largely from Sirappu maruthuvam, Yugi vaidhya Sinthamani, Agasthiar paripooranam-400, Siddha Maruthuvanga churukkam and Gurunadi nool. These texts discuss about the aetiology, pathogenesis, clinical features, investigations, diagnosis, prognosis and treatment of Kalanjaha padai.
Treatment aspects include Pathiyam (diet restrictions), Eyama, Nyama [Good aspects in words and deeds), pranayamam (breathing exercises) and Yogasanam (Postures). These are discussed in Siddha literatures like PatharathaGuna Sinthamani, Thirumoolar Thirumanthiram and Sirappu Maruthuvam besides the drug treatment. The above said drugless methodical treatment was very useful in alleviating the stress, one of the main precipitating factors of the disease.

The drug treatment includes the Ahamaruthuvam (Internal Medicine) and Puramaruthuvam (External medicine/topical application). These are found to arrest the disease process and cure it with a quick response or relief.

Twenty cases were selected and admitted for In Patient ward. They were diagnosed and treated according to the criteria found in Siddha texts. Modern routine investigations were also carried out to exclude other systemic diseases if any.

Sex distribution

In the study period among the 20 cases 17 were males and the rest were Female. According to the text books there is no apparent sex predilection in Kalanjaha padai, but the major vulnerability of males may be due to their life style with augmented mental strain, when compared with females.

Age distribution

During the entire course of study the author found the disease Kalanjaha padai affects the age group between 20 and 80.
**Kaalam distribution.**

The clinical study revealed that the incidence of the disease was highest in Pitha kaalam (33-66 years) - 70%.

**Occupation and socio economic status**

Out of the 20 cases 15 cases were from poor socio-economic status 5 cases belong to middle class. Most of them get daily wages.

**Diet habits**

18 patients have mixed diet and 2 patients were purely vegetarian.

**Seasonal reference**

Out of 20 cases, the maximum of cases were admitted during pinpani kaalam.

**Thinai reference**

Among 20 cases treated, all cases belong to Marutha nilam. Even though, the literature says no disease will occur in ‘marutha nilam’, it was not correlated with this study.

**Triggering factors**

The subjects include alcoholic, smoker, psychologically stressed and had skin injury.

**Tridosha reference**

In tridoshas especially in Vatham, abanan was affected in 50% of cases and samanan, viyanan in 100% of cases. In pitham, Ranjagam, Sathagam and
Prasagam were affected in all cases. In Kabam, Tharpagam was affected in 15% and Santhigam affected in 25% of cases.

**Udal kattugal reference**

Out of 7 udal thathus, Senneer was affected in all the 20 cases and Saram and Enbu were also affected.

**Ennvagai thervugal**

Niram and sparisam were affected in all 20 cases as there were dryness, roughness and thickness of the skin, pinpoint bleeding on removing the scales. Habitual constipation was reported in 10 cases. Vatha Kapha Nadi was noted in 9 cases and Pitha Kabam in 11 cases.

Modern laboratory investigations such as TC, DC, ESR, Hb, Blood Sugar, Urea, Serum cholesterol, VDRL, Urine for albumin, sugar and deposits, Motion for ova and cyst were carried out at the laboratory of Government Siddha Medical College, Palayamkottai to rule out other systemic involvement.

Well defined non indurated dry erythematous areas with silvery white scales, in layer by layer, scaly form, candle grease sign, Auspitz sign, Koebner's phenomenon with little or no itching are the clinical features of Psoriasis which resemble Kalanjaha Padai and the disappearance of these were considered as the criteria for determining the cure of the disease.

The drugs under the clinical trial were,

1. Neeradimuthu rasayanam-500 mgm daily 2 times with hot water.
2. Aadutheenda palai vembu thylam for topical application.
The preparations and dosage of these drugs were taken from Siddha vaithiya pathartha guna vilakkam-Kannusamiyam pillai and Gunapadam-mooligai Vaguppu.

All the patients were instructed to follow pathiyam, irrespective of O.P. and I.P. Patients.

Mica like scales was reduced to minimum variations within 15 days of treatment. Raised, non indurate plaques were also reduced in size during this period.

A marked and gradual disappearance of Auspitz sign was noticed everyday. During the time of treatment the patients were uniformly advised to follow Yogasanas and Pranayamam. These methods gave them a good supportive therapy and patients felt better while practicing them.

Pharmacological analysis of the trial drugs were done at the Department of Pharmacology and Biochemical analysis of the test drug was done at the Department of Bio chemistry, Govt. Siddha Medical college, Palayamkottai.
The disease kalanjaha padai was taken for the clinical study. The clinical study on kalanjaha padai with reference to its aetiology, pathogenesis, clinical features, investigation, diagnosis and treatment was conducted at the Post Graduate Department of sirappu Maruthuvam, Government Siddha Medical College, Palayamkottai. Twenty cases with the signs and symptoms of kalanjaha padai were selected and a thorough observation was made. They were found out from the outpatient department and admitted in the inpatient ward.

No adverse reactions like nausea, vomiting, diarrhoea were reported during the study period. The drugs employed in the clinical study were given to use only after careful purification process.

The majority of the patients were male. The trial drug had mainly kaippu suvai and this mainly accounts for the therapeutic effect in skin diseases.

The results were found to be encouraging. Among the inpatients treated 20% shows good result. 70% shows moderate result and 10% shows mild results. In outpatients 10 cases were treated with both internal and external medicines. Out of these 30% shows good results, 60% fair and 10% poor. 5 cases treated only with internal medicine. Out of these 40% shows fair and 60% poor. 5 cases treated only with external medicine. Out of these 60% fair and 40% poor.
For chronic skin diseases, Siddha system of medicine confers excellent therapeutic agents than the other systems. Also clinical evaluations and specific laboratory tests confirm this statement.

In Bio-Chemical analysis Neeradimuthu Rasayanam contains Chloride, unsaturated compound, reducing sugar, Amino acids.

In pharmacological studies of Neeradimuthu Rasayanam shows moderate anti-histaminic action, mild anti-inflammatory action and Aadutheenda palai vembu thylam shows moderate anti-inflammatory action.

The drug of choice for both internal as well as external are economically less costly. Regarding the preparation point of view the drug was easily to be prepared.

No side effect was reported for the drug and with short duration with certain restriction this disease can be cured. As research point of view the author has a challenging work by these preparations for this skin disorder.
CONCLUSION

1. The treatment was given for Psoriasis on the basis of Siddha system principles. Deranged three doshas were corrected by the author prepared medicine given.

2. Neeradimuthu Rasayanam as an internal medicine and Aadutheendapalai vembu thylam as an external application respectively.

3. In the above medicines, internal medicine was selected from Siddha vaithya pathartha guna vilakkam - Kannasamiyam pillai and external medicine was selected from the Gunapadam - Mooligai vaguppy.

4. 20% of cases found good results 70% have Fair.

5. The clinically the drugs were free from adverse effect.

6. Preparation of both, Internal and External Medicines were simple.

7. Hence it is concluded that the trial drugs were effective against Psoriasis.
### LIST OF OUT PATIENTS

**Out patients treated with both internal and external medicines**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Date</th>
<th>O.P.No.</th>
<th>Name</th>
<th>Age/Sex</th>
<th>Complaints</th>
<th>No. of days</th>
<th>Report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Scaling</td>
<td>Candle Grease Sign</td>
<td>Auspitz Sign</td>
</tr>
<tr>
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<td>02.05.07</td>
<td>31063</td>
<td>Mr. Kuttalalingam</td>
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<td>Present</td>
<td>Present</td>
</tr>
<tr>
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<td>03.05.07</td>
<td>31261</td>
<td>Mr. Ameer Rutheen</td>
<td>48/M</td>
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<td>Present</td>
<td>Present</td>
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<tr>
<td>3</td>
<td>10.05.07</td>
<td>32739</td>
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<td>Present</td>
<td>Present</td>
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<tr>
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<td>Present</td>
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<tr>
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<td>17.05.07</td>
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<td>40/M</td>
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<td>Present</td>
<td>Present</td>
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<tr>
<td>6</td>
<td>18.05.07</td>
<td>34164</td>
<td>Mr. Gurusamy</td>
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<td>Present</td>
<td>Present</td>
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<td>Present</td>
<td>Present</td>
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<td>23.05.07</td>
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<td>Present</td>
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<td>Present</td>
<td>Present</td>
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### Out patients treated with internal medicine

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<th>Date</th>
<th>O.P.No.</th>
<th>Name</th>
<th>Age/Sex</th>
<th>Complaints</th>
<th>No. of days</th>
<th>Report</th>
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<td>Candle Grease Sign</td>
<td>Auspitz Sign</td>
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<td>37822</td>
<td>Mrs. Babuammal</td>
<td>55/F</td>
<td>Present</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>2</td>
<td>26.06.07</td>
<td>41847</td>
<td>Mr. Swaminathan</td>
<td>45/M</td>
<td>Present</td>
<td>Present</td>
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<td>09.07.07</td>
<td>43945</td>
<td>Mr. Paneer Selvam</td>
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<tr>
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<td>Present</td>
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<td>53437</td>
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<td>Present</td>
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### Out patients treated with external medicine

<table>
<thead>
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<th>Date</th>
<th>O.P.No.</th>
<th>Name</th>
<th>Age/Sex</th>
<th>Complaints</th>
<th>No. of days</th>
<th>Report</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>Scaling</td>
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<td>Auspitz Sign</td>
</tr>
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<td>Present</td>
<td>Present</td>
</tr>
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<td>38873</td>
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# Investigations of 20 IP Patients

<table>
<thead>
<tr>
<th>S. No</th>
<th>IP. No</th>
<th>Urine</th>
<th>Motion</th>
<th>Skin scrapping test</th>
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<td></td>
<td></td>
<td>Alb</td>
<td>Sug</td>
<td>Dep</td>
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<td>2268</td>
<td>Nil</td>
<td>Nil</td>
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</tbody>
</table>

F.EC - Few Epithelial Cells, F.PC - Few Puscells, NAD - No Abnormal Defect
Table shows report of 20 I.P Cases

<table>
<thead>
<tr>
<th>S. No</th>
<th>IP. No</th>
<th>Name of the Patient</th>
<th>Age</th>
<th>Sex</th>
<th>Date of Admission</th>
<th>Drug and dose</th>
<th>Date of Discharge</th>
<th>No.of Days</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1893</td>
<td>Mr.Gunabalan</td>
<td>53</td>
<td>M</td>
<td>21.04.05</td>
<td>Neeradimuthu Rasayanam - 500mg B.D</td>
<td>26.05.05</td>
<td>36</td>
<td>Fair</td>
</tr>
<tr>
<td>2</td>
<td>920</td>
<td>Mr.Muthupattan</td>
<td>65</td>
<td>M</td>
<td>25.04.05</td>
<td>Aadutheendai palai Vembu Thylam - 30ml</td>
<td>08.05.05</td>
<td>14</td>
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</tr>
<tr>
<td>3</td>
<td>922</td>
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<td>45</td>
<td>M</td>
<td>25.04.05</td>
<td></td>
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<td>37</td>
<td>Fair</td>
</tr>
<tr>
<td>4</td>
<td>1003</td>
<td>Mrs.Subbulakshmi</td>
<td>45</td>
<td>F</td>
<td>03.05.05</td>
<td></td>
<td>01.06.05</td>
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<td>Fair</td>
</tr>
<tr>
<td>5</td>
<td>1078</td>
<td>Mr.Maharajan</td>
<td>50</td>
<td>M</td>
<td>12.05.05</td>
<td></td>
<td>22.06.05</td>
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<td>Poor</td>
</tr>
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<td>Mr.Charles</td>
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<td>M</td>
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<td></td>
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</tr>
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<td>Fair</td>
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<td>11</td>
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<td>04.06.07</td>
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<tr>
<td>12</td>
<td>1422</td>
<td>Mr.Duraiaraj</td>
<td>51</td>
<td>M</td>
<td>29.05.07</td>
<td></td>
<td>19.06.07</td>
<td>22</td>
<td>Good</td>
</tr>
<tr>
<td>13</td>
<td>1458</td>
<td>Mrs.Meenakshi</td>
<td>45</td>
<td>F</td>
<td>01.06.07</td>
<td></td>
<td>12.06.07</td>
<td>12</td>
<td>Fair</td>
</tr>
<tr>
<td>14</td>
<td>1515</td>
<td>Mrs.RasoolBeevi</td>
<td>68</td>
<td>F</td>
<td>07.06.07</td>
<td></td>
<td>26.06.07</td>
<td>20</td>
<td>Fair</td>
</tr>
<tr>
<td>15</td>
<td>1542</td>
<td>Mr.Sekar</td>
<td>19</td>
<td>M</td>
<td>12.06.07</td>
<td></td>
<td>10.07.07</td>
<td>29</td>
<td>Fair</td>
</tr>
<tr>
<td>16</td>
<td>1710</td>
<td>Mr.Swaminathan</td>
<td>45</td>
<td>M</td>
<td>07.07.07</td>
<td></td>
<td>24.07.07</td>
<td>18</td>
<td>Fair</td>
</tr>
<tr>
<td>17</td>
<td>1781</td>
<td>Mrs.Rajee</td>
<td>50</td>
<td>F</td>
<td>11.07.07</td>
<td></td>
<td>24.07.07</td>
<td>14</td>
<td>Good</td>
</tr>
<tr>
<td>18</td>
<td>1784</td>
<td>Mrs.Thankammal</td>
<td>73</td>
<td>F</td>
<td>11.07.07</td>
<td></td>
<td>31.07.07</td>
<td>21</td>
<td>Good</td>
</tr>
<tr>
<td>19</td>
<td>2246</td>
<td>Mr.Shanmugam</td>
<td>60</td>
<td>M</td>
<td>06.09.07</td>
<td></td>
<td>21.09.07</td>
<td>16</td>
<td>Fair</td>
</tr>
<tr>
<td>20</td>
<td>2268</td>
<td>Mrs.Muthammal</td>
<td>62</td>
<td>F</td>
<td>08.09.07</td>
<td></td>
<td>25.09.07</td>
<td>18</td>
<td>Poor</td>
</tr>
</tbody>
</table>
Description of Drugs

English name: Jangli almond
Botanical name: Hydnocarpus laurifolia
Family: Bixaceae
Parts used: seeds
Organoleptic characters

Suvai : kaippu
Thanmai : veppam
Pirivu : karppu

Action :

Alterative
Stimulant
Detergent
Parasiticide

"கிறுமூக்கிலிங் இல்லாம் கிறுமூக்கு கல்லூட்
கர்யுளியுடைய பொருளகுரு கல்லூட் - கரேதூதம்
கர்யுளியுடைய பொருளகுரு கிரகிள்பூதம்
கரேதூதம் கரேதூதூது புண்ட்டு":

- அகந்தீரம் தரமரந்தம்

Active principles:

Generally known as chaulmoogra oil used extensively in the treatment of leprosy and other cutaneous diseases. It contains fatty acids namely chautmoogric, hydnocarpic, garlic and oleic. Hydnocarpus seeds have long seen used in south India as a remedy for leprosy, chronic skin diseases and dressing for wounds and ulcers.

- The wealth of India vol-V P.No; 142, 143
English name: Winter cherry

Family: Solanaceae

Botanical name: Withania somnifera

Parts used: Root

**Organoleptic characters**

- Suvai: kaippu
- Thanmai: veppam
- Pirivu: karppu

Constituents:

**Alkaloids:**

- Withanin, Somniferine, Cuscohygrine, Anahygrine, Tropine,
- Pseudotropine, Anaferine.

**Free amino acids:**

- Aspartic acid, Glycine, Tyrosine, Alanine, Proline. Aswagandha is useful in the treatment of inflammatory conditions, ulcers and scabies.
**Smilax china**

**English name:** China root  
**Family:** Liliaceae  
**Botanical name:** Smilax china  
**Parts used:** Root

**Organoleptic characters**

- **Suvai:** kaippu  
- **Thanmai:** Thatpam  
- **Pirivu:** karppu

**Actions:**  
- Alterative  
- Antisyphilitic  
- Depurative  
- Aphrodisiac

"தமிழ்நாடு பொழுதான் கரைத்தும் பழம் பிறகுதல்
சேர்த்து கறுக்க வீழ்கிறது பொழுதுதோறும்
கருட்டு பார்க்கிறது இருந்து பொழுதுபெற்று
பொழுதுபிரிய புரிவித்து பராட்டு.

- வையைத் திறிக்க

**Hemidesmus indicus**

**English name:** Indian sarasapailla  
**Family:** Asclepiadaceae  
**Botanical name:** Hemidesmus indicus
Organoleptic characters

Suvi : Inippu, kaippu

Thanmai : thatpam

Pirivu : karppu

Actions:

Alterative
Tonic
Demulcent
Diuretic
Diaphoretic

Active principles:

It contains essential oil – 2hydroxy – 4 methoxy benzaldehyde, sitosterol, stigmasterol, sarsapic acid, ketone, fatty acids, saponin, tannin, resin acids. It is employed in nutritional disorders, syphilis, urinary diseases and skin diseases.

- The wealth of india

English name : Dried ginger
Botanical name : Zingiber officinale
Family : Zingiberaceae
Parts used : root
Organoleptic characters

Suvai : kaippu
Thanmai : veppam
Pirivu : karppu

Constituents:

Volatile oil, starch, free amino acids like glutamic, aspartic, serine, glycine, theoronine, valine etc.,

Green ginger contains thiamine, riboflavin, niacin, vit c. Dried ginger contain an anti-histaminic factor.

பொருளின் பண்புகள்

” கரட்டலும் மாங்கல்களும் மருந்தம் மடந்திருப்பது அசத்தனம்

துருள் மாநிலத்திலும் கிளைவாகும் - ஏராண்டனம்

கொழுங்கு செண்டை குடும்பாரம் என்னை காட்டு

கால்குட்டை பிண்டு பிண்டு வெளிக்கையில் “

- பொருளின் குறைவாய்ப்பு”

சாத்தகமை கோவை:

அறுப்பு உயிர்கள் குறுக்கான பதம்பலம்

சாத்தகமை யாரும் மாங்கல்களும் பிண்டுகள்மை - அறுப்புக்கை

மிகுதி மதிக்கும் சுருக்கத்திலுள்ள பொருள்

பொருள் குறைவாய்வு சாத்தகமை

- அறுப்பின் குறைவாய்வு
Properties of the trial medicine

English name: Indian birthwort

Botanical name: Aristolochia bracteolata

Family: Astritlochiaceae

Organoleptic characters

Suvai: kaippu

Thanmai: veppam

Pirivu: karppu

Action:

Anthelmintic

Emmenagogue

Purgative

Stimulant
It contains aristolochic acid, a nitrophenone compound with tumour inhibiting properties.

**Neem oil -** Neem oil

Botanical name: *Azadirachta indica*

Family: Meliaceae

**Organoleptic characters**

- Suvai: kaippu
- Thanmai: veppam
- Pirivu: karppu

**Action:**

- Stimulant
- Antiseptic
- Insecticide.

“அழுதித்தாக்கு பாதுகாக்க கருத்துற்ற அர்த்திசையுடைய
 நீயீதா பொருளின் காரணம் பத்தீடிகியே புணர்வுகுறிப்பிட்டு
 கோப்பு கற்கைப்பு கருத்துற்றகியாக பத்தீடுசெய்யும்
 நீயீதா பொருளின் காரணம் பத்தீடு”
Constituents

Fatty acids, glycerides, bitter principles like nimbedin, nimbidinin, nimbidic acid, azadrone, gedunin etc.,

The oil is a useful remedy in some chronic skin disease and ulcers. It possesses antiseptic and antifugal activity. Different preparation of nimbidin as an external application for the skin disorder showed good result.

- the wealth of india
BIO-CHEMICAL ANALYSIS OF
NEERADIMUTHU RASAYANAM

Preparation of the Extract

5 gram of rasayanam was weighed accurately and placed in a 250 ml clean beaker, then 50ml of distilled water was added and dissolved well. Then it was boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it was diluted to 100ml with distilled water. This fluid was taken for analysis.

<table>
<thead>
<tr>
<th>S.NO</th>
<th>EXPERIMENT</th>
<th>OBSERVATION</th>
<th>INFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>TEST FOR CALCIUM</strong></td>
<td>2ml of the above prepared extract was taken in a clean test tube. To this added 2 ml of 4% Ammonium oxalate solution was added.</td>
<td>No White precipitate was formed.</td>
</tr>
<tr>
<td>2.</td>
<td><strong>TEST FOR SULPHATE:</strong></td>
<td>2ml of the extract was added to 5% barium chloride solution.</td>
<td>No white precipitate was formed.</td>
</tr>
<tr>
<td>3.</td>
<td><strong>TEST FOR CHLORIDE</strong></td>
<td>The extract was treated with silver nitrate solution.</td>
<td>A white precipitate was formed.</td>
</tr>
<tr>
<td></td>
<td>Test for Carbohydrate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4.</td>
<td>The extract was treated with concentrated HCL.</td>
<td>No brisk effervescence was formed.</td>
<td>Absence of Carbonate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Test for Starch</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>The extract was added with weak iodine solution.</td>
<td>No Blue colour was formed.</td>
<td>Absence of starch.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Test for Iron Ferric</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>The extract was treated with concentrated Glacial acetic acid and potassium ferro cyanide.</td>
<td>No blue colour was formed.</td>
<td>Absence of ferric iron.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Ferrous:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>The extract was treated with concentrated Nitric acid and ammonium thio cyanate.</td>
<td>No Blood red colour was formed.</td>
<td>Absence of ferrous iron.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Test for Phosphate</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>The extract was treated with ammonium Molybdate and concentrated Nitric acid.</td>
<td>No yellow precipitate was formed.</td>
<td>Absence of phosphate.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Test for Albumin</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>The extract was treated with Esbach’s reagent.</td>
<td>No yellow precipitate was formed.</td>
<td>Absence of Albumin.</td>
</tr>
<tr>
<td>10.</td>
<td><strong>TEST FOR TANNIC ACID</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>--------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The extract was treated with ferric chloride.</td>
<td>No blue black precipitate is formed.</td>
<td>Absence of Tannic acid.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11.</th>
<th><strong>TEST FOR UNSATURATION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium permanganate solution was added to the extract.</td>
<td>It gets decolourised.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12.</th>
<th><strong>TEST FOR THE REDUCING SUGAR</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>5ml of Benedict’s qualitative solution was taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.</td>
<td>Yellow precipitate was formed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>13.</th>
<th><strong>TEST FOR AMINO ACID:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>One or two drops of the extract was placed on a filter paper and dried it well. After drying, 1% Ninhydrin was sprayed over the same and dried it well.</td>
<td>Violet colour was formed</td>
</tr>
</tbody>
</table>
ANTI-HISTAMINIC EFFECT OF NEERADI MUTHU RASAYANAM ON ISOLATED ILEUM OF GUINEA PIG

Aim:

To study the Anti-histaminic effect of Neeradi muthu rasayanam

PREPARATION OF TEST DRUG:

1 gm of Neeradi muthu rasayanam dissolved in 10 ml of distilled water and mixed well.

SOLUTION REQUIRED:

Histamine (1 in 1, 00,000 strength)

PROCEDURE:

A guinea pig weighing about 450 gms was starved for 48 hrs and only water was allowed. It was killed by stunning with a sharp blow on the head and cutting its throat to bleed it, to death. The abdomen was quickly opened and the viscera inspected and loops of intestine identified. Use the patch as a landmark the ileum was removed and placed in a shallow dish containing warm "Tyrode solution", the lumen of the ileum was gently rinsed out with saline. It was cut into segments of required length, generally 4 cm, in the fully relaxed state and the sutures were made with needle and tied at either ends and segment is suspended in an isolated organ bath. It was aerated by an oxygen tube and immersed in Tyrode solution at 37°C. Drugs were given to study the inhibitory effect of histamine induced contractions.

INFEERENCE:

The test drug has Anti-Histaminic action.
ACUTE ANTI-INFLAMMATORY STUDY ON AADUTHEENDA PALAI VEMBU THYLAM (EXTERNAL USE)

BY HIND-PAW METHOD IN ALBINO RATS

Aim:

To study the acute Anti-inflammatory activity of the test drug - Aadutheenda palai vembu thylam.

PREPARATION OF THE TEST DRUG:

The thylam was prepared as per the Gunapadam mooligai vaguppu and described in annexure.

PROCEDURE:

Nine healthy albino rats weighing 100-150 gm were taken and divided into three groups, each consisting of 3 rats. First group was kept as control by giving distilled water of 2 ml/100 gm of body weight. The second group was given Ibuprofen at a dose of 20 mg/100 gm of body weight. The third group was kept as test group.

Before the administration of the best drug the hind-paw volumes of all rats were measured. This was done by dipping the hind-paw (up to tibio-tarsal junction) into a mercury plethysmograph. While dipping the hind-paw by pulling the syringe piston, the level of mercury in the center small tube was made to coincide with red marking and reading was noted from the plethysmograph.

Soon after the measurement, the drug was administered to the later, a subcutaneous injection of 0.1ml of 1% (W/V) carrageenin in water was made into
To the third (test) group Aadutheenda palai vembu thylam was topically applied for three times over the inflammed surface in a thin layer within half an hour gap.

One and half-hours after injection the hind-paw volume was measured once again. The difference between the initial and final volume would show the amount of inflammation. Taking the volume in the control group as 100% inflammation, anti-inflammatory effect of the test group is calculated.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Group Drug</th>
<th>Dose/ 100gm bw</th>
<th>Mean Diff</th>
<th>% Inf</th>
<th>% Inh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Control – water</td>
<td>2ml</td>
<td>0.68</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>2.</td>
<td>Standard – Ibu profen</td>
<td>20 mg</td>
<td>0.67</td>
<td></td>
<td>98.52</td>
</tr>
<tr>
<td>3.</td>
<td>Test Drug - Aadutheendapalai vembu thylam</td>
<td>Ext</td>
<td>0.43</td>
<td>63.23</td>
<td>36.77</td>
</tr>
</tbody>
</table>

**Inference:**

The drug has **Moderate Anti-Inflammatory Action.**
PHARMACOLOGICAL ANALYSIS

ACUTE ANTI INFLAMMATORY ACTIVITY IN RATS BY HIND PAW METHOD

AIM:

To demonstrate the acute anti-inflammatory activity of Neeradimuthu Rasayanam in albino rats by Hind Paw Method.

PREPARATION OF THE TEST DRUG:

1gm of Neeradimuthu Rasayanam was suspended in 10 ml of water. From the above test drug 2 ml was administered orally. 1 ml contain 100 mg of Neeradimuthu Rasayanam.

PROCEDURE:

Six albino rats weighting 100-150 gm were taken and divided into three groups and each group consisting 2 rats.

First group was kept as control and received water. Second group received Ibuprofen at a dose of 20mg/100 gm body weight. Third group of animals received Neeradimuthu Rasayanam.

Before administration of drugs, the hind paw volume of all rats was measured. This was done by dipping the hind paw up to the tibio tarsal junction in a mercury plethysmograph. Soon after the measurement the drug was administered.

One hour after the administration of drug a sub cutaneous injection of 0.1ml of 1% w/v of carrageenin in water was made into plantar surface of both the hind paw of each rat.
Three hours after carrageenin injection, the hind paw volume was measured once again. Difference between the initial and final value were noted and compared.

The method is more suitable for studying anti inflammatory activity on acute inflammation.

The result of the drug is compared with the standard as well as control group.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Group</th>
<th>Dose/100mg body weight</th>
<th>Mean difference</th>
<th>Percentage of inflammation</th>
<th>Percentage of inhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Control</td>
<td>Water 2 ml</td>
<td>0.68</td>
<td>100</td>
<td>Nil</td>
</tr>
<tr>
<td>2</td>
<td>Standard</td>
<td>Ibuprofen 20 mg</td>
<td>0.67</td>
<td>-</td>
<td>98.52</td>
</tr>
<tr>
<td>3</td>
<td>Test</td>
<td>Neeradimuthu Rasayanam</td>
<td>0.53</td>
<td>77.94</td>
<td>22.06</td>
</tr>
</tbody>
</table>

**INFERENCES:**

From the above experiment it is observed that the test drug Neeradimuthu Rasayanam has **Mild Anti Inflammatory Action**.
GOVERNMENT SIDDHA MEDICAL COLLEGE HOSPITAL,
PALAYAMKOTTAI
POST GRADUATE – SIRAPPU MARUTHUVAM DEPARTMENT
(P.G.III)
AN OPEN TRIAL OF SIDDHA TREATMENT
DISEASE: KALANJAHAVA PADAI
DRUG: INTERNAL : NEERADIMUTHU RASAYANAM
EXTERNAL: AADUTHEENDAPALAI VEMBU THYLAM

1. O.P NO: -----------  2. BED NO: -----------  3. S.NO: [ ]
4. NAME: ------------------------  5. AGE (yr) [ ]  6. GENDER: [ M ] [ F ]
7. OCCUPATION: -------------------------------

8. POSTAL ADDRESS

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9. COMPLAINTS AND DURATION
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10. HISTORY OF PRESENT ILLNESS
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

11. PAST HISTORY
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
12. FAMILY HISTORY: 1. NO □ 2. YES □

13. MENSTRUAL HISTORY:
   4. Menstrual cycle-Irregular □  5. Attained Menopause □

HABITS
14. Smoker □ Yes(1) No (2)
15. Alcoholic □
16. Betalnut chewer □
17. Non-vegetarian □

GENERAL EXAMINATION
18. Body weight [kg] □
20. Blood pressure (mmHg) □ □ / □ □
21. Heart rate / min. □ □
22. Respiratory rate /min □ □
23. Pulse rate /min.

(1) Yes (2) No
24. Pallor □ □
25. Jaundice □ □
26. Clubbing □ □
27. Cyanosis □ □
28. Pedal edema □ □
29. Lymphadenopathy □ □
30. Engorged veins □ □
CLINICAL EXAMINATION OF SKIN

31. SITE: _________________________________________

32. COLOUR:  1. Normal [ ]  2. Reddish [ ]  3. Black [ ]
              4. Silvery [ ]

33. SIZE OF LESION (Length cm):

__________________________________

34. SHAPE:   1. Round [ ]  2. Coined [ ]  3. Diffused [ ]


36. ERYTHEMA: 1. Present [ ]  2. Absent [ ]

37. SCALING: 1. Present [ ]  2. Absent [ ]


Yes (1)  No (2)

39. PUSTULE : [ ]  [ ]

40. PAPULE : [ ]  [ ]

41. MACULE : [ ]  [ ]

42. PIGMENTATION:  1. No [ ]  2. Hypo [ ]  3. Hyper [ ]

43. SENSATION:  1. Normal [ ]  2. Anaesthetic [ ]  3. Hyperaesthetic [ ]

44. CANDLE GREASE SIGN: 1. Present [ ]  2. Absent [ ]

45. AUSPITZ SIGN: 1. Present [ ]  2. Absent [ ]

46. KOEBNER’S PHENOMENON: 1. Present [ ]  2. Absent [ ]
EXAMINATION OF VITAL ORGANS

(1) Normal (2) Abnormal

47. CVS
☐ ☐ .......................

48. RS
☐ ☐ .......................

49. ABDOMEN
☐ ☐ .......................

SIDDHA ASPECTS

50. NILAM


51. KAALA IYALBU


52. UDAL IYALBU


53. GUNAM

1. Sathuvam ☐ 2. Raasatham ☐ 3. Thamasam ☐

AYMPORIGAL

(1) Normal (2) Affected

54. Mei ☐ ☐ .......................

55. Vaai ☐ ☐ .......................

56. Kan ☐ ☐ .......................

57. Mookku ☐ ☐ .......................

58. Sevi ☐ ☐ .......................
<table>
<thead>
<tr>
<th></th>
<th>(1) Normal</th>
<th>(2) Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>59. Kai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>60. Kaal</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>61. Vaai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>62. Eruvaai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>63. Karuvaai</td>
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**UYIR THAATHUKKAL**

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<tr>
<td>64. Pranan</td>
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<td>□</td>
</tr>
<tr>
<td>65. Abanan</td>
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<td>□</td>
</tr>
<tr>
<td>66. Viyanan</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>67. Uthanan</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>68. Samanan</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>69. Nagan</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>70. Koorman</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>71. Kirukaran</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>72. Devathathan</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>73. Dhananjeyan</td>
<td>□</td>
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</table>

**PITTHAM**

<table>
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<tr>
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<tbody>
<tr>
<td>74. Analagam</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>75. Ranjagam</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>76. Sathagam</td>
<td>□</td>
<td>□</td>
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<td>77. Alosagam</td>
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<td>78. Prasagam</td>
<td>□</td>
<td>□</td>
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<td></td>
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<td>Affected</td>
</tr>
<tr>
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</tr>
<tr>
<td>79.</td>
<td>Avalambagam</td>
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<td>80.</td>
<td>Kiletham</td>
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</tr>
<tr>
<td>81.</td>
<td>Pothagam</td>
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<td>82.</td>
<td>Tharpagam</td>
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<td>83.</td>
<td>Santhigam</td>
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<tr>
<td>84.</td>
<td>Saaram</td>
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</tr>
<tr>
<td>85.</td>
<td>Senneer</td>
<td></td>
</tr>
<tr>
<td>86.</td>
<td>Oon</td>
<td></td>
</tr>
<tr>
<td>87.</td>
<td>Kozhuppu</td>
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</tr>
<tr>
<td>88.</td>
<td>Enbu</td>
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</tr>
<tr>
<td>89.</td>
<td>Moolai</td>
<td></td>
</tr>
<tr>
<td>90.</td>
<td>Sukkilam / Suronitham</td>
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**UDAL THAATHUKKAL**

<table>
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<tr>
<td>84.</td>
<td>Saaram</td>
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</tr>
<tr>
<td>85.</td>
<td>Senneer</td>
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<td></td>
</tr>
<tr>
<td>86.</td>
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</tr>
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<td></td>
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<tr>
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<td>Sukkilam / Suronitham</td>
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<td></td>
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**ENVAGAI THERVUGAL**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>91.</td>
<td>Naa</td>
</tr>
<tr>
<td>92.</td>
<td>Niram</td>
</tr>
<tr>
<td>93.</td>
<td>Mozhi</td>
</tr>
<tr>
<td>94.</td>
<td>Vizhi</td>
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<tr>
<td>95.</td>
<td>Sparisam</td>
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<td>96.</td>
<td>Naadi</td>
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### MALAM

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<tr>
<td>98. Nurai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>99. Kirumi</td>
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<td>□</td>
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<tr>
<td>100. Kalappu</td>
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<td>□</td>
</tr>
<tr>
<td>101. Erugal</td>
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<td>□</td>
</tr>
<tr>
<td>102. Elagal</td>
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### MOOTHIRAM

**Neerkuri**

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<tr>
<td>103. Niram</td>
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<td>□</td>
</tr>
<tr>
<td>104. Manam</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>105. Edai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>106. Nurai</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>107. Enjal</td>
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</tbody>
</table>

**Neikuri**

1. Vaatha Neer □
2. Pittha Neer □
3. Kaba Neer □
LAB INVESTIGATIONS

BLOOD

108. TC (cells/ cu.m.m)  

DC (%): 109 N 110 L 111 M 112 E 113 B

114. ESR (mm) ½ Hr  115. ESR (mm): 1 Hr:

116. Hb (g %)

Blood Sugar (mg%):  117. Fasting  
118 Post-prandial  
119 Random

120. Blood Urea (mg%):  

121. Serum Creatinine:

122. Blood Cholesterol (mg%):  

URINE

123. Albumin - 0.Nil 1.+ 2.++ 3.+++  
124. Sugar - 0.Nil 1.+ 2.++ 3.+++  

Deposit:  

<table>
<thead>
<tr>
<th>Present (1)</th>
<th>Absent (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 Pus cells</td>
<td></td>
</tr>
<tr>
<td>126 Epithelial cells</td>
<td></td>
</tr>
<tr>
<td>127 Red blood cells</td>
<td></td>
</tr>
<tr>
<td>128 Casts/ Crystal</td>
<td></td>
</tr>
<tr>
<td>MOTION</td>
<td>Present (1)</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>129. Ova</td>
<td></td>
</tr>
<tr>
<td>130. Cyst</td>
<td></td>
</tr>
<tr>
<td>131. Occult blood</td>
<td></td>
</tr>
<tr>
<td>132. Pus cells</td>
<td></td>
</tr>
</tbody>
</table>

Drug issued for patients.

133. No. of vadagam: [ ]
134. Volume of Thylam (ml): [ ]

135. Date: _______________  136. Signature of Doctor: ___________

137. Station: _____________  138. Signature of H.O.D: ___________
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   Thomas B Fitspatric
   Arthur Z. Eisen
   Klaus Wolff
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14. Siddhar Aruvai Maruthuvam - Dr. Uthma Rayan
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18. Thirummoolar Vaidhyam 600
19. Udal Thathuvam
20. Wealth of India
21. Yugi Vaidhya Chinthamani

Websites:
22. Psoriasis net.org
23. Psoriasis.org
ACKNOWLEDGEMENT

Lord Almighty! I thank you for the gift of life and the showers of blessings showered on me to complete this dissertation work, also I thank you for your constant heart fully intercession throughout my life.

The author extends her thanks to the Vice-Chancellor, the TamilNadu Dr.M.G.R. Medical University, Chennai, The Commissioner of Indian System of Medicine and Homeopathy, Chennai.

The author expresses her great sense of gratitude to the Principal DR.M.Thinakaran M.D(s) Government Siddha Medical College, Palayamkottai for the valuable guidance given by him in this dissertation work.

The author is thankful to Dr.R.Devarajan M.D(s), Vice Principal, Government Siddha Medical College for his support regarding this studies.

The author expresses her cordial thanks to Dr.K.Somasekaran M.D(s),Head of the Department, Post Graduate Department of Sirappu Maruthuvam, Government Siddha Medical College, Palayamkottai for his whole hearted admiration and inspiration of this study.
The author is very much thankful to Dr. K. Saibudeen M.D(s) Lecturer, Post Graduate Department of Sirappu Maruthuvam, Government Siddha Medical College, Palayamkottai for his guidance with his precious experiences.

The author is very much grateful to Dr. S. Ramaguru, M.S(ortho) Professor of Orthopaedics, Government Siddha Medical College, Palayamkottai for his valuable guidance in this study.

The author expresses her heartfelt thanks to Mr. Kalaivanan M.Sc., Head of the Department of Pharmacology, Government Siddha Medical College, Palayamkottai for his support in the pharmacological aspect of this dissertation work.

The author would like to thank Prof. N. Naga Prema, M.Sc., Head of the Department of Biochemistry, Government Siddha Medical College, Palayamkottai.

The author express her gratitude to the Librarian Mrs. Poonkodi M.A., B.LIS., Government Siddha Medical College, Palayamkottai for fetching books for reference whenever required.

I am indebted to Mr. J. Andrews Milton MPT for his good wishes, encouragement and guidance.
Lastly but not leastly the author is very much grateful to Broad Band Net Cafe, Palayamkottai for their great effort in bringing out this Dissertation work in an excellent format.

This part of the dissertation will be incomplete if the forgets to thanks to her patients for their cooperation.
Results IP Patients

Results OP Patients treated with both Internal and External medicines
Results OP Patients treated with Internal medicine

Results OP Patients treated with External medicine