A STUDY ON

“MANDAI KARAPPAN”

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INTRODUCTION

“Siddha medicine is the oldest and the foremost of all other medical systems of the world”

The Siddha System of medicine is the oldest in the world. There are two ancient system of medicine in India. The Siddha which flourished in South India especially in Tamil Nadu and Ayurvedha prevalent in North India.

The word Siddha comes from the word Siddhi which means an object to attain perfection or heavenly bliss. Siddha system of medicine is based on Saiva Siddhantha. Siddha is a Tamil word that is derived from its root 'chit' which means perfection in life or "heavenly bliss”

The fundamental subjects of Siddha methodology are

1. VADHAM (ALCHEMY)
2. VAITHIYAM (MEDICINE)
3. YOGAM (YOGA)
4. GNANAM or THATHUVAM (PHILOSOPHY)

Siddha generally refers to Athma Siddha that is the 8 supernatural power. Those who attained or achieved the above said powers are known as Siddhars.

These siddhars also called as Tamil Siddhas are a religious order of mystics found in the southern part of India who's origins can be traced back to the eighth century. They form a distinctive part of a larger movement which spread throughout South Asia, from Sri Lanka in the South to Tibet in the north, between the seventh and eleventh centuries. Siddhas everywhere share common practices, cosmology, and symbols derived from Tantrism whether the practitioner is Hindu, Buddhist, or Jain. All are part of a "pan-Indian tantric yoga movement" which Eliade described as formulating over a five hundred year period, between the 7th and the 11th centuries, but fully flowering only after the 12th century. Excluding perhaps
the Buddhist Siddhas, all such groups are considered radical, if not
dangerous, by the orthodoxy.

There were 18 important siddhars in olden days and they developed
this system of medicine. Hence, it is called Siddha Medicine.

The eight mighty SIDDHIC PROCESS or OCTOMIRACLE ("ATTA-
MA-SIDDHI") which could keep the body strong and perfect for EXTERNAL
LIFE, where THERE IS NO DEATH OR REBIRTH.

ATTAMA-SIDDHI

ANIMA
The faculty of reducing gross body to the size of an atom and to
enable him to fly in space.

MAHIMA
Power of expanding oneself without limit.

KARIMA
The power of reducing the primordial elements within himself to a
point desired.

LAHIMA
The power of becoming as light as feather.

PRAPTHI
Faculty of knowing everything; Past, Present and Future and to
secure everything as desired.

PRAHAMIYAM
The power of penetration like rays by which one can attain
immortality.

ESATHWAM
Supreme power over animates and inanimate in the universe.

VASITHAM
The power of securing any object.
Siddha science considers nature and man as essentially one. Nature is man and man is nature. Man is said to be the microcosm and Universe is the macrocosm because what exists in the world exists in man. Man is nothing but a miniature world containing the five elements of the various principles which constitute the minerals, vegetables and the animal kingdom. According to Siddha medical science, the Universe originally consisted of atoms which contributed to the five basic elements, viz., earth, water, fire, air and sky which correspond to the five senses of the human body and they were the fundamentals of all the corporeal things in the world.

A close relationship is found to exist between the external world and the internal system of man. Siddhars (practitioners of Siddha) maintain that the structure of the human body is a miniature world in itself. Man consumes water and food, breathes the air and thus maintains the heat in the body. He is alive on account of the life force given by ether. The earth is the first element which gives fine shape to the body including bones, tissues, muscles, skin, hair etc. Water is the second element representing blood, secretions of the glands, vital fluid etc. Fire is the third element that gives motion, vigor and vitality to the body. It also helps digestion, circulation and simulation besides respiration and the nervous system. Above all, ether is the characteristic of man's mental and spiritual faculties.

Siddhars, spiritual scientists of Tamil Nadu explored and explained the reality of Nature and its relationship to man by their yogic awareness and experimental findings. They postulated the concept of spiritualism for self improvement and the practices propounded by them came to be known as the "SIDDHA SYSTEM".

From above all it gives a clear picture that any type of diseases can be cured using Siddha medicine. Even there is a medicine for AIDS that had been discovered earlier. One type of disease “Mandai karappan “, a skin disease is cured or controlled by using siddha medicine. A detailed study of this disease is discussed in remaining part of my project.
AIM AND OBJECTIVES

“Mandai Karappan” is a skin problem among children. It affects children in their active period of life and cause severe embarrassment both physically and mentally.

India is a tropical country, having larger population in the world, where people of different socio-economic status are found. The downtrodden poor children who live in densely populated areas with poor sanitary facilities, lack of personal and environmental hygiene are tend to aggravate the dermatological problems in children. Special attention in controlling and preventing the dermatological problem is necessary.

This study was carried out with an intention to bring out an apt treatment for “Mandai Karappan” from the theories of siddha system of medicine.

Objectives:
1. To bring out an apt treatment for “Mandai Karappan”.
2. To collect authentic measures and review the ideas mentioned in ancient siddha literatures about this disease and also know the trial drugs.
3. To expose the siddha principles in diagnosis of the disease.
4. To have an idea about the Prevalence of “Mandai Karappan” with reference to age, sex, occupation, socio-economic status, family history and paruva kalam etc.
5. To know the disease alters the normal conditions under the topics Mukkuttram, Poripulangal, Udal Kattugal, Envagai Thervugal, Neerkuri and Neikuri.
6. To make a detailed clinical study of the disease by careful examination on etiology, Clinical features, diagnosis, prognosis and complications based on both siddha and modern aspects.
7. To have a clinical trial on patients with the selected drugs, in the treatment of the disease “Mandai Karappan”
8. To evaluate the Bio-Chemical analysis, pharmacological studies of the trial drugs.
9. To use modern diagnostic parameters in studying the progress of the patients.
SIDDHA ASPECT

சால்படுவதற்கான கருப்பிளை

கருப்பிளை

சால்படுவதற்கான மூலக்கூறுகளும், பிளைகளும், கீழ்வாக்கப்பட்டு
கொள்ள வேண்டும்.

முக்கியம்:

செல்வில் மீசும், மீசும், மீசும், பூள், முள்ளு, முள்ளு, வில்லி மற்றும், நீர்வாய்ப் பகழ்த்தான தன்னால் சால்படுவதற்கான மூலக்கூறுகள் நோக்கத்தில் பிரிக்கப்பட்டு விளக்கப்பட்டுள்ளன.

முக்கியம்:

தலைவர்களின் நுரசுகளிலுள்ள மூலக்கூறுகள் தன்னால் பயன்படுத்தப்படும்
கருப்பிளை நோக்கத்தில் தன்னால் பயன்படுத்தப்படும்.

திட்டம் 1-3 முழுவதும் மூலக்கூறுகள் தன்னால் (பாராமொழி - பக்கம் 45)

"சுருங்கு எச்சனை நோக்கத்தில் சால்படுவதற்கான மூலக்கூறுகள் - நோக்கத்தில் பந்துக்கப்பட்டு அகுக்கும் பந்துக்கப்பட்டு அகுக்கும் மூலக்கூறுகள்"

திட்டம் 3-7 முழுவதும் மூலக்கூறுகள் தன்னால் தன்னால். வடிவும் 1 - 12முழுவதும் கருப்பிளை

சால்படுவதற்கான:

"சால்படுவதற்கான மூலக்கூறுகள் பயன்படும்
முழு கருப்பிளை மூலக்கூறுகள் சால்படுவதற்கான
சால்படுவதற்கான மூலக்கூறுகள் முழு 1-12பக்கமும்

முக்கியம் கருப்பிளை நோக்கத்தில்

- பாராமொழி - பக்கம் 247
“பிரிவுக் கருக்கப்பட்டுள்ள வைப்புகள்

பிரிவுகளில் பிரிவுப்பைச் செல்லும் வைப்புகள்

சிதற்சியில் கருத்துருக்கள் கருக்கப்பட்டுள்ளன

அழகுக்குறுக்கும் பாதுகாப்பு பாதுகாப்பு பிரிவு

அழகுக்குறுக்கும் பாதுகாப்பு பாதுகாப்பு பிரிவு

சிதற்சியில் பாதுகாப்பு பாதுகாப்பு பிரிவு

சிதற்சியில் பாதுகாப்பு பாதுகாப்பு பிரிவு

"தமக்குக் குறிப்பிட்டு கருக்கப்பட்டு

சிவன்றுக்கு நிச்சயமாகப் பாதுகாப்பு

நூலைப்பொறிக்கு கருக்கப்பட்டு

நூலைப்பொறிக்கு கருக்கப்பட்டு

பாதுகாப்பு பாதுகாப்பு

நூலைப்பொறிக்கு

நூலைப்பொறிக்கு

- பெங்கலம் (பக்கம் 5)

ஆண்டு குறிப்பிட்டு கருக்கப்பட்டு

ஆண்டு குறிப்பிட்டு கருக்கப்பட்டு
கருப்பாறை அகாலநோய்வ இணையத்துக்கு கருப்பாறை, வெளிநூறு, கருப்பாறை, பெருநூறு பெருநூறுக்கு கருப்பாறை ஒழுங்கிய கருப்பாறை கருப்பாறை

“அம்மி தனிய கலந்த முஸ்லிம் மகாமகம் பிரதான கருப்பாறை

1) வெளிநூறு
2) கருப்பாறை
3) வெளிநூறு
4) கருப்பாறை
5) கருப்பாறை
6) கருப்பாறை
7) வெளிநூறு
8) கருப்பாறை
9) வெளிநூறு
10) வெளிநூறு
11) வெளிநூறு
12) கருப்பாறை
13) வெளிநூறு
14) வெளிநூறு
15) வெளிநூறு
16) மகளை
17) பாலை
18) விளை கருப்பாண்

கருப்பாண் 18 மட்டுமே.

> குறுக்கு வாய்ப்பு 235-வது கருப்பாண் விளக்கம் 85 வகுப்பு.
> அக்கண்டியவுடம் 2000 - வாய்ப்பு விளக்கம் 66 வகுப்பாண் வகுப்பு,
> அக்கண்டியவுடம் விளக்கம் 80 கருப்பாண் வகுப்பு,
> புனித சென்றையில் சிற்றடையால் விளக்கம் 7 வகுக்கு கருப்பாண் வகுப்பு கருப்பாண்

> குறுக்கு வாய்ப்பு 235 -வது கருப்பாண் விளக்கம் 85 வகுப்பு,
> பாலை கருப்பாண் கருப்பாண் விளக்கம் 18 வகுப்பு கருப்பாண்

மேலும் கருப்பாண் விளக்கம் குறிப்பிட்டம்:

“அது மேலும் கருப்பாண் விளக்கம் கருப்பாண் கருப்பாண் விளக்கம் கருப்பாண் விளக்கம்
> மேலும் பாலை கருப்பாண் விளக்கம் கருப்பாண் விளக்கம்
> அக்கண்டியவுடம் கருப்பாண் விளக்கம்
> அப்பனை கருப்பாண் விளக்கம் கருப்பாண்
> குறுக்கு வாய்ப்பு, நூற்றாண்டு விளக்கம், மலர் கருப்பாண்
> மலர் கருப்பாண் விளக்கம் கருப்பாண், கருப்பாண் கருப்பாண்
> கருப்பாண் விளக்கம் கருப்பாண் விளக்கம்”

9
பொருள் விளக்கம் மிகுந்து விளக்கம் தன்னுறை ரெண்டு இருந்து ஒரு கருவி என்பது.

1. வருடக்கருப்பான
2. அண்மை கருப்பான
3. துப்பாகாரபான
4. மீனாகாரபான
5. விமானகாரபான
6. கருவிகாரபான

(Prognosis)

கருப்பாரபான, விமானகாரபான - இருந்து தன்னுறை

கருப்பாரவின் இத்தகையது, மீனாகாரபான விமானங்குறை தன்னுறை

தீர்மானம் இருந்தது.
THRIDHOSHA THEORY

In Siddha System, the manifestations of all diseases are the result of derangement of three dhoshas i.e. VAATHA, PITHTHA AND KABHA. According to Noi Nadal and Noi Muthal Nadal Thirattu and Siddha Maruthuvam texts, the prime factor, which involves in skin diseases is vaatham.

“எத்தானும் உணவியுலேனும்”
- சோந்தி.

Vitiation of Vatha due to food and activities etc., leads to vitiation of saaram, and senneer of udal kattugal. This initially affects the colour of the skin.

In due course in addition to vaatha, derangement of Piththa and Kabha also occurs and the disease progresses. Finally the kabha predominantly increased.

According to the theory of siddhars, the human body is composed of 96 THATHUS including Panchapoothams and Thridhosha. The siddha system of medicine is based on the Thridhosha theory. This includes the three humors; they are Vaatha, Piththa and Kabha. These three humors are primarily and essential constitutional factors of the human body. These factors exist in 1: ½: ¼ ratios respectively in the normal body. This normal existence is responsible for the proper functioning of the body. Any alteration in the above ratio can cause disease in the body like Vaatha disease, Piththa disease and Kabha Disease.

VAATHA :-( VAYU)

Vayu is classified into ten types according to its origin and function.

1. PRAANAN

This is located in heart and lungs to nose.
Its functions are controls mind and five objects of sense, useful for breathing, expectoration, coughing and sneezing.

2. ABAANAN:
It is located in lower abdomen and extremities.
Its functions are responsible for passing Urine, stools, sperm, menstrual flow and fetus. It is also responsible for the proper mobilization of digestive extracts.

3. SAMAANAN:
It is located in the stomach.
It is responsible for proper digestion, and distributes the digestive extract to all parts of the body.

4. VIYAANAN:
It is located mainly in the heart.
Its functions are responsible for movements of all parts of the body.

5. UTHAANAN:
It is located in the chest.
Its functions are responsible for speech and also for complexion, mental strength and hard work.

6. NAAGAN:
It is located in the eyes. It is responsible for opening and closing the eyes.

7. KOORMAN:
It is located in heart and eyes.
It is responsible for vision and yawning and also for lacrimation.

8. KIRUKARAN:
It is located in the tongue.
It is responsible for salivation, nasal secretion, appetite and also for sneezing and coughing.

9. THEVATHATHAN:
It is located in rectum and genitalia.
It is responsible for Laziness, Sleeping and Anger.

10. THANANJEYAN:

It is located in nose.

It is responsible for makes swelling of the body, makes noise in the ear, separate the suture of the skull after death.

PITHTHA:

Piththa represents “Theyu”. It is classified into 5 types.

1. ANALAM:

This gives appetite and responsible for the change of liquid state into solid state of food substances and for Proper digestion.

2. RANJAGAM:

Converts the food extracts into blood and gives red colour to blood. It is also stimulates the synthesis of blood.

3. SAATHAGAM:

It is situated in the heart and determines its work according to mind, knowledge and devotion.

4. AALOSAGAM:

This is responsible for vision and brightens the eyes.

5. PIRASAGAM:

Gives complexion and brightness to the skin.

KABHA:

Kabha is divided into 5 types.

1. AVALAMBAGAM:

It is located in the lungs. It is named “Avalambagam”, because it is being the co – ordination of other four types of kabha.

2. KILETHAM:

It is located in the stomach and makes the food moist and soft.

3. POTHAGAM:

It is located in the tongue and responsible for the sensation of taste.
4. **THARPAGAM:**

   Situated in the head and responsible for the coolness of eyes.

5. **SANTHIGAM:**

   Situated in the joints and responsible for the lubrication and free movements of the joints.

Combination of five elements in Thridhosha:

- Vaatha - Vali + Vinn
- Piththa - Thee + Thee
- Kabha - Mann + Neer

**TASTE**

Taste involved in the development of disease, and also in treatment.

The five elemental combinations of tastes:

- Sweet - Mann + Neer
- Sour - Mann + Thee
- Salt - Neer + Thee
- Bitter - Vali + Veli
- Pungent - Vali + Thee
- Astringent - Mann + Vali

**UDAL KATTUGAL:**

Our body consists of seven Udal Kattugal. They are,

1. **SAARAM:**

   It is the final product of the digestive process, which strengthens the body and mind and nourishes the blood.

2. **SENNEER:**

   The saaram after absorption is converted into senneer. It is responsible for knowledge, strength, boldness and healthy complexion. Imparts colour to body and nourishes the muscles.

3. **OON:**

   The musculature will give structure and shape of the body. The well built or thin built is due to the muscle formation
4. KOZHUPPU:
   Lubricates the organs and thus facilitates their functions and maintains oily matter of the body.

5. ENBU:
   Forms the basic skeletal structure of the body. Responsible for locomotion and protection of vital organs.

6. MOOLAI:
   Present inside the bone which strengthens and maintain the normal conditions of the bone.

7. SUCKILLAM OR SURONITHAM:
   Responsible for the propagation of species.

PARUVAKAALAM (Season)

The whole year is constructed by 6 seasons as perumpozhuthu. They are known as.

2. Koothirkaalam - Iyppasi and Karthigai - October and November.
5. Elavenilkaalam - Chithirai and Vaigasi - April and May.
6. Mudhuvenil Kaalam - Aani and Aadi - June and July.

The sirupozhuthu, the minor classifications of time of a day has been divided into Vaikarai, Kalai, Munpagal, Maalai, Iravu and Yaamam.

The diseases were triggered in a specific time period of a season and of a day. The siddhars have been anticipated the seasonal changes and advised certain measures in the name of “Kaala Ozhukam” to avoid the onset of such ailments.
PINIYARI MURAIMAI or ENVAGAI THERVUGAL (Diagnosis)

Piniyari muraimai is the method of diagnosing the disease. It is based upon the following principles. They are,

1. Poriyalarithal.
2. Pulanalarithal.
3. Vinadhal.

1. Poriyalarithal:

Physician’s Pori and Pulan are used as the tools for examining the Pori, Pulan of the patient. Pori is the five organs of Perception. They are nose, tongue, eyes, ears and skin. Poriyalarithal is examining the Pori of the Patient by the Physician.

They are

1. Nose.
2. Tongue.
3. Eye.
4. Skin.
5. Ear.

2. Pulanalarithal:

Pulan is the five object of sense namely smell, taste, sight, sensation and sound. Pulanalarithal is the examination of the pulan of the patient by the physician.

1. Smell.
2. Taste.
4. Sensation.
5. Sound.

3. Vinaadhal:

By Interrogation the physician knows about the patients name, age occupation, native place, socio-economic status, family history, diet habits, prone for any allergens, period of illness, history of previous episode,
frequency of attacks by change of season, relevant history of treatment and habits etc.

**Envagai Thervugal or Piniyari Muraimai.**

Envagai Thervugal is the siddhars diagnostic methods. This is described as,

"தரும்பரிசை கருணைம் வீசுதிருப்பு

மலூம் சுத்ரியிலையுள் மாற்றத்துப் போன்றோம்"

- இன்றும் முன்னிலான கி.மு - பகுதியை

"தரும்பரிசை விபறி கருணை பார்க்கிற்றோம்

நூற்றுக்கு மேலான வீசுதிருப்பு

திறைக்குறிக் கொண்டு காணை காட்டோம்

தச்சங்காளத் விளையாட மாற்றம் நோய்க்க

பிறந்துள்ள சுத்ரியிலையுள் மாற்றம் நோய்க்க

புளோயூர் மற்றும் பம்பியாய் காரணம்

புளோயூர் செலவால் பயன்வந்த இலக்கிணியால்

புளோயூர் காரணம் பயன்வந்த இலக்கிணியால்"

- கருணை நோய்

In Agasthiyar vaidhya Vallathi-600, Envagai Thervugal has been mentioned as “Attavitha Paritchai”,

நிகுத்தங்கள் அவளின் புலம் கண்டோம்

நிகுத்தங்கள் புலம் கண்டோம்

புளோயூர் ஆக்கம் சிறுத்துபோம்

புளோயூர் ஆக்கம் சிறுத்துபோம்

புளோயூர் ஆக்கம் சிறுத்துபோம்

புளோயூர் ஆக்கம் சிறுத்துபோம்

புளோயூர் ஆக்கம் சிறுத்துபோம்
Envagai thervugal are

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

1. **Naa (tongue)**

   The tongue is the organ of taste and speech. We perceive taste, through the tongue when it is wet. Dry tongue cannot perceive taste. The tongue is also the vital organ of speech, used to convey in words, the thoughts, concepts, ideas and feelings. Examination of this important organ reveals the totality of what is happening in the body. Look the patient's tongue; observe the size, shape, surface, margins and colour.

2. **Niram (colour of the skin)**

   Colour indicating vaatha, piththa, kabha and tridoshas, yellow or pallor or black of redness of the skin, any bluish discolouration of the face, conjunctivae and Nail beds.

   In Karappan blackish discolouration present in the affected area.

3. **Mozhi (voice)**

   Clarity of speech, (or) any disturbances, loud voice, slurring, crying, talk induced by hallucination, undue argument, breathlessness, can be made out. Different respiratory sound and abnormal sounds are also observed.
4. Vizhi (eye)

Eyes that are small and blink frequently show a predominance of vaatha in the body. Excessive blink shows deep-seated nervousness and anxiety or fear. A drooping upper eyelid indicates a deranged vaatha.

Any abnormal change of colour, shape of eye, size of the pupil, lacrimation, bleeding, eyelashes and eyebrows must be noted.

5. Sparisam (Palpation)

Dryness of the body, temperature state of the body, sweating, oozing, enlargement of viscera, malnutrition, any palpable mass, tenderness, touch sensation, fissured skin, thickening of hair, loss of hair, chillness of palm, sole, nose, ear, abdomen, roughness of the skin, thickening, patches, pigmentation, itch, vesicles, ulcer, emaciation and oedema are noted.

In Mandai karppan the skin is rough, oozing, tenderness, thickening are found.

6. Malam (fecas)

Quantity, colour, odour, froth, consistency including indigestion, blood stained, mucus content, frequency, constipation etc.

7. Moothiram

Quantity, colour, froth, frequency, retention, deposit, heaviness, presence of abnormal constituents like albumin, sugar and deposits etc.

8. Naadi

The examination of Naadi is used in diagnosis and prognosis of the disease.

Any how in general, the changes in thridhosha are best diagnosed by feeling the Naadi. The power of Naadi manifests in the body as three vital forces namely Vaatha, Piththa and Kabha, these three Uyirthathukkal which organise, regularise, and integrate the life activities in each and every live being.

Kabha Naadi generally affected in skin diseases, including Mandai Karappan.
This is quoted as follows,

"தருத்தப்பு ஒன்றுக்குவிட்டவுடா இந்த நோய் சம்பாதிக்கும் பாதை என்று
செய்வு நோய்கள் பாதகம் கூறப்
செல்வாய்வு காரணி விளக்கத் தீர்க்க
பிரிக்க மேற்கு மருந்தான் மித்தியஸ்யத்
பாதாந்தத்தில் கருவ கிளை விளக்கத் தீர்க்க
முந்தே சுத்தம் வந்து சுருக்கி பருவம் குறுக்கொன்று
செல்வாய்வு காரணி ராசியை வேறுபடு
சுருக்கான் பால் குறுக்கே விளக்க

-சுதுரு

It is also stated that if vitiated vaatha is mixed with raised ushnam, it indicates the skin disease, mandai Karappan. This is known as,

“மித்தியஸ்யத் மார்க்கணி முழுமையாக கனவாரையிட
செல்வாய்வு கிலை விளக்கத் தீர்க்க
செல்வாய்வு பார்ப்பு அற்புத்தம் நேரமும்
செல்வாய்வு சுத்தம் வந்து பிரிக்கானையிட
பிரிக்கானையிட கிளை காரணியின் நூறு
பிரிக்கானையிட பார்ப்பு பற்றியிட கேட்டுகொண்டு
அந்தப்படி பலோ குறுக்கே உறு
அற்புத்தம் பிரிக்கானையிட மேற்காக்க

-சுதுரு

NEERKURI AND NEIKURI

Based upon the clinical features of a disease and Naadi, the diagnosis is further confirmed by the support of Neerkuri and Neikuri.
Collection of urine for the determination of Neerkuri and Neikuri.

The patient must take well-cooked food in the previous day. The intake must be proportionate to the degree of his appetite. Food intake should be taken, at appropriate time. He must have sound sleep on the previous night. The urine is collected on the dawn of the next day in a glass container and closed immediately to prevent from the contact of external atmosphere. This specimen must be examined within 1 ½ hours. This procedure should be followed strictly in order to get accurate reading of Neerkuri and Neikuri.

**NEERKURI:**

Urine has the following features

1. **Niram**
2. **Edai**
3. **Manam**
4. **Nurai**
5. **Enjal**

"நிரம் வழிகலை கால் மேற்கு கால்வைகளை செய்வதை பிந்தையது ஆனந்தகலை முன்னாலும் மறுத்து செய்வத்துப் பின்புறம் அடமண்டில் பொருளில் புனைப்பிட்டு போக்கும் பாதம் இ 1"
NEIKURI:
The diagnosis and prognosis of Dhosha derangement of the diseases are studied on the basis of the behaviour by drop of gingily oil on the surface of the urine kept in a wide vessel in the sunlight.

Methods for the determination of three dhosha’s derangement by adding a drop of in the urine as follows.

“இறைந்த கேள் கலர்கள் தினமல்ல கிளி
சிக்க வைக்கத்தில் போர் கிளைகள் தினமல்ல
சிக்கத்தில் சென்று வெள்ளி வலை கைந்துருகி
சிக்க வைக்கத்தில் போர் கிளைகள்
சிக்கத்தில் போர் வைக்கத்தில் போர்

- சுவீரல் சுருங்குப்பொறியல் - பகுதி 1

The process of oil indication:
The urine specimen is collected and analysed as follows.

The specimen is kept in a glass dish, well exposed to sunlight. It should not be disturbed by the wind. Then add one drop of gingily oil by a glass rod. Observe keenly about the position and spreading of the oil drop.

“அரிவேச உரிசையும் ஆடே காகியும்”
“உயரீழ போரேளியா அரசு பிறந்து”
“பெருங்காலி குறிக்கும் போரேளியா கைறு”

If a drop of oil spreads like a snake it indicates the vaatha disease, it spreads like a ring it indicates piththa disease, and it spreads like a pearl it indicates kabha disease.

In Mandai Karappan, the oil spreads like a pearl.
NOI KANIPPU VIVATHAM (Differential Diagnosis)

Mandai Karappan is differentiated from other Seventeen types of Karappan in Balavagadam by its clinical features

The differentiating features are,

1. Pain in the neck.
2. Skin folds of the neck and joints become fissured and ulcerated.
3. Erythematous papules associated with excoriation and serous exudates occur on the legs, arms, skin folded areas and sometimes all over the body.
4. Pruritus.
5. Formation of erythema on the affected area, due to itching.
6. Vesicles, then crusting.
7. Foul smelling discharge in the ulcers.
8. Emaciation.
9. The skin becomes dry and scaling.
10. Sometimes the oozing contain blood. (Serous exudate)
11. General debility including tremor.
12. Mandai Karappan is differentiated from sirangu (scabies).
   Scabies is caused by the mite, “Sarcoptes scabiei”.
13. Mandai Karappan is differentiated from Padarthamarai (Ring worm infestation).
   Padarthamarai is a fungal infection and it is caused by “Tinea”. The lesions consist of circular or irregular patches with very well defined margins, which were studded with small papulo-vesicular lesions.
1. Mandai Karappan is differentiated from Kalanchagapadai (Psoriasis). In psoriasis there is a prominent silvery scaling and pinpoint bleeding, scalp also involved.

2. Mandai Karappan is differentiated from kuttam (Leprosy) In Leprosy, the causative organism is “Mycobacterium leprae”, it is a granulomatous inflammatory disease, affecting skin and nerves

MARUTHUVAM: (Treatment)

The siddha way of treatment is comprised of the five principles. Defaecation, fasting, perspiration therapy, emetics, and oilisation therapy.

The line of treatment consists of,

1. Regulation of affected kutram.
2. Drug for the disease.
3. Pathiyam.

Prior to the main treatment, the above principles will be followed to regulate the affected kutram. In Mandai Karappan Vatha affected mainly then Piththa and Kabha.

“In Kranthamalai Vitha Manjavum” -  ஓடு

“Veenarchathanam Vadhayum Atukum”

“Karantha Nee Karpam Saline Thokkum Kudum
Kudumala Karelippu Thoorgum Naddum
Saknakunjam Nee Karuppan Thodum”

-Neelahayam Vetha Mullum Thalum - Makkam 1

In this case, the siddha text has specified an anthelmintic along with laxative to be given before the starting of the main drug.

The trial drug Mandai karappan Thylum has the anthelmintic property, so laxative to be given before the starting of the treatment.
PATHIYAM (Diet)

Pathiyam forms an important part of treatment. Certain dietary and other restrictions are imposed in relation to the disease or the drug.

Various siddha classical books say the importance of Pathiyam.

In kadum Pathiyam (strict diet) a small quantity of fried salt is added to cooked rice which is eaten after adding hot water. This has to be followed during the entire period of taking medicine and then re-dieting is prescribed in which burnt tamarind, unripe brinjal and drumstick are also added.

KAPPU (Prevention):

In Mandai karappan, intake of cholam, kambu, varagu, sundaikkai, mutton, pakar must be avoided.

When the baby is breast feeding, mother must avoid the above.

Daily diet must contain uncooked vegetables and cooked green gram or bengalgram at least once a day.

In bathing, Kasthuri manchal along with green gram powder must be used.

Detergents, shampoo must be avoided.
MODERN ASPECTS

Embryology

Origin of the skin

The whole of the skin, epidermis and dermis are unified integrated organ system, it develops from two different primitive embryonic layers—epidermis from the ectoderm and dermis from the mesoderm. The most superficial layer of flattened cells is called periderm. During the third month of foetal life, three layers of cells are recognizable, the periderm, the intermediate and the basal layer which is close to derma. The basal cells multiply rapidly and keep pushing the older cells towards the periderm and thus by the fifth month a stratum of these cells (prickle cells) superficial to basal cells forms a definite stratum Malpighii. End of second month of intra-uterine life, the derma consists of closely packed, spindle-shaped mesenchymal cells and by the third month of intra-uterine life, fine reticulum fibres are demonstrable, which later increase in number and thickness and form the collagenous fibers. The elastic fibres appear during the sixth month the foetal life.

The subcutaneous fat is apparent by the end of third month of intra-uterine life, but becomes abundant only during the later months of foetal life. The nail starts as an epidermal specialization on the dorsum of the tips of the digits by the third month of foetal life. Most of the sebaceous glands in the body develop in connection with hair follicles during the fifth month of foetal life.

The skin is composed of a superficial epithelial layer— the Epidermis and underlying connective tissue layer, the Dermis (or) Corium. Beneath the Corium is another connective tissue layer, rather loose in texture— the ‘Hypodermis’ (or) subcutaneous layer.
**Epidermis**

The epidermis is formed of non-vascular stratified epithelium. Its usual thickness is between 0.07 mm and 0.12 mm. The epidermis is mainly two divisible they are keratinising (or) Malpighian system (Keratinocytes) which forms the bulk and the pigmentary system (Melanocytes) which produces the pigment.

There are seven layers in the epidermis.

1. **Stratum Germinatum or Stratum Basale**

This is the deepest portion of the epidermis and is composed of columnar cells placed perpendicular to the skin surface. The whole of the epidermis germinates from this stratum, hence the name stratum Germinatum.

2. **Stratum Malpighii (or) the prickle cell layer**

It is superficial to the base cell layer and is composed of several layers of polyhedral cells connected to each other by intercellular brides.

3. **Stratum Granulosum**

It is composed of flat, fusiform cells which are one to three layers thick. It is superficial to the Stratum Malpighii. These cells contain irregular granules of Keratohyalin.

4. **Stratum Lucidum**

It is pale and wavy looking layer, present superficial to the stratum granulosum. This layer contains refractile droplets of eleidin.

5. **Stratum Corneum**

This is the most superficial layer, the outer surface that is exposed to the atmosphere. It consists of many layers of non-nucleated, flattened, cornfield cells.

6. **Dentritic cells of Epidermis**

These are melanocytes, Langerhan’s cells and indeterminate cells. The cells of langerhan’s are found in the middle of epidermis
7. Basal lamina (Basement Membrane)

Dermal side of the basal lamina contains of few scattered collagen fibres.

**Dermis**

The dermis is bounded distally by its junction with the epidermis and proximally by the subcutaneous fat. The base of the dermis is a supporting matrix (or) ground substance in which polysaccharides. The matrix contains two kinds of proteins. They are

- **Collagen** - When has great tensile strength
- **Elastin** - Which has considerable elasticity

Hair follicles, various types of sebaceous and sweat glands, plain muscle fibres, and sensory end organs like pacinian and adipose tissue are seen in the microscope section of the dermis.

The dermis contains few cells, which are fibroblast mast cells, histocytes (or) macrophages, lymphocytes (or) other leucocytes and melanocytes. In the deeper layer of dermis then in arterio venous anastonomosis surrounded by sphincter group of smooth muscles under autonomic control.

**Sebaceous glands**

They are situated in the upper half of the Corium. The Sebaceous glands are derived from the epithelial cells of the hair follicle and present everywhere in the skin except on the palms and soles.

They are multi lobulated and covered by a connective tissue capsule within which is a layer of small epithelial cells. As these cells mature towards the center of the lobules and they enlarge, their cytoplasm becoming arranged in a delicate network surrounding globular of fat (Sebum)
Sweat glands

These are found in all areas of the skin. The sweat glands originate as down growths from the epidermis. They consist of a single unbranched tube which terminates in the form of a coil in the mid-corium.

The coil is the secretary segment and is lined by a single layer of epithelial cells. The duct runs straight upwards from it to the epidermis, which it transverses in a corkscrew meshwork of horn cells.

Apocrine glands

They occur in the axillae, areola and nipples of breasts, umbilicus, around the anus and the genitalia. The myo-epithelial cells are highly developed and more abundant in these glands. They are specified sweat glands and their secretion is odoriferous with a secondary sexual significance.

Hair

Hair is found on almost every part of the body surface except on the palms and the soles, the dorsal surface of the terminal phalanges, the inner surface of the labia, the inner surface of the prepuce and glanspenis. Hair growth development is under endocrine control.

Hair is made of hard keratin and is analogous to nail. It is formed by the hair matrix, a layer of specified epidermal cells. Capping the papilla, the two structures making up the hair bulb. Melanocytes are present in the matrix and form the pigment of hair. The portion of a hair below the surface of the scalp is known as the hair root. Above the surface of the scalp the hair is composed of the medulla, cortex and cuticle.

The medulla consists of seven rows of soft keratin, but is discontinuous (or) even absent in most human hairs. The cortex is the main structural component and is made up of tightly packed fusiform keratinised cells.
Nails

These are semitransparent plates like structures, covering the dorsal surfaces of the distal phalanges of the fingers and toes. The nails are composed of many layers of flattened keratinised cells fused into a homogenous mass. They arise from epidermis lining and invaginating of skin at the base of the nail, this specialized epidermis known as the nail matrix. The invagination of skin at the base of the nail is called the nail fold. The anterior border encourches upon the nail plate as a flattened keratinous rim, the cuticle and forms a protective barrier against irritants and infections.

Blood Vessels

The blood supply of the skin originates from the large number of arteries forming anastamosis in the deepest part of cortex. From here single vessels run upwards and form a second network in the upper cortex finally termina; arterioles ascend into the papillae ending in capillary loops, which drain into connecting venules. The blood is returned to the large veins in the subcutaneous tissues.

Lymphatics

The skin contains a rich net work on lymphatics which drain into a few larger vessels in the hypodermis.

Nerve supply

The nerve supply of the skin consists of a motor sympathetic portion derived from the sympathetic ganglia. The sympathetic fibers innervate the blood vessel, erector pilorum muscles and apocrine duct, where the fibers are adnergic and cause contraction.

Physiology

Protective function

The epidermis and subcutaneous fat play roles in the protective functions the mechanical properties of the skin depends mainly on the dermis. It protects the penetration of harmful substances and bacterial
invasions. Another is to protect against sunlight by synthesis and bacterial invasions. Another is to protect against by synthesis of Melanin pigment.

2. Immunological function

The skin is in the front line of the defence of the body. In essence the defences involve the production of antibody- complex, multi hair proteins, which bind with the offensive antigens. Langerhans cells probably play a crucial role in connect sensitisation, immuno surveillance against viral infections and neoplasms.

3. Sensory functions

The skin is richly supplied with nerves and various types of specialized sensory end – organs which provide information regarding environment changes, so that body can then adjust its activities accordingly. In some animals the hair at certain situations have specialized sensory receptors located at the bases of the hair follicles which serve to enhance sensory appreciation.

4. Secretion and Excretion

The skin possesses various types of glands, which pour secretions on the surface. The more important glands are the sweat and the sebaceous glands. The ecdocrine glands which are scattered all over the body surface secrete a thin transparent watery fluid known as true sweat, which the apocrine glands secrete a thicker rather milky and odoriferous solution. Sweat in its composition consists of 1.2% solids and 98.8% water. The substances excreted in it are Sodium chloride, Sodium phosphate, Sodium bicarbonate, Keratin and small amount of urea. The skin can also excrete drugs administered to the individual for example mercury, arsenic, iodine etc.

The sebaceous glands of the skin secretes sebum, which is composed of fatty acids, cholesterol, alcohol, etc. Fatty acids have a mild fungistatic activity. The sebum acts as a lubricant for the drying effects of the atmosphere.
5. Synthesis of vitamin ‘D’

Vitamin ‘D’ is synthesized in the skin as a result of exposure to ultra violet ‘B’ (UVB) radiation and since it is carried in the blood attached to a binding protein to exercise a specific effect at a different site. Vitamin D5 is essential for skeletal development and it contains antirachitic properties. Vitamin D3 is formed principally in the stratum spinosum and the stratum barale, from the precursor 7 dehydro cholesterol by way of a provitamin D3 (2,5).


The skin plays the most important role in the regulation of heat loss. It loses heat to the external environment in three ways by conduction, by radiation and by evaporation, Heat loss by the first two mechanisms takes place when the enviromental temperature is lower than that of the skin. Heat loss by evaporation mainly means the amount of heat spent by the body to evaporate the sweat from the surface of the skin. About 90% of the total loss of the body is regulated by the skin. The heat loss through the skin is regulated by various physiological mechanisms, which include,

➢ The reaction of the cutaneous vessels
➢ The reaction of the smooth muscle fibres of the skin and
➢ Perspiration

7. Endocrine functions

Hair follicles and sebaceous glands are target for the organic steroids secreted by the gonads the adrenal cortex and melanocytes are directly influenced by polypeptide hormones of the pituitary.

8. Storage function of skin

Blood is stored in the rich sub papillary plexuses of the dermis, about one litre. The skin is also a good storehouse of ergosterol which is irradiated by the ultra violet light of the sun and converted into vit ‘D’

The junction between dermis and hypodermis has a considerable capacity for storing fat and permanent store of subcutaneous adipose
tissue. Certain substances like glucose and chloride may also be stored in the skin temporarily. Cornfield layer also acts as a reservoir for topically applied cortico-steroids (or) other hormones, which are absorbed slowly for many days from the surface.

9. Absorption

The skin can absorb substances dissolved in fatty solvents like vitamins and hormones. Information greatly increases the skin permeability. Substances that are completely insoluble in water and lipids do not penetrate.

10. Gaseous Exchange through skin

A small amount of gaseous exchange occurs through the skin. In man the amount of Co exchange through the skin is negligible compared to the amount exhaled from the lungs.
ECZEMA

Synonym: Dermatitis

It is a common problem all over the world. Eczema is a Greek word. The word implies ‘boil out’

Definition:

Eczema is a non-contagious inflammation of the skin characterized by erythema, scaling, oedema, vesiculation and oozing.

Eczema is a specific type of allergic cutaneous manifestation of antigen antibody reaction. It is characterized by superficial inflammatory oedema of the epidermis associated with vesicle formation. Itching varies from mild to severe paroxysms which may even interfere with work and sleep.

The natural history of Eczema is diagrammatically represented as follows.

Age of onset:

Infancy, at puberty and at time of menopause.
Etiology:

Basically two factors causes eczema.

- Allergic or a sensitive skin.
- Exposure to an irritant.

**General predisposing causes are**

- Age
- Familial predisposition
- Allergy
- Debility
- Climate
- Psychological factors.

**Local factors**

- Xeroderma or ichthyosis
- A greasy skin.
- hyperhidrosis
- Varicose veins.

**Exciting and aggravating factors**

*Irritants* – Physical, Chemical or electrical

*Sensitizers* – Plants, cosmetics, clothing, medicaments and occupational hazards

*External infections* – streptococci, staphylococci, fungus etc.

Mental and emotional conflicts, strains and stresses. Internal septic focus-shedding toxins or causing bacteraemia.

**Diet and state of digestion**

*Diathesis* – Allergic, Xerodermic, hyperhidrotic or seborrheic

*Drugs* – Given for the disease or otherwise state of local or general nutrition

*Climate* – Temperature and humidity.

**Morpho-Clinical Classification**

It is acute, sub – acute and chronic stages.
The acute stage is characterized by itchy erythema followed by oedema, papules, vesicles, Oozing and crusting. This stage does not last long. In about a couple of weeks the lesions start to heal.

If the cause persists and the eczema last over months or years, it becomes chronic. In such cases, the integument appears thickened and pigmented with prominent criss – cross markings (lichenification). This is the end result of all types of long – standing eczemas.

In between the acute and chronic stages is the sub-acute stage, characterized by papules and scaling with moderate oedema and erythema.

**Classification**

- Photo dermatitis
- Contact dermatitis or chemical eczema
- Infective eczema
  - Post traumatic infective Eczema
  - Follicular Infective Eczema
  - Flexural Infective Eczema
- Endogenous Eczema
  - Infantile Eczema
  - Atopic Eczema
  - Nummular Eczema (Discoid Eczema)
  - Disseminated Eczema (Eczematides)
  - Cheiropompholyx (Dyshidrosis)
- Varicose dermatitis or Eczema.
- Neurodermatitis and etc.
ATOPIE ECZEMA

Synonym:

Besnier’s prurigo. It is also called Asthma-Eczema syndrome.

Many types of Eczema occur in children, the most common is atopic dermatitis. Atopic Dermatitis (AD) is a highly pruritic skin disease that affects more than 10% of children.

Atopic dermatitis is a chronic relapsing dermatitis characterized by pruritis occurring in early childhood. Disease is rarely present at birth but may start the age of 3 months. The onset may be delayed in some cases. The classical features are erythema, exudation, lichenification and intense itching.

There is a strong familial predisposition to allergic diseases like asthma, present. The eczema is characterized by a selective flexural distribution, extreme chronicity with acute exacerbations from time to time a familiar and personal allergic predisposition and a very sensitive emotional nature.

The eczematous process is usually the result of endogenous sensitization but exogenous allergies may also play a part. The exogenous allergies can be proved by patch tests a dendogenous sensitization can be proved by scratch tests, which show allergy to multiple agents. There is more than normal susceptibility to develop passive transfer antibodies in the blood serum (prausnitz kustner reaction). Besides allergens, emotional stresses and parental attitudes can also cause this condition. The atopic patient is also very sensitive to physical stresses like heat, cold and humidity and also infection. There is also vasomotor sensitivity.

Etiology

- Emotional – by psychiatric evaluation of the patient’s home, parents occupation and other environments.
- Allergie – by a search into his diet eternal contacts and inhalants if any.
Age

Early childhood (O.P.Ghai – page 634)

The earliest presentation before the age of 3 months may be like that of seborrheic dermatitis.

Some patients go on to full-fledged infantile eczema by the age of 3-4 months. As the age of child advance, Flexural eczema develops.

Pathogenesis:

Complex interactions between genetic, environmental, and immunologic factors contribute to the pathogenesis of AD.

There is strong epidemiological association between atopic dermatitis, allergic rhinitis, asthma and immune deficiency disorders such as wiskott Aldrich syndrome. It is now widely believed to be a late phase IgE mediated reaction due to a constitutional anomaly in the Immune system. The disorder maybe triggered by an extrinsic allergen. Scratching of skin to relieve itching encourages entry of potential allergens such as resident flora of the skin viz., staphylococci and even pneumococci. These further exacerbate the inflammation of the skin setting up a vicious cycle. Factors released from inflamed skin perpetuate further changes in the dermal and circulating immune competent cells and set up a second vicious cycle.

Systemic immune response

Most patients with AD have peripheral blood eosinophilia and increased serum IgE levels. Peripheral blood T cells from AD patients produce decreased amounts of Interferon-gamma (IFN-y), an inhibitor of T helper type 2 (Th2) cell function. If N-ymgeneration ex vivo is inversely correlated with serum IgE concentrations in AD. An increased frequency of allergen-specific T cells producing increased interleukin IL-4, IL-5, and IL-13 in the peripheral blood of patients with AD contributes to the eosinophilia and increased IgE levels in AD.
**Immunology**

Sensitization develops when a different clone of T-lymphocytes is activated. The sensitized T-lymphocytes yield two sub-populations of lymphocytes, viz., memory cells that are responsible for the persistence of contact allergy and the effector cells that the allergic response when appropriately challenged.

**Histopathology**

Characteristic features are intercellular oedema and vesicle formation. There may be mild to moderate dermal reaction.

In chronic cases hyperkeratosis, acanthosis and infiltration of upper dermis with lymphocytes are seen.

**Clinical features**

The earliest presentation before the age of 3 months may be like that of seborrheic dermatitis. Erythematous squamous lesions first appear on the scalp behind the ears around the nose, buttock or genital region. Itching may not be as pronounced most cases resolve in 4-6 weeks without leaving any residual sequel, but some patients go on to full-fledged infantile eczema by the age of 3-4 months.

Clinically, there are 3 stages of atopic eczema

- Infantile stage
- Childhood type
- Adult type.

1. **Infantile eczema**

This occurs in children between the ages of 3 months and 2 years. It manifests as rosy erythema over the cheeks. There is brown desquamation, small papule formation and some crusting. The skin folds behind the ear become fissured and neck creases appear sudden. These may be secondarily infected with candida. Etensor surfaces of arms, legs and wrist may show dryness and scaling. Generally perioral, Periorbital and nasal regions are spared. Itching is marked. The typical lesions are
characterized by erythema, vesicles, exudation and crusting. Buttocks generally escape because of protective clothing. But in some cases, on the buttocks and in the groins, napkin rash like dermatitis may develop. Most children show a resolution by the age of one or 2 years, but the illness may continue with remissions and exacerbations in few cases.

The typical lesions are characterized by erythema, vesicles, exudation and crusting. Pruritis is a prominent symptom it comes in spasms. The progress is marked by spontaneous remissions and exacerbations. Teething digestive upsets change of season, dietetic indiscretions and tantrums affect the condition adversely and may even cause flare-ups. To start with, the infants are usually plump. They soon go off food, have restless days and nights resulting in debility, misery and fretfulness. The general belief is that there are 2 types of infantile eczemas.

**Types of Infantile Eczema**

*a. The atopic variety*

With high familial predisposition to allergic disease – These are rather resistant to treatment. The infant becomes restless and fatigued very irritable and pruritic. The condition develops later into typical atopic dermatitis.

*b. The simple variety*

Without familial predisposition – The infants are plump and good natured. Itching is moderate. These do well with treatment and the child recover completely by the age of two.

Infantile eczema is not infectious. Contact eczemas are rare in infancy for two reasons. Firstly, sensitivity is extremely uncommon before puberty and secondly chemical contacts are few.

**2. Childhood Atopic Eczema**

This type in which the main lesions are lichenoid and succulent, polyhedral papules. The eczema may become generalised on the face, trunk, flexural folds of the extremities. It starts at about the age of five,
either as such or as continuation of infantile eczema: this goes on till the age of about twelve.

**Flexural eczema**

As the age of the child advances the lesions become more pronounced over the flexures of the elbows, kness, neck and front of ankle. There is redness, scaling and lichenification.

**Diagnostic criteria**

Hanifen and Rajka defined major and minor criteria for diagnostic accuracy of atopic dermatitis. Three major and three minor criteria should be present.

**Major criteria**

- Pruritus.
- Facial and extensor eczema in infants and children.
- Tendency to chronicity.
- Personal or family history of atopy such as asthma, allergic rhinitis or atopic dermatitis.

**Minor criteria:**

- Pityriasis alba
- delayed blanching to cholinergics
- Anterior subcapsular cataract
- Xerosis
- Ichthyosis vulgaris with accentuation over palmar creases.
- Facial pallor
- Suborbital shadowing
- Infraorbital folds
- Keratoconus
- Recurrent skin infections.
- Tendency to non-specific dermatosis of hands
- Raised serum total IgE.
Diagnosis

The diagnosis is made mostly on clinical grounds and personal (or) family history of atopy.

Differential Diagnosis

A number of inflammatory skin diseases, immunodeficiencis, skin malignancies, genetic disorders, infections disease and infestations share symptoms and signs with AD and should be considered and excluded before a diagnosis of AD is established.

Wiskott-Aldrich syndrome is an X-linked recessive disorder, associated with thrombocytopenia, immune defects, and recurrent severe bacterial infections, characterized by a rash almost indistinguishable from AD.

The hyper IgE syndrome is characterized by markedly elevated serum IgE levels, recurrent deep-seated bacterial infections chronic dermatitis and reclacitrant dermatophytosis.

Treatment

Most Patients can be made to recover if exposures to the causative agents are prevented.

The child should be bathed once or twice in a day using very small quantity of soap or non-soap cleanser in bath water. This is done to prevent drying of epidermis. After bath, he should be palled dry with towel and emollients and topical medication should be applied on the still wet skin.

Systemic antibiotics should be given for 7-10 days to treat secondary bacterial infection. A low concentration corticosteroid cream can be applied to relieve inflammation. Prophylactic treatment of staphylococcal carrier sites (nose, axillae and perineum) with topical antibiotics such as mupirocin ointment may be appropriate in-patients with recurrent infected eczema.

Antihistamins relieve itching and also help in relieving the inflammation. Systemic steroid therapy is not advisable.
Allergen exacerbating the lesion should be avoided. Supplementation of diet with large amounts of fish oil containing omega-3 fatty acids show favorable results.

Complications

AD is associated with recurrent viral skin infections. The most serious viral infection is “Kaposi Varicellli form eruption or eczema herpeticm”, which is caused by HSV and affects patients of all ages. After an incubation period of 5-12 days, multiple, itchy, vesiculopustular lesions erupt in a disseminated pattern, the vesicular lesions are umbilicated, tend to crop, and often become haemorrhagic and crusted.

Persons with Ad are susceptible to “eczema vaccinatum” caused by variola virus (small pox), which is similar in appearance to eczema herpeticum and historically follows smallpox vaccination or exposure to individuals vaccinated with smallpox.

Stahylococcus aureus is found on over 90% of AD skin lesions. Honey coloured crusting, folliculits, impetigo and pyoderma are indicators of s.aureus.

Patients with extensive skin involvement may develop exfoliative dermatitis.

Eyelid dermatitis and chronic blepharitis may result in visual impairement from corneal scaring.

Atopic keratoconjunctivitis is usually bilateral and can have disabling symptoms that include itching, burning, tearing, and copious mucoid discharge.

Keratoconus is conical deformity of the cornea believed to result from chronic rubbing of the eyes in-patients with AD.

Prognosis

AD generally tends to be more severe and persistent in young children. Periods of remission appear more frequently as the patient grows older. Spontaneous resolution of AD has been reported to occur after age 5yr in 40-60% of patients affected during infancy, particularly if their
disease is mild. Although earlier studies suggested that approximately 84% of children outgrow their AD by adolescence.

The following predictive factors correlate with a poor prognosis for AD: widespread Ad in childhood, concomitant allergic rhinitis and asthma, family history of AD in parents of siblings, early age at onset of AD, being an only child and very high serum IgE levels.

**Prevention**

Exposure to the causative agents must be avoided. The child should bathe once or twice in a day using non-soap cleanser in bath water.

Avoid detergents and shampoo.
MATERIALS AND METHODS

MATERIALS

The study on clinical evaluation of the disease Mandai Karappan was carried out in the Post Graduate Kuzhanthai Maruthuvamm Department at Government Siddha Medical College, Palayamkottai.

Twenty cases with clinical signs and symptoms of Mandai Karappan of both sexes below the age group of 1 to 12 were selected and studied under the guidance of the Professor and lecturer of Post Graduate department.

SELECTION OF PATIENTS

Cases were selected from out patients and the parameters for the case selection were acute and chronic onset of itching, erythema, papules, vesicles, oozing, pustules, lichenification, discoloration and pain in the neck. All the cases were carefully examined before admission for correct diagnosis and rule out any other coexisting illness.

The patients were advised to withdraw all other forms of medicine to follow regular diet schedule.

METHODS

Patients were subjected to physical examination on siddha methodology “PINIYARI MURAIMAI”. It has 3 main principles which are poriyalarithal, pulanalarithal, vinathal and effected through Envagai thervugal.

The history of dietetic habits, allergic history, familial predisposition and the nilam from which they come were also noted. The patients were examined for udal vanmai and mukkutra nilai.

The above details were studied for arriving at a correct diagnosis.
INVESTIGATIONS

Clinical investigation of siddha and modern medicine were adopted for diagnosing the disease Mandai karappan.

Siddha diagnostic tests are especially Neerkuri and Neikuri.

Modern diagnostic test such as

- Blood test for TC, DC, ESR and Hb.
- Urine analysis for sugar and albumin,
- Fecal for ova and cyst.

METHOD OF TREATMENT

Siddha system of medicine is based on mukkutra theory and hence the treatment is mainly aimed to bring down the thridhosha to its normal state and thereby, restoring the physiological condition of the three thathu’s.

In all the twenty cases internal medicine “Karappan Thylum” (கரப்பன் துளம்) and external medicine “Karappan Mel Poochu Thylum” were given and clinical evaluation carried out in the In-Patient ward of post Graduate Department of Kuzhanthai Maruthuvam, Government Siddha Medical College Palayamkottai.

Bio-chemical analysis and pharmacological evaluation of the drugs were conducted in the Biochemistry and pharmacology department of Government Siddha Medical College, Palayamkottai respectively.

The internal medicine, Mandai Karappan Thylum was given for internal medicine. The dose is adjusted according to the age of the patient.

The external medicine, Karappan Mel Poochu Thylum was given for external medicine especially in dry conditions. Clinical improvements in these in-patients were noted with the available laboratory tests.
RESULTS AND OBSERVATIONS

Results were observed with respect to the following criteria:

1. Age Reference
2. Sex Reference
3. Religion Reference
4. Economic status of the patient Reference
5. Diet Reference
6. Family history Reference
7. Paruva Kaalam
8. Mode of onset Reference
9. Clinical features of Mandai karappan during admission Reference
10. Thridhosha Theory
11. Ezhu udarkattugal Reference
12. Envagai Thervugal Reference
13. Neikuri Reference
14. Etiology Reference
15. Results after treatment Reference

The observations recorded with the above said criteria were given in the tabular column form.

Table 1: Sex Reference

<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 children</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>2</td>
<td>Female children</td>
<td>4</td>
<td>20%</td>
</tr>
</tbody>
</table>

Out of the 20 patients, 16 were male children and 4 were female children.
Table 2: Age Reference

<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>0-1 year</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>1-3 years</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>3-6 years</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>6-12 years</td>
<td>19</td>
<td>95%</td>
</tr>
</tbody>
</table>

Out of 20 patients 5% were 0 to 1 year and 95% were 6 to 12 year

Table 3: Religion Reference

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Religion</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hindu</td>
<td>14</td>
<td>70%</td>
</tr>
<tr>
<td>2</td>
<td>Christian</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>3</td>
<td>Muslim</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

Out of 20 patients 75% were Hindus, 25% were Christian and 5% were Muslim.

Table 4: Socio-Economic status of the patient

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Socio-Economic Status</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor</td>
<td>14</td>
<td>70%</td>
</tr>
<tr>
<td>2</td>
<td>Middle</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>3</td>
<td>Rich</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Out of the 20 patients, 14 were in poor and 6 were in middle socio-economic status.

Table 5: Diet Reference

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Diet Habit</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vegetarian</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Mixed diet</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Out of the 20 patients, all twenty were mixed diet intakers.
Table 6: Family history Reference

<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</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Negative</td>
<td>18</td>
<td>90%</td>
</tr>
</tbody>
</table>

Out of the 20 patients, 10% had the positive family history.

Table 7: Etiology

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Etiology</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Contact Allergy</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>2</td>
<td>Positive family history</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>Food Allergy</td>
<td>10</td>
<td>50%</td>
</tr>
</tbody>
</table>

Regarding etiology, 2 patients had the positive family history, 3 had contact allergy and 10 had food allergy.

Table 8: Paruva Kaalam

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Paruva Kaalam</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaar kaalam (Auvani &amp; Puratasi)</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>Koothir kaalam (Iyypasi &amp; Karthigai)</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>3</td>
<td>Munpani kaalam (Markazhi &amp; Thai)</td>
<td>7</td>
<td>35%</td>
</tr>
<tr>
<td>4</td>
<td>Pinpani kaalam (Maasi &amp; Panguni)</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>5</td>
<td>Elaveni kaalam (Chithirai &amp; Vaikasi)</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>6</td>
<td>Muthuvenil kaalam (Aani &amp; Aadi)</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Out of the 20 patients, 7 were admitted in munpani kalam.
Table 9: Mode of onset

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Mode of onset</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acute</td>
<td>5</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>Chronic</td>
<td>15</td>
<td>75%</td>
</tr>
</tbody>
</table>

Among the 20 patients, 5 had acute onset and 15 had chronic onset.

Table 10: Clinical features of Mandai karappan during admission

<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>Itching</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Erythema</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>3</td>
<td>Papules</td>
<td>10</td>
<td>50%</td>
</tr>
<tr>
<td>4</td>
<td>Vesicles</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>5</td>
<td>Oozing</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>6</td>
<td>Pustules</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>7</td>
<td>Ulcers</td>
<td>12</td>
<td>60%</td>
</tr>
<tr>
<td>8</td>
<td>Edema</td>
<td>11</td>
<td>55%</td>
</tr>
<tr>
<td>9</td>
<td>Scaling</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>10</td>
<td>Lichenification</td>
<td>8</td>
<td>40%</td>
</tr>
<tr>
<td>11</td>
<td>Discolouration</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>12</td>
<td>Emaciation</td>
<td>2</td>
<td>10%</td>
</tr>
</tbody>
</table>
Table 11: Tridosha
Table showing the derangement of vaatha

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of vaatha</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pranan</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Abaanan</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>3</td>
<td>Viyaanan</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>4</td>
<td>Uthaanan</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5</td>
<td>Samaanan</td>
<td>4</td>
<td>20%</td>
</tr>
<tr>
<td>6</td>
<td>Naagan</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>2</td>
<td>10 %</td>
</tr>
<tr>
<td>9</td>
<td>Devathathan</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>10</td>
<td>Thananjeyan</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Table showing the derangement of piththa

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of piththa</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anilam</td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>2</td>
<td>Ranjagam</td>
<td>18</td>
<td>90%</td>
</tr>
<tr>
<td>3</td>
<td>Sathagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Prasagam</td>
<td>18</td>
<td>90%</td>
</tr>
<tr>
<td>5</td>
<td>Alosagam</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table showing the derangement of kabha

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Classification of kabha</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Avalambagam</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Kilethagam</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>Pothagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Tharpagam</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Santhigam</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 12: Ezhu udarkattugal Reference

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Udarkattugal</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Saaram</td>
<td>15</td>
<td>75%</td>
</tr>
<tr>
<td>2</td>
<td>Senneer</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>3</td>
<td>Oon</td>
<td>9</td>
<td>45%</td>
</tr>
<tr>
<td>4</td>
<td>Kozhuppu</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>5</td>
<td>Enbu</td>
<td>--</td>
<td>--</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>

Saram and senneer were affected in 20 patients, due to the derangement of vaathaand piththa.

Table 13: Envagai Thervugal Reference

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Envagai Thervugal</th>
<th>No.of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Naa</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>Niram</td>
<td>16</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>Mozhi</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>4</td>
<td>Vizhi</td>
<td>2</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Malam</td>
<td>6</td>
<td>30%</td>
</tr>
<tr>
<td>6</td>
<td>Moothiram</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>7</td>
<td>Naadi</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>8</td>
<td>Sparisam</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Naa, Niram, Vizhi were affected due to the deficiency of senneer and maalam, naadi and moothiram were affected due to the derangement of vaatha. Sparisam affected due to the presence of itch, lichenification, fissures, ulcers and scaling.
Table 14: Neikuri Reference

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Type of urine test</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neerkuri “Vaikkol Niram”</td>
<td>20</td>
<td>100%</td>
</tr>
<tr>
<td>2</td>
<td>Neikuri “Muththothu Nitral”</td>
<td>20</td>
<td>100%</td>
</tr>
</tbody>
</table>

Urine samples of all the 20 patients were showing vaikol niram (straw which was soaked in rain water colour) in neerkuri and muththothu nitral (like a pearl) in neikuri.

Table 15: Results after treatment Reference

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Results</th>
<th>No. of cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good relief</td>
<td>3</td>
<td>15%</td>
</tr>
<tr>
<td>2</td>
<td>Moderate relief</td>
<td>12</td>
<td>60%</td>
</tr>
<tr>
<td>3</td>
<td>Mild relief</td>
<td>5</td>
<td>25%</td>
</tr>
</tbody>
</table>

Out of the 20 patients, 3 had good relief, 12 had moderate relief and 5 had mild relief.
DISCUSSION

Mandai karappan, a clinical entity which is described by siddhars, taken for clinical studies with reference to its etiology, clinical features, prognosis and its response for selective two traditional proprietary siddha drugs viz., Mandai Karappan Thylum internal and Karappan Mel Poochu Thylum for external medicine.

In its clinical feature, primary lesions like itch, rashes, macule, erythema, papules and vesicles. The secondary changes are crusting, ulcers, oozing, edema, pain and lichenification of the skin. In chronic cases, emaciation and fatigue may develop. This study comprises primarily a survey of literature both siddha and modern literature.

According to siddha science, the causative factors are certain foods like maize, ragi and certain types of fish, unripe banana, familial inheritance and syphilis. In modern science, the causative factors are allergic or a sensitive skin and exposure to an irritant.

The disease occurs all over the world irrespective of sex and race. Twenty patients were selected and admitted in the inpatient wards of the kuzhanthai maruthuvam. Post Graduate department of siddha medical college hospital. Patients were questioned of their food habits, familial predisposition and personal allergic history 10% of patients had history of familial predisposition. Literary review shows patients who sufferend from Mandaikarappan ranged between the age group of 3 months to 12 years.

The research study shows that the patients between the ages of 1-12 years were more affected by Mandaikarappan.

Among the 20 patients most of the patients came with itching, vesicles, oozing, discolouration and lichenification. During admission 100% of patients had itching, 20% of patients had oozing, 75% of patients had erythema, 80%of patients had vesicles and 40% of patients had lichenification and 75% had discolouration.

In paruvakaalam, 35% of patients were affected in Margali and Thai (Munpani Kaalam). Vaatha is aggravated of its original state itself during
the months between Aadi to Iyppasi. The aggravation of Vatha during this month aggravates karappan.

In VAATHA, due to its derangement, its types of Pranan, Abaan, Viyaanan, Samaanan, Kirukaran and Devathathan are affected in all 100% of patients. It leads to anorexia, indigestion, derangement of saaram and constipation.

In PITHTHA due to its derangement, its types of Analapitham, Ranjagam and Prasagam are affected in all 100% of patients. It leads to indigestion, anaemia and discolouration of the skin.

The KABAM due to its derangement, its types of Avalambagam, and kilethagam are affected. It leads to indigestion and pain on neck.

According to UDARKATTGAL Reference, Saaram affected 75% and Senneer were affected in all 100% of the patients, leads to saaram and senneer deficiency. In chronic cases 45% oon and 30% kozhuppu also affected. The research study shows, 9 patients were affected by deficiency of oon and 6 patients were affected by kozhuppu.

The diagnosis was made on the basis of Envagai Thervugal, history, macroscopic findings of the skin, and also with available modern investigation methods. Routine examination of blood and urine were done. These investigations were used to rule out any other co-existing illness.

On examination of ENVEGAI THERVUGAL Sparism affected in 100% of the patients, Naa were affected 30% and Vizhi were affected in 10% of the patients, and malam was affected in 30% of the patients. Naa, Niram, Vizhi were affected due to the deficiency of senneer and malam were affected due to the derangement of vaatha.

Urine samples of all the 20 patients were showing Vaikol Niram in Neerkuri and Muthothu Niral in Neikuri. Vaikol Niram according to Seerana Abakkuva Neer Niram due to indigestion. Muthothu Niral according to Kabha Neer due to the derangement of kabha.

The pharmacological study shows that the trial drug, Mandai Karappan Thylum has moderate anti-histamine, and anti-inflammatory
action. The external medicine, Karappan Mel Poochu Thylam has moderate anti-inflammatory action.

According to TREATMENT, primarily a laxative was given to correct the derangement of vaatha. Then the trial drugs were given to cure the disease, Mandai karappan.

According to the evidence of siddha literature, MANDAI KARAPPAN THYLUM possesses Altenative, tonic, Anthelimintic, parasiticitic, Antiseptic, Astringent, Diuretic action.

In KARAPPAN THYLAM, its bark contains Astringent action and its leaves contain Antisepetic action and healing property. GINGELLY OIL contains Emollient action and its preservative property, preserve this preparation for along time.

KARAPPAN MEL POOCHU THYLUM contains Astringent, Aromatic and Antiseptic action. Due to its aromatic action it relieves the offensive odour in Mandaikarappan. Its astringent action controls oozing and its antiseptic action prevent secondary infection.

All the patients were well responding to the internal as well as external application from the date of admission. The number of days taken for complete disappearance of the symptoms varied from case to case.

Out of 20 patients, 15% of patients had good relief, 60% of patients had moderate relief and 25% of patients had mild relief.

The analysis ensures the efficacies of the trial drugs which were proved clinically and pharmacologically.

The trial drugs used for Mandai karppan remedy are easily available and economic. The drugs are effective in Mandai karappan treatment.
SUMMARY

Mandai karappan, a well known disease with considerable involvement of the skin and wide constitutional features was taken for the present study.

At first step, various medical literatures dealing the disease karappan were collected. The disease Mandai karappan is more or less correlated with “Atopic Eczema”- Infantile and childhood type.

Twenty cases were selected and careful detailed history was elicited and diagnosis was made on both siddha and modern methodology. Among the 20 cases, 16 were male and 4 were female.

Regarding the treatment, all the cases were treated with “Mandai Karappan Thylum” internally and “karappan mel poochu thylum” externally. The duration of treatment ranged from 5 to 7 days depending upon the severity of the illness with further follow up for any recurrence. Most of the patients were responding well from the beginning with remarkable signs and improvement.

The clinical diagnosis was done upon the basis of signs and symptoms explained in siddha pediatric text “Balavagadam”.

The efficacies of the drugs were studied and observed during the study.

The clinical trial was conducted with 20 patients. Among these, 3 patients had good relief, 12 had moderate and 5 had mild relief.

During and after the course of treatment relapsing effects were reported and controlled by trail Medicine.

The potency of the drugs was studied by bio-chemical analysis and pharmacological analysis in Govt. Siddha Medical College, Palayamkottai.

The bio-chemical analysis reveals the presence of Calcium, Sulphate,

Ferrous, Tannic acid, Unstaturated compounds and amino acids.

These analyses ensure the efficacies of the trial drugs which were proved clinically.
CONCLUSION

- The literature has been collected from “Athma rachamirta vaithiya sarasangiragam”.
- Clinical trial was conducted with 20 cases from both sexes from different age groups, ranging between 1 year to 12 years.
- Before starting the treatment careful detailed of the history of the patient was carried out and recorded.
- They were treated with ‘Mandai karappan Thylum’ internally and ‘Karappan mel poochu thylum’ externally.
- History, clinical findings, laboratory results, Envagai thervugal and uyir thathukkal were used for the diagnostic purpose for Mandai krappan disease.
- The general improvements of the patients were observed, few of the patients showed good relief generally, some of them showed moderate and most of them mild relief.
- From the clinical study shows that the internal drug is clinically moderately effective for controlling the disease.
- The action of external applications is also moderate action to controlled the disease.
- The drugs were found to be free from adverse effects from the beginning and the entire course of treatment.
- The raw drugs are available in all the months of the year.
- The preparation of medicine is very simple.

So they are beneficial for long term purpose for the disease “Mandai karappan”.

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METHOD OF PREPARATION & PROPERTIES OF THE TRIAL DRUGS
Preparation and Properties of the trial drugs

1.  காப்பாற்றும் கருவி காற்று :- சூட்டல்

2.  காப்பாற்றும் வேல் உயர்வு காற்று :- தைவல்

ஆராய்ச்சி:- “அது மாசமாக விளியல் மாதிரியை வழங்குகிறது”

1.  காப்பாற்றும் கருவி:-

| கம்பாட்டிடர் பிபாபர் சிப்புத்தியாருகர் | -- 4புருஷார்வயனும் |
| தெளிநோக்கு | -- 1புருஷார்வயனும் |
| குடும்பத்தருகற்கும் | -- 4புருஷார்வயனும் |
| நான் கைச்சுருக்கும் | -- 1புருஷார்வயனும் |
| குருதுகுறைகள் | -- 1புருஷார்வயனும் |
| செம்பனைந்தான் | -- 1புருஷார்வயனும் |

முன்னாட்டு:

குழாவிலிருந்து சிப்புத்தியாருகர், தெளிநோக்கு. குடும்பநிதைவு சிப்புத்தியாருகரில் பிபாம்பாட்டு காப்பாற்றும் கருவி பெறுகிறது சிப்புத்தியாருகருக்கு, தெளிநோக்கு குடும்பநிதைவு விருது பெற்றுள்ளது காப்பாற்றும் வேல் உயர்வு காற்று பெறும் கருவிகளுக்கு படுத்து வைக்கிறது சிப்புத்தியாருகருக்கு.
1. சமாதிகீழ்ப்பட்டச் சிற்பம்:-

   Botanical Name :- Asparagus racemosus
   Sanskrit Name :- Shatavari
   Hindi :- Satavare

   நூற்று : திரிவிப்பு தூக்கு : குரு பிள்ளை : திரிவிப்பு

   நீர்ப்பான:

   நெருங்கியதில் - Nutritive
   நூர்காராரங்கு - Demulcent
   திரிவிப்பு - Antispasmatc

   Asparagus racemosus திரிவிப்பு

   Saccharine
   Mucilage சமாதிக்கு Chemical compounds சமாதிக்கு.

2. காரை:

   Botanical Name : Aloe vera

   மூன்றுப் பின் குரு : மலர், காய், பெரு.
   குரு : திரிவிப்பு தூக்கு : குரு பிள்ளை : திரிவிப்பு

   போர்ப்பான:

   > திரிவிப்பு
   > குரு பிள்ளை
3. \textbf{**Botanical Name:** Solanum trilobatum}

- **Rit:** - Stimulant
- **Expectorant**
- **Tonic**

\textbf{Chemical compounds}

- Solanine

4. \textbf{**Botanical Name:** Sesamum indicum}

- **English:** - Gingely Oil
- **Sanskrit:** - Tilam
- **Malayalam:** - Karuella

- **Rit:** - Sesamin, Sesamolin, Phytosterol
5. केताढिकीकरण:-

BOTANICAL NAME: NIGELLA SATIVA

English : - Blackcumin
Small Fennel

Malayalam : - Karinchrakam

Sanskrit : - Krishnajiraka

Hindi : - Kala Zira

बालाकुम्भ : - कुलिक

कलम : - कनक

करिनङ्कन : - कलिक

प्रीतिः : - कालम

Chemical compounds:-

Melanthin
Metarhin

अधूरा केताढिकीकरण में तत्पर मात्राएं होगी उपलब्धिकरण के लिए।
6. Plumbago zeylanica:

English: Rose coloured lead - Wort
Sanskrit: Rakta-shikha
Hindi: Lal-Chita

Chemical compounds:
- Plumbagin
- Sistosterol
- Glycoside
2. எழுத்துக்கள் ரோட்டிகள் கையெழுத்துகள்

கிராமத்தில் கயை

- பெண் குழந்தைகள் ரோட்டிகள்  -- 1 பாணம்
- பெண் குழந்தைகள் ரோட்டிகள்  -- 1 பாணம்
- பெண் குழந்தைகள் போப்பெயர்ச்சிகள்  -- 12 பாணம்
- வரலாற்றுச் சுருள்  -- 12 பாணம்
- தமிழ் மொழி மொழிபொருள்  -- 12 பாணம்
- கான்கை  -- 1பாணம்
- பிளக்கு  -- 1பாணம்
- சின்னவிளை  -- 1பாணம்
- முன்னிலம்  -- 1பாணம்

எண்ணிக்கை:-

பெண் குழந்தைகள், பெண் குழந்தைகள், பெண் குழந்தைகள் போப்பெயர்ச்சிகள், வரலாற்றுச் சுருள் போன்ற பெண் குழந்தைகள் போப்பெயர், பிளக்கு, சின்னவிளை, முன்னிலம் ஆகியனுக்கு அடிப்படையில் போட்டி சான்று கையெழுத்துகளின் நோயாட்டு.

அட்டகம்:-

மப்பூச்சி, சின்னவிளை, முன்னிலம் சுருள் போப்பெயர்

சின்னவிளை:-

காண்டாலப்பூச்சி

சுருள் பெயர்:-

1 சுருள்
1. Botanical Name: Piper Betal
   English: Betal leaf
   Family: Piperaceae
   Uses:
   - Stimulant
   - Antiseptic
   - Astringent

Chemical compounds
   Arakene
   Sesquiterpene
   Chavicol

2. Botanical Name: Solanum nigrum
   Uses:
   - Alternative
Chemical compounds:

Solanine, Saponine – Diaphoric

Chemical compounds:

Botanical Name: Calotris gigantia.
English: Mudar
Sanskrit: Arka.
Hindi: Akan
Malayalam: Erukku.

3. Botanical Name: Calotris gigantia.

Botanical Name: Calotris gigantia.

- Anthelmentic
- Alternative
- Laxative
- Stimulant

Chemical Compounds:

- calotoin
- calactin
- uscharin

4. Botanical Name: Sesamum indicum

Botanical Name: Sesamum indicum

English: Gingely Oil
Sanskrit: Tilam
Malayalam: Karuella
5. **Botanical name** : Zingiber officinale
   **English name** : Dried Ginger
   **Hindi** : Sonth

Chemical compounds:
   - Phellandrene
   - Gingerol
   - Gingerin

6. **Botanical Name** : Piper nigrum
   **Malayalam** : Kurumulaku
   **Hindi** : Kali-Mirch

Organic:
   - Acrid
   - Rubefacient
7. **Botanical Name** :- Piper longum  
**English** :- Long Pepper  
**Sanskrit** :- Pippali

- **Stimulant**
- **Carminative**

**Chemical compounds**

*Piperine*

8. **Botanical Name** :- Acorus calamus  
**English** :- Sweet-flag  
**Malayalam** :- Vajambu

- **Stimulant**
- **Carminative**  

**Chemical compounds**

*Piperine*
9. **Uses:**

- **Botanical name:** ClemoneViscova
- **Malayalam:** Karvela
- **Sanskrit:** Ajaganda
- **Hindi:** Hurhur

**Properties:**

- Anthelmentic
- Rebefacient
- Antispasmatic
- Carminative
- Diaphoretic
BIO – CHEMICAL ANALYSIS
GOVT. SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI
BIO-CHEMICAL ANALYSIS OF MANDAI KARAPPAN THYLUM (INTERNAL)

Preparation of the extract:

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

Qualitative 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>TEST FOR CALCIUM</td>
<td>A white precipitate is formed</td>
<td>Indicates the presence of calcium</td>
</tr>
<tr>
<td></td>
<td>2ml of the above prepared extract is taken in a clean test tube. 2 ml of 4% Ammonium oxalate solution is added to it.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>TEST FOR SULPHATE:</td>
<td>A white precipitate is formed</td>
<td>Indicates presence of Sulphate</td>
</tr>
<tr>
<td></td>
<td>2ml of the extract is added to 5% barium chloide solution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TEST FOR CHLORIDE</td>
<td>No white precipitate is formed</td>
<td>Absence of Chloride</td>
</tr>
<tr>
<td></td>
<td>The extract is treated with silver nitrate solution.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>TEST FOR CARBONATE</td>
<td>No brisk effervesce is formed</td>
<td>Absence of carbonate</td>
</tr>
<tr>
<td></td>
<td>The substance is treated with concentrated Hydro Cholric Acid.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>TEST FOR CARBONATE</td>
<td>No White precepetate is</td>
<td>Absence of Zinc</td>
</tr>
<tr>
<td></td>
<td>The extract is added with</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test</td>
<td>Procedure</td>
<td>Result</td>
<td>Conclusion</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Pittassium Ferrocyanide Solution</td>
<td></td>
<td>formed</td>
<td></td>
</tr>
<tr>
<td>6  TEST FOR IORN</td>
<td>The extract is treated with concentrated Glacial acetic acid and potassium ferro cyanide</td>
<td>No Blue colour is formed</td>
<td>Absence of ferric iron</td>
</tr>
<tr>
<td>7  TEST OF FERROUS IRON</td>
<td>The extract is treated with concentrated Nitric acid and ammonium thio cyanate</td>
<td>Blood red colour is formed</td>
<td>Indicates the presence of ferrous iron</td>
</tr>
<tr>
<td>8  TEST FOR PHOSPHATE</td>
<td>The extract is treated with ammonium Molybdate and concentrated nitric acid.</td>
<td>Yellow precipitate is formed</td>
<td>Indicates presence of Phosphate</td>
</tr>
<tr>
<td>9  TEST FOR ALBUMIN</td>
<td>The extract is treated with ferric chloride</td>
<td>No Yellow precipitate is formed</td>
<td>Absence of Albumin</td>
</tr>
<tr>
<td>10 TEST FOR TANNIC ACID</td>
<td>The extract is treated with Esbatch’s reagent</td>
<td>Blue black precipitate is formed</td>
<td>Indicates presence of Tannic acid</td>
</tr>
<tr>
<td>11 TEST FOR UNSATURATION</td>
<td>Potassium permanganate solution is added to the extract.</td>
<td>It gets decolourised</td>
<td>Indicates the presence of unsaturated compound</td>
</tr>
<tr>
<td>12 TEST FOR THE REDUCING SUGER</td>
<td>5ml of Benedict’s qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10</td>
<td>No colour change occurs</td>
<td>Absence of Reducing suger</td>
</tr>
</tbody>
</table>
drops of the extract and again boil it for 2 mts.

| 13 | **TEST FOR AMINO ACID**  
Once or two drops of the extract is placed on a filter paper and dried it well. After drying, 1% Ninhydrin is sprayed over the same and dried iot well. | Violet colour is formed | Indicates the presence of Amino acid |
PHARMACOLOGICAL ANALYSIS
ANTI-HISTAMINIC EFFECT OF MANDAI KARAPAN THYLUM

Aim
To study the anti-histaminic affect of “Mandai Karappan Thylum”

Preparation of drug
1gm of Mandai Karappan Thylum was added with 5ml of water. This was used for the studies.

Solution required
Histamine (1 in 1, 00,000 strength)

Method
A Guinea pig weighing about 450gms was starved for 48 hours 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 using the patch as a land mark. Then the ileum was removed and placed in a shallow-dish containing warm “Tyrode solution” mixed with atropins. With the help of 25ml pipette, the lumen of the ileum was gently rinsed out with saline. It was cut into segments of required length, generally 4 cm, in a fully relaxed state and the sutures were made with needle and tied at either ends. The segment was suspended in an isolated organ bath. It was aerated by an organ tube and immersed in Tyrode solution at 37° C. Drugs were given to study the inhibitory effect of histamine induced contractions.

Inference
The drug has moderate anti-histamine action.
Acute Anti-Inflammatory Study on
MANDAI KARAPPAN THYLUM
by
Hind-Paw Method in Albino Rats

Aim
To study the acute Anti inflammatory effect of “Mandai Karappan Thylum”.

Preparation of the test drug
1 gm of “Mandai Karappan Thylum” was dissolved in 10 ml of water. A dose of 2 ml was give into each rat. This 1 ml contains 100 mg of the test drug.

Procedure
Six healthy albino rats weighing 100 – 150 gm were taken and divided into three groups, each consisting of 2 rats.

First group was kept as control by giving distilled water of 1 ml/100 gm of body weight. The third group received the test drug “Mandai Karappan Thylum” of 200mg/100gm of body weight.

Before administration of test drug, the hind – paw volume of all rats was measured. This was done by dipping the hind – paw (up to tibio – tarsal junction) in to a mercury plethysmo graph. While dipping the hind – paw by pull in 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 plethysmo graph.

Soon after the measurement the drugs were administered orally. One hour later a sub–cutaneous injection of 0.1 ml of 1% (W/V) Carrageenin in water was made into plantar surface of both hind – paw of each rat. Three hours after carrageenin injection, the hind – paw volume was measured once again. The difference between the initial and final volume was calculated and compared.
The method is more suitable for studying the anti–inflammatory activity in acute inflammation. The values are given in the table.

**Effect of KARAPPAN THYLUM**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Drug</th>
<th>Dose/ 100gm body</th>
<th>Initial Reading average</th>
<th>Final Reading average</th>
<th>Mean difference</th>
<th>Inflammation %</th>
<th>inhibition %</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Water</td>
<td>1 ml</td>
<td>0.65</td>
<td>1.5</td>
<td>0.85</td>
<td>100.0</td>
<td>Nil</td>
<td>-</td>
</tr>
<tr>
<td>Standard</td>
<td>Ibuprofen</td>
<td>20 mg / ml</td>
<td>0.80</td>
<td>0.85</td>
<td>0.05</td>
<td>6.25</td>
<td>93.75</td>
<td>-</td>
</tr>
<tr>
<td>Test drug</td>
<td>karappan Thylum</td>
<td>100 mg / 1 ml</td>
<td>0.80</td>
<td>1.4</td>
<td>0.6</td>
<td>66.6</td>
<td>34.4</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Inference: The test drug has Moderate Anti – Inflammatory action.
CHRONIC ANTI-INFLAMMATORY STUDY ON
MANDAI KARAPPAN THYLUM

BY
COTTON PELLETS GRANULOMA METHOD IN ALBINO RATS

Aim
To study the chronic anti-inflammatory activity of the drug. “Mandai Karappan Thylum” in the rats by cotton pellets implantation (granuloma) methods.

Preparation of the test drug
1 gm of “Mandai Karappan Thylum” was mixed with dissolved in 10 ml of distilled water. A dose 1 ml was given to each rat. This 1 ml contains 100 mg of test drug.

Procedure
Cotton pellets each weighing 10 mg prepared and sterilized in the autoclave for about one hour under 15 Hg atmospheric pressure. 6 rats weighing between 100 – 200 Gms were selected and divided into 3 groups each containing 2 rats. Each rat was anaesthetized with ether and cotton pellets were implanted subcutaneously in the groin of two on each side.

From the day of implantation a group of animals received “Mandai Karapan Thylum” in a dose of 100mg/100gm of body weight. The control group of animals received distilled water 1 ml /100gm of body weight. The standard group of animals received distilled water 1 ml/100gm of body weight. The standard group of animals received Ibuprofen in a dose of 20mg/100gm of body weight.

On the eighth day the rats were sacrificed and the pellets were removed and weighed. They were put in an incubator at 60° – 80°C and then they were weighed.
The weight of the granulation tissue formed is the difference between the weight and dry weight. The results of the control standards and test group were compared and the results were calculated.

### Effect of Mandai KarappanThylum

<table>
<thead>
<tr>
<th>Groups</th>
<th>Drug</th>
<th>Dose/100gm body</th>
<th>Pellet Weight</th>
<th>Pellet weight of the Granuloma of the drugs</th>
<th>Mean Difference</th>
<th>Inflammation</th>
<th>inhibition %</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Water</td>
<td>1 ml</td>
<td>10 mg</td>
<td>250mg</td>
<td>-</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Standard</td>
<td>Ibuprofen</td>
<td>20 mg / 1 ml</td>
<td>10 mg</td>
<td>56mg</td>
<td>-</td>
<td>22.4</td>
<td>77.6</td>
<td>-</td>
</tr>
<tr>
<td>Test drug</td>
<td>Karappan Thylum</td>
<td>100 mg / 1 ml</td>
<td>10 mg</td>
<td>147mg</td>
<td>-</td>
<td>59</td>
<td>41</td>
<td>Moderate Action</td>
</tr>
</tbody>
</table>

Inference: The test drug has Moderate Anti – Inflammatory action in chronic condition.
Aim

To study the acute Anti inflammatory activity of the test drug “Mandai Karappan Thylum and Karappan mal poochu Thylum”.

Preparation of the test drug

The “Mandai Karappan Thylam and Karapan mel poochuThylum”is prepared as per the Gunapadam moologai – vaguppu and described later.

Procedure

Six healthy albino rats weighing 100 – 150 gm were taken and divided into three groups, each consisting of 2 rats.

First group was kept as control by giving distilled water of 1 ml\100gm of body weight. The second group was given Ibuprofen at does of 20mg\100gm of body weight. The third group was kept as test group.

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

Soon after the measurement, the drugs were administered to the first and second orally. One hour later, a sub-cutaneous injection of 0.1ml of 1% (W\V) carrageenin in water was made into planter surface of both hind-paw of each rat. To the third (test group) “Karappan Thylum and Karappan mel poochu Thylum” was topically applied for three times over
the inflamed surface in a thin layer within half an hour gap. To the other groups no drug was applied over inflamed surface.

One and half-hour 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% of inflammation, anti-inflammation, anti-inflammatory effect of the test group is calculated.

**Effect of Mandai Karappan Thylum and Karappan mel poochu Thylum**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Drug</th>
<th>Dose/100gm body</th>
<th>Initial Reading average</th>
<th>Final Reading average</th>
<th>Mean difference</th>
<th>Inflammation %</th>
<th>inhibition %</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Water</td>
<td>1ml</td>
<td>0.65</td>
<td>1.50</td>
<td>0.85</td>
<td>100.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Standaerd</td>
<td>Lbuprofen</td>
<td>20mg/1ml</td>
<td>0.80</td>
<td>0.85</td>
<td>0.05</td>
<td>6.25</td>
<td>93.75</td>
<td>-</td>
</tr>
<tr>
<td>Test drug</td>
<td>Karappan Thylum and Karappan mel poochu thylum</td>
<td>Ext.</td>
<td>0.8</td>
<td>1.5</td>
<td>0.7</td>
<td>77.7</td>
<td>22.3</td>
<td>Moderate</td>
</tr>
</tbody>
</table>

Inference: The test drugs has Moderate acute Anti-inflammatory action.
PROFORMA
CASE SHEET PROFORMA – Karappan
GOVERNMENT SIDDHA MEDCIAL COLLEGE AND HOSPITAL
Post Graduate Research Centre
Branch IV – Kuzhandai Maruthyvam
Palayamkottai – 627 002.

Name of the Medical unit: Name of the Medical unit: Nationality :
I.P.No. : I.P.No. : Religion :
Bed No. : Bed No. : Date of Admission :
Name : Name : Date of Discharge :
Age/Sex : Age/Sex : Duration of treatment:
Occupation (Parents) : Occupation (Parents) : Diagnosis :
Income (Parents) : Income (Parents) : M.O. :
Informant : Informant :
Address: Temporary : Address: Temporary :

Permanent :
Complaints and duration :
History of present illness :
History of past illness :
Antenatal History :
Birth and Neonatal :
Dietetetic and Nutritional History :
Developmental History :
Family History :
Social History :
Immunzation History :
Contact History :
General Examination
1. Co-operative : 
2. Consciousness : 
3. Decubitus : 
4. Anaemia : 
5. Jaundice : 
6. Cyanosis : 
7. Clubbing : 
8. Pedal oedema : 
9. Lymph adenopathy : 
10. Nourishment : 
11. Skin changes :

Vital signs
1. Pulse
   - Rate :
   - Rhythm :
   - Volume :
   - Character :

2. B.P. :
3. R.R. :
4. Temp :

Anthropometry
1. Wt – Weightage :
2. Ht – Heightage :
3. Mid arm circumference :
4. Head circumference :
5. Chest :
6. Skin fold thickness :
Clinical Examination: Siddha System

Poripulangal
Mei : 
Vai : 
Khan : 
Mookku : 
Sevi : 

Kanmendriyam – Kanmavidayam
Kai : 
Kall : 
Vaai : 
Eruvaai : 
Karuvai : 

Gunam
Sathuvam : 
Rajo : 
Thamo : 

Nilam
Kurinchi : 
Mullai : 
Marutham : 
Neithal : 
Palai : 

Paruva kaalam
Kar : 
Koothir : 
Munpani : 
Elavenil : 
Muthuvenil : 
Utkayam – Athakayam

Puyam : 
Chayam : 
Kaal : 
Paatham : 

Pira uruppugalin nilai
Moolai : 
Iruthayam : 
Puppusam : 
Kalleral : 
Manneeral : 
Kudal : 
Siruneeragam : 
Kuri : 

Mummalam
Viyarvai : 
Malam : 
Moothiram : 

Mukkutra udal
Vaatha thegi : 
Piththa thegi : 
Kabha thegi : 
Kalappu thegi : 

Udal kattugal
Saaram : 
Senneer : 
Oon : 
Kozhuppu : 
Enbu : 
Moolai : 
Sukkilam/Suronitham : 

84
Envagai Thervugal
Naadi : 
Sparisam : 
Naa : 
Niram : 
Mozhi : 
Vizhi : 
Malam : 
Moothiram :

Vaatham
Piranana : 
Abaanan : 
Uthaanan : 
Viyaanan : 
Samaanan : 
Naagan : 
Koorman : 
Kirugaran : 
Devathathan : 
Dhananjeyan :

Pitham
Anilam : 
Ranjakam : 
Sathagam : 
Alosakam : 
Pirasakam :

Kabam
Avalambagam : 
Kiletham : 
Pothagam : 
Tharpakam :
Clinical Examination of Skin

Site of the lesion :
Size :
Shape :
General colour of the skin :
Colour of lesion :
Pruritus :
Erythema :
Scaling :
Oozing :
Crusting :
Lichenified :
Hair follicular involvement :
Exudation :
Excoriation :
Ulceration :
Bleeding :
Macule :
Papule :  
Pustule :  
Nodule  
  a. Wheal :  
  b. Scar :  

Blister  
Vesicle :  
Bulla :  
Scald like :  
Haemorrhage :  

Examination of other systems  
CNS :  
CVS :  
RS :  
Abdomen :  

Lab Investigation  
1. Blood  
   TC :  
   DC :  
   Hb :  
   ESR :  
   VDRL :  
   Sugar :  
   Urea :  
   Cholesterol :  
   IgE :  

2. Urine  
   Albumin :  
   Sugar :  
   Deposits :  

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3. Motion

Ova : 
Cyst : 
RBC : 
Pus Cells : 

4. Skin scrapping for fungus : 
5. Skin clipping : 
6. Skin biopsy : 
7. Culture and sensitivity : 

DIFFERENTIAL DIAGNOSIS : 
PROGNOSIS : 
MARUTHUVAMURAI : 
DAILY PROGRESS : 
ADVICE : 
Name of the Medical unit:   Nationality :  
I.P.No.   :   Religion :  
Bed No.   :   Informant :  
Name :   Date of Admission :  
Age/Sex :   Date of Discharge :  
Occupation (Parents) :   No. of days treated :  
Income (Parents) :   Diagnosis :  

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Clinical Features</th>
<th>During Admission</th>
<th>During Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Itching</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Oozing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Erythema</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Odema (local)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Scaling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Vesicles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pustules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Papules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Ulcers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Lichenification</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discolouration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Emaciation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Fatigue</td>
<td></td>
<td></td>
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7. Practice of Dermatology- Dr.P.N.Behl
12. Robbins Pathologic basis of disease.
13. Gray’s Anatomy
<table>
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<tr>
<th>S NO</th>
<th>I.P.NO</th>
<th>Name</th>
<th>Age/Sex</th>
<th>Clinical Features</th>
<th>Duration of Illness</th>
<th>DOA</th>
<th>DOD</th>
<th>Duration of Treatment in I.P.&amp;O.P</th>
<th>Motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1005</td>
<td>Kalpana devi</td>
<td>8/f</td>
<td>Itching, Erythema, Papules, vesiculation, Profuse exudates</td>
<td>2 months</td>
<td>2/5/06</td>
<td>8/5/06</td>
<td>3 months</td>
<td>Nil</td>
</tr>
<tr>
<td>2</td>
<td>1992</td>
<td>Naveen Rajan</td>
<td>1/m</td>
<td>Itching, Scaling, small pustules, ulceration, Scratch mark</td>
<td>1 month</td>
<td>29/8/06</td>
<td>4/9/06</td>
<td>4 months</td>
<td>Nil</td>
</tr>
<tr>
<td>3</td>
<td>2609</td>
<td>Manuvel</td>
<td>8/m</td>
<td>Scaling, Ulceration, small pustules, Pigmentation changes</td>
<td>4 months</td>
<td>20/11/06</td>
<td>24/11/06</td>
<td>2 months</td>
<td>Nil</td>
</tr>
<tr>
<td>4</td>
<td>2610</td>
<td>Prakesh</td>
<td>11/f</td>
<td>Itching, Scaling, Pigmentation changes</td>
<td>3 months</td>
<td>20/11/06</td>
<td>24/11/06</td>
<td>1 month</td>
<td>Nil</td>
</tr>
<tr>
<td>5</td>
<td>2611</td>
<td>Kandhan</td>
<td>12/m</td>
<td>Itching, Erythema, ulceration, Scaling Dry skin</td>
<td>2 months</td>
<td>20/11/06</td>
<td>24/11/06</td>
<td>4 months</td>
<td>Nil</td>
</tr>
<tr>
<td>6</td>
<td>2630</td>
<td>Vidhya</td>
<td>9/f</td>
<td>Ulceration, small pustules, Pigmentation changes</td>
<td>5 months</td>
<td>20/11/06</td>
<td>24/11/06</td>
<td>3 months</td>
<td>Nil</td>
</tr>
<tr>
<td>7</td>
<td>2696</td>
<td>Ameer khan</td>
<td>10/m</td>
<td>Small pustules, Ulceration, Erythema</td>
<td>4 months</td>
<td>28/11/06</td>
<td>4/11/06</td>
<td>2 months</td>
<td>Nil</td>
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<td>210</td>
<td>Arumugam</td>
<td>9/m</td>
<td>Itching, Erythema, Scaling, Ulceration</td>
<td>4 months</td>
<td>25/1/07</td>
<td>29/1/07</td>
<td>6 months</td>
<td>Nil</td>
</tr>
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<td>9</td>
<td>202</td>
<td>Prakesh</td>
<td>6/m</td>
<td>Erythema, Scaling, Small pustules, Dry skin</td>
<td>3 months</td>
<td>25/1/07</td>
<td>29/1/07</td>
<td>3 months</td>
<td>Nil</td>
</tr>
<tr>
<td>10</td>
<td>209</td>
<td>Kavirayan</td>
<td>8/m</td>
<td>Itching, dry skin, cracking Scaling, Ulceration, scratch Marks</td>
<td>3 months</td>
<td>25/1/07</td>
<td>29/1/07</td>
<td>3 months</td>
<td>Nil</td>
</tr>
<tr>
<td>11</td>
<td>280</td>
<td>Vijaya prabhagan</td>
<td>8/m</td>
<td>Dry skin, cracking, scratch Marks, Ulceration</td>
<td>1 month</td>
<td>30/1/07</td>
<td>3/2/07</td>
<td>4 months</td>
<td>Nil</td>
</tr>
<tr>
<td>S NO</td>
<td>I.P.NO</td>
<td>Name</td>
<td>Age/Sex</td>
<td>Clinical Features</td>
<td>Duration of Illness</td>
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<td>Motion</td>
</tr>
<tr>
<td>------</td>
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<td>-------</td>
<td>----------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>12</td>
<td>261</td>
<td>Chindiya</td>
<td>m/f</td>
<td>Papules, Vesiculation, Profuse exudes, fissure scaling</td>
<td>2 months</td>
<td>30/1/07</td>
<td>3/2/07</td>
<td>2 months</td>
<td>Nil</td>
</tr>
<tr>
<td>13</td>
<td>262</td>
<td>Maruthy</td>
<td>7/m</td>
<td>Itching, Dry skin, cracking, fissure scaling</td>
<td>4 months</td>
<td>3/1/07</td>
<td>3/2/07</td>
<td>1 month</td>
<td>Nil</td>
</tr>
<tr>
<td>14</td>
<td>268</td>
<td>Nandini</td>
<td>11/f</td>
<td>Itching, Erythema, Scaling, Fissure &amp; scratch</td>
<td>2 months</td>
<td>30/1/07</td>
<td>3/2/07</td>
<td>3 months</td>
<td>Nil</td>
</tr>
<tr>
<td>15</td>
<td>350</td>
<td>Ananth</td>
<td>12/m</td>
<td>Erythema, Scaling, Fissure &amp; scratch, dry skin, cracking</td>
<td>6 months</td>
<td>6/2/07</td>
<td>13/2/07</td>
<td>2 months</td>
<td>Nil</td>
</tr>
<tr>
<td>16</td>
<td>1045</td>
<td>Antoney Michalraj</td>
<td>9/m</td>
<td>Itching, Scaling, Erythema, dry skin, cracking</td>
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<td>Erythema, Itching, dry skin, cracking, fissure &amp; scratch</td>
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<td>8/m</td>
<td>Papules, Vesiculation, Smallpustules, Ulceration, dry skin</td>
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<td>Masana muthu</td>
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<td>25/4/07</td>
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<td>Antony</td>
<td>7/m</td>
<td>Itching, Erythema, Scaling, cracking, dry skin, Small pustules, Ulceration</td>
<td>3 months</td>
<td>11/5/07</td>
<td>16/5/07</td>
<td>2 months</td>
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## INVESTIGATION CHART

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குறிக்பாடு

மினசெ காய்வானி
வணக்கினை புதுப்பு

வெள்ளை
கார்கர்

மிளகர்
கிபிலிக்கு

மாற்றம்
கொழுவியில்லாத கிகழ்கை

குமாரி
தாய்வூடை

நீண்டுடற்பாகண்
காற்றுருகம்

உணவுச் சாதனங்கள்
Bio-Assay of Anti-Histamine Action of Karappan Thylum

Bio-Assay of Anti-Histamine Action of Karappan Theera Ennai on Isolated Guinea Pig Ileum

D - Drug  A - Avil  H - Histamine
NORMAL SKIN

SKIN IN ECZEMA

Tightly packed skin cells help create natural barrier of the skin.

Ingress of chemical solvents and water causes inflammation.

Keratinocytes become less tightly held together.