

A STUDY ON
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INTRODUCTION

Since disease, decay and death have co-existed with life, the study of diseases and their treatment must also have been contemporaneous with the dawn of human intellect. The siddhars were the foremost intellects; they introduced the Siddha system of medicine which is one of the byproduct of siddhars. Yoga, Kayakarpam, Muppu and Alchemy are the unique and mystic but non – evasive aspects of Siddha.

Siddhars were people who achieved “Siddhi” which means perfection. They were philosophers, healers and men with supernatural powers. There were 18 important Siddhars and “Guru Agasthiyar” was the father of this noble system. This system emphasis that medical treatment should be oriented not merely to disease but also takes into account the patient, his environment, sex, age, habits, mental frame, habitat, diet and physical condition.

Siddhars system of medicine is based on 96 Thathuvaas out of which the panchaboothas and Uyir Thadhukal gain prime importance. The panchaboothas are nothing but the five elements of earth and they correspond to the five senses of human body. The three Uyirthadhukal are Vaatham, Pitham and Khabam, They are formed and activated by the panchaboothas.

Thus man is a miniature of the entire universe and every minute change in the universe affects him and vice-versa.

அண்டத்திலுள்ளதே பிண்டம்
பிண்டத்திலுள்ளதே அண்டம்

rl;IKdp epfz;L.

The Panchaboothas and Uyir Thadhukal exist in normal ratio in a healthy man. Any alteration in this ratio results in disease.

Pediatrics is concerned with the health of infants, children and adolescence their growth and development and their opportunity to achieve full potential as adults from the very budding stage.

For the importance of maintaining a good health in the younger ones, the Siddhars separately mentioned many diseases and treatment pertaining to the pediatric community called “Balavagadam”. Though many siddhars mentioned pediatric diseases and their treatment, Agasthiyar was the first to write a separate literature on Pediatric diseases.

Lasunathabitham (Tonsillitis) is one of the common ailments in Pediatric age group. The author has thus taken this disease and undergone a dissertation work in which she gives a clear picture of the topic in both siddha and Modern aspects and also about its treatment, prognosis, dietic aspects etc.

AIM AND OBJECTIVES

The children are our Next generation to face the world and its problems. Many diseases easily affect them. As Siddha pediatricians it is our duty to protect and prevent the children community from various diseases.

The disease “Lasunathabitham” is the most common upper respiratory tract infection occurring in children. The signs and symptoms correlate with Tonsillitis of modern medicine. About a vast majority of children undergo Tonsillectomy each year. If “Lasunathabitham” is not properly treated it may lead to life threatening complications like Rheumatic Fever, Acute glomerular Nephritis etc. Thus keeping in mind the above conditions, the author selected the disease “Lasunathabitham” and her aim is to safeguard the children from the disease and its complications using.

- i) Kalluppu maathirai
- ii) Akargara Kudineer as internal medicines and
- iii) Sukku – Amukra pattru (sos) as External medicine.

The objectives are as follows:

- 1) To make a detailed study on the topic “Lasunathabitham” on the basis of siddha by collecting and reviewing the ideas mentioned in the olden literatures.

2)To know how the disease altered the normal conditions of Uyir thadhukkal, Udal Thadukal, Envagai theru, Neerkuri, Neikuri etc. and thus to expose the diagnostic methods mentioned by siddhars.

3)To make a comparative study and to know the degree of correlation on etiology, classifications, signs and symptoms of “Lasunathabitham” with that of “Tonsillitis” of modern medicine.

4)To have an idea about the incidence of the disease with age, sex, socio – economic status, Family history and seasonal variation.

5)To evaluate the bio – chemical, pharmacological and Anti – microbial studies of the drugs used for the treatment of the disease.

6)To create awareness among the public about the disease its complications, preventive aspects and treatment available in Siddha medicine thereby making them to know the advantages that overcome the other systems of medicine especially in this disease.

TONSILLITIS

INTRODUCTION:

Tonsillitis is one of the common upper respiratory tract infections in children. It is also seen in younger adults but most commonly seen in children population. It is rare in older adults and extremely rare above the age of fifty.

DEFINITION:

Tonsillitis means inflammation of the Tonsils. The term usually refers to the inflammation of palatine Tonsils.

Tonsillitis is common in the children of age group 4 – 12 years, both sexes are equally affected.

In young children, the tendency to get viral tonsillitis is more when compared to elder ones who are more prone to Bacterial tonsillitis. In general bacterial tonsillitis occur more in winter season and the viral tonsillitis in summer and rainy seasons.

INCUBATION PERIOD:

2 – 4 days.

AETIOLOGY:

The following organisms are responsible for causing Tonsillitis.

Viruses:

Adeno virus

Rhino virus

Enterovirus including coxsackievirus

Influenza

Para influenza
Respiratory syncytial Virus
Corona virus

Herpes simplex type I
Ebstein Barr virus.

Bacterial agents:

Streptococci A,C & G group
Staphylococcus aureus
Pneumococci
Haemophilus influenzae
Mycoplasma Pneumoniae
Neisseria gonorrhoea
Treponema pallidum
Miscellaneous oral commensals.

Fungi:

Candida albicans

MODE OF TRANSMISSION:

The upper respiratory tract infection is a Droplet infection, spread both by direct and indirect contact, through which Tonsillitis may or may not occur.

PREDISPOSING FACTORS:

1. Common in children
2. Lower socio – economic status
3. Ingestion of cold drinks or cold foodstuffs
4. Spring and Autumn season
5. Unclean utensils

6. Post – nasal drip
7. Following nasal surgery and surgery for sinusitis
8. Incomplete tonsillectomy.

ACUTE TONSILLITIS:

Acute Tonsillitis may affect any age group but it is most frequently found in children.

Aetiology

It may occur as a primary infection of Tonsil itself or may secondarily occur as a result of infection of upper respiratory tract infection usually following viral infection. Common organisms causing the disease are

Streptococcus

Staphylococcus

Hemophilus influenzae and Pneumococci.

Poor orodental hygiene, poor nutrition Congested surroundings are the predisposing factors.

Pathology:

Inflammation of tonsil



Hyperemia of tonsil



Edema of tonsil.



Conversion of lymphoid follicles into small abscesses



Discharge of abscess into crypts.

Types:

Catarrhal Tonsillitis – when tonsils are inflamed as a result of generalised infection of oropharyngeal mucosa, the condition is termed as catarrhal tonsillitis.

Follicular tonsillitis:

When the inflammatory exudates collect in tonsillar crypts, these present as multiple white spots on the inflamed tonsillar surface, giving rise to a clinical picture of follicular tonsillitis.

Membranous tonsillitis:

Sometimes exudation from crypts may coalesce to form a membrane over the surface of tonsil giving a clinical picture of membranous tonsillitis.

Parenchymatous tonsillitis:

When the whole tonsil is uniformly congested and swollen, it is called Parenchymatous tonsillitis

Clinical features:**Symptoms**

Discomfort in throat (or) Sore – throat

Dysphagia

Generalised body symptoms malaise body ache Fever and Anorexia .

Onset is often sudden with temperature raising upto 40 ° C.

There may be trismus

When dysphagia is severe pain radiates upto Ears.

Signs:

Tachycardia

Tongue is furred

Breath is offensive

Tonsils – Swollen, Congested with exudate in the crypts.

Edema of Uvula and soft palate

Jugulodigastric lymph nodes are tender or enlarged.

Complications:

1. Chronic tonsillitis:

Repeated attacks of acute tonsillitis result in chronic inflammatory changes in tonsillar surface leading to chronic tonsillitis.

2. Peritonsillar abscess (Quinsy) :

Spread of infection from tonsil to paratonsillar tissue results in abscess between tonsillar capsule and tonsil bed called peritonsillar abscess.

3. Parapharyngeal abscess:

Infection from the tonsil or peritonsillar tissue may involve the parapharyngeal space with abscess formation.

4. Acute Otitis media

Infection from tonsil may extend to the eustachian tube and result in acute otitis media.

5. Acute nephritis (Streptococcal tonsillitis)

6. Rheumatic fever(Streptococcal tonsillitis)

7. Sub Acute bacterial endocarditis (in a patient with valvular disease)

8. Acute appendicitis may also follow tonsillitis

Treatment:

The patient should take bed rest.

Analgesics and Anti-pyretics may be given for every 4hrs.

Antibiotics must be given for sufficient period of time and never stopped in between because if they are discontinued too early a relapse may occur.

Administration of fluids to prevent dehydration.

Oral steroids can lessen the symptoms caused by mononucleosis.

CHRONIC TONSILLITIS:

Chronic inflammatory changes in the tonsil are usually the result of recurrent acute infections treated inadequately.

Aetiology:

The most common and the most important cause of recurrent infection of tonsils is persistent or recurrent infection of nose and paranasal sinus. This leads to postnasal discharge which then infects the tonsil as well.

Pathology:

Recurrent infection



Development of minute abscesses within the lymphoid follicles.



The lymphoid follicles walled off by fibrous tissues.



Surrounded by inflammatory cells.

Clinical features:

Symptoms:

Recurrent attacks of sore throat.

Unpleasant taste

Halitosis

Dysphagia

Signs:

Sometimes hypertrophy of tonsils.

Congestion of tonsils, epithelial debris may be squeezed on pressure

Anterior pillars hyperemia

Jugulodigastric lymph node enlargement.

Complications:

1. Intratonsillar abscess.
2. Tonsillar cyst.
3. Tonsillolith.
4. Peritonsillar abscess (Quinsy)
5. Parapharyngeal abscess
6. Rheumatic fever (Streptococcal Tonsillitis)
7. Acute Glomerular Nephritis (Streptococcal Tonsillitis)
8. Septicemia.

Treatment:

Incase of chronic tonsillitis antibiotics combined with oral steroids may resolve the infection.

Drugs – antibiotics, in case of bacterial tonsillitis may be given as injection o.d.or tablets as t.d.s. for a course of 10 days.

Rest.

Fluids – especially warm water or warm salt solution may soothe the throat, when used as a gargle.

Lozenges may also help to reduce pain.

If antibiotics do not seem to eradicate the problem and if the condition is recurrent enough to trouble the patient and if pharyngitis can be excluded then tonsillectomy is advised.

**THE VIRAL SORE THROAT & THE BACTERIAL SORE
THROAT -SOME DIFFERENTIATING
FEATURES.**

Viral Origin:

Sore throat initially occurs in viral pharyngitis after the onset of other constitutional symptoms (Fever, Malaise etc)

Reaches peak by second or third day.

Hoarseness, cough and Rhinitis and pharyngeal inflammation all are mild.

Cervical lymph nodes – Firm and enlarged.

Entire illness lasts not more than 5 days

Complications are rare, although bacterial otitis media may occur.

The bacterial (streptococcal) – Sore throat:

Sore throat occurs after 12-24 hrs of other symptoms like headache, Abdominal pain, Vomiting etc.

Fever may not be noted upto 1 day and the temp. may rise upto 40°C and continues for 4 days

1/3rd of patients show tonsillar enlargement with sore throat.

Pharyngeal erythema, pharyngeal pain may vary from slight to severe causing dysphagia.

Anterior cervical lymphadenopathy.

Illness lasts for 2 weeks.

Hoarseness, cough and Rhinitis are rare

Acute Rheumatic Fever and Acute Glomerular Nephritis may follow as complications.

RECURRENT TONSILLITIS:

Recurrent tonsillitis is diagnosed when an individual has

- i) 7 episodes in 1 year;
- ii) 3 infections each year for 3 consecutive years.

KISSING TONSILLITIS:

When tonsils meet in the midline or overlap each other it is called kissing tonsillitis

LINGUAL TONSILLITIS

when the lingual tonsils are inflamed it is called Lingual tonsillitis which may be acute or chronic.

Acute lingual tonsillitis:

Examination of posterior tongue by mirror reveals enlarged lingual tonsils with exudates pain in the upper throat and pain during movements of the tongue are the symptoms. Voice may be garbled.
Treatment – Antibiotics.

Chronic lingual tonsillitis:

This may be a problem after tonsillectomy, when the lingual tonsils undergo compensatory hypertrophy especially in smokers and women at menopause. The symptoms are discomfort in throat, dysphagia and plumpy voice. Most patients responds to treatment and dietic habits and to some local applicants.
Sometimes diathermy or Cryosurgery may be needed to reduce the size of lingual tonsil.

PERI TONSILLAR ABSCESS (QUINSY) :

Quinsy is a recognised complication of tonsillitis and consists of a collection of pus in the para – tonsillar region (Peritonsillar space) between tonsillar capsule and tonsillar bed. It occurs usually at the upper pole.

Cause :

Complication of untreated or partially treated tonsillitis.

Symptoms:

These appear before the formation of abscess.

Worsening unilateral sore throat

Dysphagia

Following the abscess these symptoms develop.

Persistent pain

Fever

Drizzling

Foul breath

Trismus

Muffled Voice

Neck pain

Referred ear pain.

Signs:

Tender swollen lymph nodes.

Swollen peri-tonsillar abscess (with pus collection).

Complication:

Pharyngeal abscess

Septicemia

Extension of abscess into deep neck spaces.

Treatment:

Antibiotics

Incision and Drainage

When there is similar history before then tonsillectomy should be considered.

INTRA – TONSILLAR ABSCESS:

It is a rare process in which an abscess forms in the tonsil itself. It may form either from extension of an obstructed tonsillar crypt or from an intratonsillar rupture of the peri-tonsillar abscess. Treatment is similar to that of Quinsy.

TONSILLOLITH:

A tonsillolith also called Tonsil stone or calculi of tonsil is a piece or more commonly a cluster of calcareous matter in the crypts of the palatine tonsils.

It may originate in the upper pole of tonsil and may attain considerable size. It may be seen on the surface or detected by probe, sometimes it may be extruded spontaneously or removed using probe.

Tonsil stones are the results of a combination of any of the following;

Food particles

Dead white blood cells.

Oral bacteria

Overactive salivary glands.

They have pungent odor. Visually they may resemble sesame seeds in color and texture and one may feel it as a foreign body lodged between outside of wisdom teeth and temporomandibular joint, when it is of a larger size.

RETENTION CYST OF TONSIL:

They are white topped cysts, either single or multiple, which occur on the epithelial lining of tonsil and if merely punctured tends to recur.

TB OF TONSIL:

It has no characteristic features. Attention is drawn to tonsils by tuberculous cervical lymph nodes. The TB bacilli in infected milk are presumed to reach the nodes via tonsils which may or may not be infected. There is no means of diagnosing this by clinical examination and the condition is discovered by histological examination of tonsils which is usually done after tonsillectomy. It is however safe to remove the

tonsils who have tuberculous cervical adenitis, rather than to leave potentially infected tonsils. Anti – tuberculous therapy should be started when the diagnosis is made in the nodes.

VINCENT’S ANGINA / ULCERATIVE GINGIVITIS:

Ulcerative gingivitis is a highly infections and ulcerative lesion of tonsils. It was common during the Ist world war being called as trench mouth and the frequency with which it occurred was due to lack of hygiene in cleaning of eating and drinking utensils. Now the condition is less common because of improved hygiene.

The infection is caused by two gram negative organisms

- i) Fusiform bacillus
- ii) Spirochetes.

Symptoms & Signs- Low grade fever,

Sore throat

Throat pain radiating to ears.

Cervical lymphadenopathy

Usually involves on one side and may spread to soft and hard palate. The typical lesion is 'greyish slough' which bleeds easily on removal. The pseudomembrane reforms after removal. There is a characteristic smell from breath. Infection may persist for several weeks if untreated, but if treated should clear up within a week.

DIAGNOSIS OF TONSILLITIS:

- i) Diagnosis is made by the typical clinical features of the disease. On inspection of the pharynx visible enlarged tonsils may be seen. They are usually reddened and may have white spots on them. The lymph nodes of jaw and neck may be enlarged and tender to touch.
- ii) A culture of tonsil may reveal the causative organism. Positivity for streptococci may confirm the diagnosis in most patients, while the others may show positivity for staphylococci, pneumococci and hemophilus influenzae.
- iii) If necessary the following diagnostic measures may be adopted

Streptococcus Antigen detection by rapid test.

Anti – streptolysin- O titre.

DIFFERENTIAL DIAGNOSIS:

In order to confirm the correct diagnosis Tonsillitis should be differentiated from the following.

Ulcerative gingivitis

The differentiating feature is the necrotizing tissues on the tonsil, mostly unilateral.

Infectious mononucleosis

Membranous exudate on Tonsils

Diphtheria

Scarlet fever

Associated strawberry tongue and skin rashes may be present.

Herpangia

Not usually associated with tonsillar exudates but rather with many vesiculo ulcers of anterior fauces and soft palate.

Agranulocytosis

Often manifested by symptoms of pharyngitis. Tonsils and post pharyngeal wall show yellow or dirty white exudates and mucosal haemorrhages are common.

Allergic Rhinitis

Allergic rhinitis with a non-purulent postnasal discharge also cause sore- throat but resolves very faster.

Primary Syphilis

The lesions are asymptomatic here.

TB Tonsils

Presence of tuberculous cervical lymph nodes.

Tonsil CA

HIV / AIDS.

TONSILLECTOMY:

If the child has chronic, recurring tonsil or throat infection despite treatment, a tonsillectomy may be advisable. General guidelines are

5 or more episodes in one year.

3 or more episodes per year for 2years.

Infections that do not respond to treatment

Since an infection can spread from Tonsils to adenoids or vice-versa, they are often removed together in the same operation particularly in children. Surgical removal of tonsils is done to prevent recurrent acute tonsillitis occasionally the tonsil may be removed to treat peritonsillar abscess (collection of pus between superior constrictor and the tonsillar hemicapsule).

Many methods have been employed, the commonest being dissection in the plane of fibrous hemicapsule followed by ligation or electrocautery to vessels, that are divided during dissection. The vessels prone to damage are paratonsillar vein and Internal carotid Artery. The nerve supply is so diffuse and hence tonsillectomy under local anesthesia is performed without blocking all the nerves. Surgical access to 9th nerve may be achieved by separating the fibres of superior constrictor.

Until better methods are available to identify those children who will truly benefit from tonsillectomy and adenoidectomy it seems prudent to avoid surgery in most cases.

Decision for removal of Tonsils should be based on symptoms and signs related to hypertrophy, obstruction and chronic infection in the tonsils and related structures. The sizes, consistency, cheesy material within the crypts are not reliable parameters. Persistent hyperemia of the anterior pillars is a more reliable sign and enlargement of cervical lymph nodes is supporting evidence. Persistent enlargement of the node is also significant.

Though hypertrophy is a considerable criteria, it should be ascertained that hypertrophy is chronic and not the result of a recent acute infection.

Complications of Tonsillectomy:

- i) The main duration of post – operative sore – throat is 5 days.
- ii) Referred ear pain and halitosis are common.
- iii) Minor hemorrhage, post operative throat infection anesthetic complications occur in 10% at least.
- iv) Severe hemorrhage or life threatening complications are occasional.
- v) Pulmonary edema may occur with tonsillectomy or adenoidectomy.
- vi) Nasal voice may occur while the palate stretches to cover the area formerly occupied by adenoid tissue. This is almost only temporary.

Contra – indication for tonsillectomy:

- i) Poliomyelitis (during the epidemiology of the disease)
- ii) Cleft – palate.
- iii) Bleeding disorders.

PREVENTION OF TONSILLITIS:

Prevention of the predisposing factors like

- i) Improvement of general hygiene.
- ii) Avoiding cold foodstuffs and cold drinks, Ice-creams etc.
- iii) Avoidance of close contact with people who are affected by infections may help to prevent Tonsillitis.
- iv) Avoiding exposure to chill weather and allergens.

INVESTIGATIONS:

Blood TC

DC

ESR

Hb

Urine Albumin

 Sugar

 Deposits

Others

 Throat Culture.

 ASO titre.

REVIEW OF MODERN LITERATURES

TONSIL

ANATOMY & EMBRYOLOGY

The pharynx has 2 parts

Nasopharynx

and

Oropharynx

Nasopharynx:

Part of the pharynx which lie above the soft palate and behind the nasal cavity is called Nasopharynx. The pharyngeal tonsil and tubal tonsil are situated here.

Oropharynx:

This extends from lower border of soft palate to the upper border of epiglottis. The palatine tonsil and lingual tonsil are situated here.

Waldayer's Ring:

The lymphatic tissue of the pharynx and oral cavity are arranged in a ring like manner around the oropharyngeal inlet (upper end of respiratory and alimentary tract). The inner ring consists mainly of the naso-pharyngeal tonsil (Adenoids), peritubal lymphoid tissues (Tubal tonsils), Fauical tonsil (Palatine tonsils) and Lingual tonsil.

The efferents from this ring drain to lymphatic nodes situated around the neck forming the outer ring. The lymphoid tissues have protective function. Anteriorly the ring is formed by lingual tonsil, laterally by palatine and tubal tonsils and posteriorly by adenoids (Pharyngeal tonsils).

Tubal Tonsils:

These are collections of lymphoid tissue in the vicinity of the auditory tubes. The openings of auditory tubes lie in the nasopharynx.

Lingual Tonsil

These are lymphoid nodules seen in the pharyngeal part of the tongue. It lies posterior to the palatoglossal arches.

Pharyngeal Tonsil

It is a collection of lymphoid tissue under the mucosa of nasopharynx, situated at the junction of roof and posterior wall of nasopharynx.

It is best developed in children. It is first seen by naked eye during the later months of foetal life and usually increases in size upto the age of 6-7 after which it usually begins to atrophy. In a child of 18 months, the pharyngeal tonsil forms a forwardly projecting pyramidal prominence which consists of several folds that radiate forwards and laterally form a median recess called pharyngeal bursa.

This pharyngeal bursa is a blind recess running upward and backward for some distance into the substance of pharyngeal tonsil. The folds of

pharyngeal tonsil consists mainly of diffuse lymphoid tissue and they also contain some deeply placed mucous glands.

The Palatine Tonsils:

The posterior part of the tongue is the mobile wall, the sides of which are projecting ridges called palatopharyngeal and palatoglossal arches (Collectively called faucial pillars in olden days).

The palatine tonsils (commonly called the tonsils) are two ovoid masses of lymphoid tissue situated in the triangular shaped tonsillar sinus between the palate pharyngeal and palato glossal arches. (ie. faucial pillars).

A fold of mucous membrane, plica semilunaris connects the palatoglossal and palatopharyngeal arches superiorly. The plica triangularis is another fold of mucous membrane which connects the palatoglossal and palatopharyngeal arches inferiorly.

The floor of the tonsillar sinus (fossa) is called the Tonsillar bed. It is formed by the lower part of superior constrictor muscle, loose areolar tissue pharyngobasilar fascia, and buccopharyngeal fascia.

The Glossopharyngeal nerve crosses the lower part of bed running obliquely downwards and forwards to reach the tongue by passing under the lower border of constrictor muscle.

At birth they are of significant size, but they enlarge during between the 3rd and 6th years age, probably in response to upper respiratory tract infections. There after some regression in size is to be expected, and in old age they atrophy.

STRUCTURE OF TONSILS (Palatine Tonsil)

The Tonsil can be described as having

2 borders

2 poles

1 body having 2 surfaces.

2 Borders:

Anterior border

Posterior border

2 Poles:

Upper pole

Lower pole

Upper pole – Extends up to

Soft palate and may even infiltrate it. The intra – tonsillar cleft lies here.

Lower pole – It reaches up to the dorsum of tongue to form lingual Tonsil.

A body having 2 surfaces:

Medial surface

Lateral surface.

The Medial surface:

The Medial surface is free and projects to a variable degree. It is covered by pharyngeal mucosa which shows on its surface the openings up to 20 called the “Tonsillar crypts” – the epithelial down growths. One large down growth near the upper pole is intra-tonsillar left (often wrongly called supratonsillar fossa) is the remnant of second pharyngeal pouch. Its mouth is semilunar in shape and is parallel to curve of dorsum of tongue.

Lateral surface :

The lateral surface is attached loosely to tonsillar bed and is covered by thickened pharyngeal submucosa called Tonsillar capsule, which is an extension of pharyngobasilar fascia. The superior constrictor separates this surface from facial Artery and two of its branches, the ascending palatine and tonsillar Artery.

At the antero- inferior part, the capsule is firmly connected to the side of tongue and behind this region is the insertion of palatoglossus and palatopharyngeus muscle fibres.

HISTOLOGY OF TONSILS:

THE TONSILLAR CRYPTS AND ITS NODULES

The tonsillar crypts are lined by stratified squamous epithelium which is continuous with that of mucous membrane of the pharynx. The tonsil chiefly consists of lymphoid tissue, which is arranged, in nodules or follicles (often called primary nodules). The nodules of the palatine tonsil lie directly deep to the covering epithelium and extend down along the sides of tonsillar crypts. The nodules may be with or without germinal centres and may be so close together that they melt into one another or they may be separated by loose lymphatic tissue.

BLOOD SUPPLY:

ARTERIAL SUPPLY:

Tonsillar branch of Facial artery is the main Artery supplying Tonsil.

Other Arteries supplying Tonsils are

- i) Ascending pharyngeal Artery

- ii) Descending pharyngeal Artery
- iii) Dorsalis lingual Artery
- iv) Ascending palatine branch of facial Artery.

VEINS:

Paratonsillar Vein emerges on lateral surface and pierces the superior constrictor muscle to end in common facial vein and pharyngeal plexus vein.

LYMPHATIC DRAINAGE:

Unlike lymph nodes, the palatine tonsil has no afferent vessels lymph sinuses. A plexus of lymph vessels surrounds each nodule of Tonsil and from it the lymph vessels pass to the upper deep cervical lymph nodes and mainly to the jugulodigastric group of lymph nodes that lie below the angle of mandible.

NERVE SUPPLY

The mucous membrane overlying the Tonsil is supplied by Tonsillar branch of Glossopharyngeal Nerve and Lesser palatine nerves.

PHYSIOLOGY OF TONSILS

The main function of the Tonsil is to have a protective role and act as sentinels at the portal of air and food passage. Hence they play an important role in host immunity against the pathogens. Their function is more important in first 5 years of age. The tonsils are involved in both humoral and cell mediated immunity.

The Tonsils contain lymphatic cells which constitutes approximately 0.2% of all lymphocytes subdivided. The centrocytes and centroblasts are lymphocytes in germinal center cells. Plasma cells develop from lymphocytes and produce immunoglobulins.

Multiplication of lymphocytes goes on in the germinal centre cells of Tonsillar nodules. The nodules contain lymphocytes and many plasma cells. The lymphocytes formed in palatine tonsil leave it by migrating through epithelium of the crypt and the debris may collect in crypts. The lymphocytes that escapes from tonsil enter the month to form salivary corpuscles.

MALT (Mucosal Associated lymphoid tissue) may occur as diffuse collections of lymphocytes plasma cells and phagocytes, throughout the follicles (or) nodules present in all three (Lingual, pharyngeal and palatine) tonsils. MALT forms an interconnected secretory system within which cells committed to Ig A and IgE synthesis may circulate. The mucosa containing the antigen sensitive lymphocytes are stimulated by antigens and the tonsillar crypts increase the surface area for contact with antigens, after activation the antibody production of Ig A synthesis occurs.

GOVERNMENT SIDDHA MEDICAL COLLEGE & HOSPITAL

PALAYAMKOTTAI

POST GRADUATION

DEPARTMENT OF KUZHANTHAI MARUTHUVAM

(BRANCH – IV)

CASE SHEET PROFOMA FOR LASUNATHABITHAM

(TONSILLITIS)

NAME OF THE WARD / MEDICAL UNIT

I.P.No : NATIONALITY :

BED No : RELIGION :

NAME : PERMANENT
ADDRESS :

AGE :

SEX : INFORMANT :

OCCUPATION : DATE OF
(Parent's occupation) ADMISSION :

INCOME : DATE OF
DISCHARGE :
DIAGNOSIS
(Provisional) :
DIAGNOSIS

(Final) :

MEDICAL OFFICER:

COMPLAINTS & DURATION :

HISTORY OF PRESENT ILLNESS :

HISTORY OF PAST ILLNESS :
(INCLUDING TREATMENT HISTORY)

CONTACT HISTORY :

ANTENATAL HISTORY :

BIRTH / NATAL HISTORY :

NEONATAL / POSTNATAL
HISTORY :

DEVELOPMENTAL HISTORY :

DIETIC HISTORY :

FAMILY HISTORY :

SOCIAL & CULTUAL HISTORY :

IMMUNISATION HISTORY :

HISTORY OF ALLERGIES :

CLINICAL EXAMINATION:

Character

Peripheral pulses.

Heart Rate:

Rate / Min

Respiratory Rate:

Rate / Min

Type

Character

Temp:

B.P: Upper Limb

Lt. side.

Rt.side.

Lower Limb

Lt. side.

Rt. side.

SIDDHA SYSTEM OF EXAMINATION:

I. NILAM:

Kurunji

Mullai

Marutham

Neithal

Paalai

II. PARUVAKAALAM:

Kaar (Aavani – purattasi):

Koodhir (Iyppasi – Karthigai):

Munpani (Margazhi – Thai):

Pinpani (Maasi – Panguni):

Ilavenil (Chithirai – Vaikaasi):

Mudhuvēnil (Aani – Aadi):

III. MUKKUTTRAM (udal nilai)

Vaadham

Pitham

Kabham

Kalappu

IV. GUNAM

Sathuvam

Raasadham

Thamadham

V. PORI PULANGAL (Sensory organs & its functions)

Mei (Body) - Ooru (Touch)

Vaai (Mouth) - Suvai (Taste)

Kan (Eye) - Oli (Sight)

Mooku (Nose) - Naatram (Smell)

Sevi (Ear) - Osai (Hearing)

VI. KANMENTHIRIYAM / VIDAYAM:

Kai (Dhaanam)

Kaal (Kamanam)

Vaai (Vasanam)

Eruvaai (Visarkam)

Karuvaai (Anantham)

VII. PIRA URUPPUKALIN NILAI

Iruthayam

Puppusam

Eraippai

Kalleeral

Manneeral

Kudal

Siruneeragam

Siruneerpai

Moolai

VIII. UYIR THADHUKAL

Vaadham

Pranan

Abanan

Viyanan

Udhanan

Samanan

Naagan

Koorman

Kirugaran

Devathathan

Dhananjeyan – Not applicable.

Pitham

Analam

Ranjagam

Saadhadgam

Prasagam

Aalosagam

Kabham

Avalampagam

Kiledhagam

Podhagam

Tharpagam

Santhigam

IX. UDAL THADHUKAL:

Saaram

Seneer

Oon

Kozhuppu

Enbu

Moolai

Sukilam / Suronitham – Not applicable (Child)

X. ENVAGAI THERVUGAL:

Naa

Niram

Mozhi

Vizhi

Malam - Niram

Edai

Irugal

Illagal

Moothiram

Neerkuri - Niram

Edai

Manan

Nurai

Enjal

Neikuri

Naadi.

MODERN ASPECTS:

SYSTEMIC EXAMINATION

EXAMINATION OF UPPER RESPIRATORY SYSTEM

GENERAL EXAMINATION.

Sore throat

Fever

Dysphagia

Cough

Nasal congestion

Rhinitis

Headache

Dyspnoea

Wheezing

Coryza

LOCAL EXAMINATION

NECK

Tonsillar node enlargement

Tenderness

Other Cervical glands

Anterior

Posterior

Upper

Superficial

Deep

EAR

Pre-auricular node

Discharge.

NOSE

Rhinitis

Pus

Mucous

Ulceration

Polyp.

MOUTH

Tonsils:

Surface

Inflammation

Redness

Follicles

Ulceration

Hemorrhage

Mucous Coating

Uvula

Inflammation

Elongation.

Pharynx:

Inflammation

Redness

Ulceration

Growth

Tongue:

Coating

Ulceration

Growth

Teeth:

Caries teeth

Gums:

Gingivitis.

OTHERS:

Past History of Tonsillitis

Recurrence of attack

Family history of allergy

Associated joint pain

Associated Nasal allergy

Personal habits

Tendency for sweets, chocolates, cold food stuffs,

Personal hygiene

Living conditions

EXAMINATION OF CARDIO VASCULAR SYSTEM

EXAMINATION OF CENTRAL NERVOUS SYSTEM

EXAMINATION OF ABDOMEN

EXAMINATION OF URINARY SYSTEM.

LABORATORY INVESTIGATIONS:

Blood

TC

DC

ESR -1/2 hr

-1 hr

HB %

Urine

Albumin

Sugar

Deposits

DAILY PROGRESS

Date	Symptoms	Medicine

GOVERNMENT SIDDHA MEDICAL COLLEGE & HOSPITAL
PALAYAMKOTTAI
POST GRADUATION
DEPARTMENT OF KUZHANTHAI MARUTHUVAM
(BRANCH – IV)
ADMISSION – DISCHARGE SHEET
FOR
LASUNATHABITHAM (TONSILLITIS)

Name of the Ward:

I.P.No : Nationality :

Bed No. : Religion :

Name : Permanent
Address :

Age / Sex :

Occupation : Informant :
(of parent) :

Income : Date of
(of parent) Admission :

Date of
Discharge :

Diagnosis
(Provisional) :

Diagnosis (Final)

MEDICAL OFFICER:

S.NO.	SIGNS & SYMPTOMS	DURING ADMISSION	DURING DISCHARGE.
Symptoms			
1.	Sore throat		
2.	Dysphagia		
3.	Fever		
4.	Cough		
5.	Hoarseness of voice		
6.	Headache		
7.	Earache		
8.	Nasal stuffiness		
9.	Malaise		
10.	Anorexia		
11.	Dis taste		
12.	Foul breath		
13.	Abdominal pain		
14.	Constipation		
Signs			
1.	Inflammation of tonsils		
2.	Erythema of tonsils		
3.	Cervical lymphadenopathy		
4.	Whitish membrane on tonsil		
5.	Foetid breath		
6.	Joint tenderness.		

REVIEW OF SIDDHA LITERATURES

Before looking into siddha literatures about the topic Lasunathabitham let us discuss in brief some basic principles called Fundamentals of Siddha the Uyir and Udal Thaadhukal.

UYIR THAADHUKAL

The universe man is composed of 5 elements such as earth, water, fire, air and ether.

1. The earth gives shape to the body and release its energy. Bones, muscles and tissues represent it in the body.
2. Water makes the earth supple and helps in the transmission of energy. Serum, lymph, saliva, etc., represent it in the body.
3. Fire makes the form of the body steady and gives vigor and stimulation. Digestion and circulation represent it in the body.
4. Air ignites the fire and works as a life carrier and is the support of all contact and exchange. Respiration and Nervous system represent it in the body.
5. Ether is the creator of life itself in the body. A harmonious combination and function of these five elements in the body produce a healthy and beautiful life.

Vatham, Pitham and Kabham have multiple significance and are symbolical in terms.

(1) Vatham represents vayu, mind, dryness, pain, flatulence, sensitiveness, lightness and also air.

(2) Pitham represents gastric juice, bile, energy, heat, inflammation, anger and irritation, etc.

(3) Kabham represents feeling of cold, heaviness, running of the nose, passing of mucoid discharge and also the saliva.

Different types and forms of Vatham Pitham Kabham

Here the description is anatomical and physiological and each has been described in five forms with five functions:

(a) Ten forms of vatham:

The first five are the main centres of the subtle physical body and correspond to the nervous plexuses of the gross physical body.

1. Matedial of mooladhar centre (அபானன்):

This corresponds to the pelvic plexus and is the seat of kundalini or material energy and control excretions.

2. Navel centre (சுமானன்):

This corresponds to the solar plexus in the navel region and control digestion.

3. Heart centre (பிராணன்):

This refers to the cardiac plexus in the Heart region and controls Heart and circulation.

4. Throat Centre (உதானன்) :

This corresponds to the pharyngeal plexus in the throat region and controls breathings and speech.

5. Forehead centre (வியானன்):

This corresponds to the Naso-ciliary plexus at the root of the nose and base of the skull and controls “will”.

The other types are described below.

6. நாகன்:

Responsible for higher intellectual functions like learning, thinking
etc,

7. கூர்மன்:

Responsible for vision and yawning, lacrimal secretion and also helps in bodybuilding.

8.கிருகரன்:

Responsible for salivation, nasal secretion, appetite and also concentration of mind.

9.தேவதத்தன்:

Responsible for laziness, sleeping and anger.

10.தனஞ்சேயன்:

Produces bloating of body after death, of which air escapes the 3rd day from the cranial burst.

(b) Five forms of Pitham:

1. Gastric juice (அனலம்): This give apetite and helps Digestion.
2. Bile (பிராசகம்): gives complexion to the skin.
3. Haemoglobin (இரஞ்சகம்): colours the blood.
4. Aqueous Humour (ஆலோசகம்): brightens the eyes.
5. Life energy (சாதகம்): controls the whole body.

(c) Five forms of Kapha:

1. Saliva (கிலேதகம்) helps masticaption.
2. Cerebrospinal fluid (தற்பகம்) keeps the head cool.
3. Lymph (போதகம்) gives taste.
4. Serum (அவலம்பகம்) helps the Heart in Pumping.
5. Synovial fluid (சந்திகம்) lubricates and aids free movements of the joints.

1. VATHAM

Its Qualities:

Opposite Qualities:

Dry (வறட்சி)

Unctuous (பசுமை)

Cold (குளிர்ச்சி)

Hot (அக்கினி)

Subtle (அணுத்துவம்)

Solid (கெட்டி)

Rough (கடினம்)

Soft (மிருது)

Unstable (அசைதல்)

Stable (ஸ்திரம்)

Light (இலகு)

Heavy (பளு)

All these qualities are present in Air and hence air we inhale is Vatham.

2. PITHAM

Its Qualities:

Hot (அக்கினி)

Acid (புளிப்பு)

Mobile (வூடுந்தன்மை)

Immobile(நிலைத்திருத்தல்)

Liquid (சலரூபம்)

Acute (குரூரம்)

(சாந்தம்)

Pungent (காரம்)

Opposite Qualities:

Cold (குளிர்ச்சி)

Sweet (இனிப்பு)

Solid (கெட்டி)

Mild or harmless

Bitter(கசப்பு)

All these qualities are present in the gastric juice and hence the gastric juice is Pitha.

3.KABHAM

Its Qualities:

Cold (குளிர்ச்சி)

Heavy (பளுவு)

Immobile(அசைவின்மை)

Opposite Qualities:

Hot (உட்டிணம்)

Light (இலகு)

Mobile (அசைதல்)

Sweet(இனிப்பு)

Soft (மிருது)

Unctuous(ஈரம்)

Viscid(வழுவழப்பு)

Pungent(காரம்)

Rough(கடினம்)

Dry(வறட்சி)

Sandy (கரகரப்பு)

All these qualities are present in Saliva. So Saliva is Kabham.

These three humours namely, air, gastric juice and saliva circulate in the system in different proportions and help in the digestion of food and general make-up of the body. Each of them has different functions. Yet it is harmony, the right proportion of each, the proper combination of the three humours, which are responsible for maintaining good health and good digestion.

When humours are disturbed for some reason or other, bodily disorders take place-for an example feeling of dryness in the throat, heat and irritation of the eyes, cold and heaviness in the head. Dryness is the quality of Air, i.e. Vatham; Heat and irritation of the eyes are the qualities of gastric juice (i.e.Pitham), cold and heaviness of the head are the qualities of saliva (Kabham).

It is why when such a disorder takes place, it is termed “Provoked vatham”, “Provoked Pitham” and “Provoked Kabham” respectively.

Some illustrations of Vatham, Pitham and Kapham:

Sl.No	Context	Vatham	Pitham	Kapham
1.	Gross body	Heart	Chest and abdomen	Arms and legs,
2.	Systems	Nervous	Digestive and circulatory	Muscular.
3.	Function	Mind	Vital	Physical

4.	Gunam	Sathuvam	Raasadham	Thamadham
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5.	Cell	Nucleus	Protoplasm	Body of the cell
6.	Humours	Air	Gastric juice	Saliva
7.	Excretions	Exhaled air	Urine and perspiration	Faeces
8.	Expulsion of dosham	Wind	Watery or yellow discharge	Mucous.
9.	Feeling of dosham	Pain or dryness	Heat	Cold
10.	Classification	Painful or paralytic	Inflammatory	Non inflammatory
11.	Causes	Lack of relaxation	Low vitality	Accumulation of toxic matter
12.	Treatment	Relaxation	Stimulation	Elimination
13.	Nature	Air	Sun	Earth or moon
14.	Shape	Gases	Liquids	Solids
15.	Profession	Judge	Police	Scavenger.

In Lasunathbitham the uyir thaadhu kabham is deranged.

UDAL THADHUKAL:

The physical body is constituted by the seven physical constituents. They are the basic tissues of our body. Each has its own specific function.

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

2. **Seeneer:** Saram is converted into senneer after proper absorption. It is responsible for knowledge, strength, boldness and healthy complexion. Imparts colour to body and nourishes muscles.
3. **Oon:** It gives structure and shape to body and is responsible for the movements of the body.
4. **Kozhuppu:** Lubricates the organs and thus facilitates their functions. Maintains oil content of the body.
5. **Enbu:** Forms the basic skeletal frame work of the body and responsible for locomotion, protection of vital organs.
6. **Moolai:** Present inside the core of the bone, which strengthens and maintains the normal conditions of the bone.
7. **Sukkilam/Suronidham:** Responsible for prorogation of species (Reproductive function)

In Lasunathabitham some of the Udal thaadhukal get either increased or decreased in quantity and quality according to which symptoms are produced.

BIO – CHEMICAL ANALYSIS OF KALLUPPU MAATHRAI
PREPARATION OF THE EXTRACT

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

QUALITATIVE ANALYSIS

S.NO.	EXPERIMENT	OBSERVATION	INFERENCE
1.	TEST FOR CALCIUM 2ml of the above-prepared extract is taken in a clean test tube. 2 ml 4% Ammonium oxalate solution is added to it.	A white precipitate is formed	Indicates the presence of calcium
2.	TEST FOR SULPHATE: 2ml of the extract is added to 5% barium chloride solution.	A white precipitate is formed	Indicates the presence of sulphate
3.	TEST FOR CHLORIDE The extract is treated with silver nitrate solution.	A white precipitate is formed	Indicates the presence of chloride
4.	TEST FOR CARBONATE The substance is treated with concentrated HCL	No brisk effervescence is formed	Absence of carbonate
5.	TEST FOR STARCH The extract is added with weak iodine solution.	No blue colour is formed.	Absence of starch
6.	TEST FOR IRON-FERRIC The extract is treated with concentrated Glacial acetic acid and potassium ferro cyanide.	No blue colour is formed	Absence of ferric Iron.
7.	TEST OF IRON FERROUS: The extract is treated with concentrated Nitric acid and ammonium thio cyanate.	Blood red colour is formed	Indicates the presence of ferrous Iron.

8.	TEST FOR PHOSPHATE The extract is treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate is formed	Absence of phosphate
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9.	TEST FOR ALBUMIN The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of Albumin
10.	TEST FOR TANNIC ACID The extract is treated with ferric chloride.	No blue black precipitate is formed	Absence of Tannic acid
11.	TEST FOR UNSATURATION Potassium permanganate solution is added to the extract.	It does not get decolourised	Absence of unsaturated compound
12.	TEST FOR THE REDUCING SUGAR 5ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2mts and added 8-10 drops of the extract and again boil it for 2 mts.	No colour Change occurs	Absence of Reducing sugar
13.	TEST FOR AMINO ACID: One 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 it well.	No violet colour is formed	Absence of Amino acid.

BIO – CHEMICAL ANALYSIS OF AKARAGARA KUDINEER
PREPARATION OF THE EXTRACT

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

QUALITATIVE ANALYSIS

S.NO.	EXPERIMENT	OBSERVATION	INFERENCE
1.	TEST FOR CALCIUM 2ml of the above prepared extract is taken in a clean test tube. 2 ml 4% Ammonium oxalate solution is added to it.	A white precipitate is formed	Indicates the presence of calcium
2.	TEST FOR SULPHATE: 2ml of the extract is added to 5% barium chloride solution.	No white precipitate is formed	Indicates the absence of sulphate
3.	TEST FOR CHLORIDE The extract is treated with silver nitrate solution.	No white precipitate is formed	Indicates the absence of chloride
4.	TEST FOR CARBONATE The substance is treated with concentrated HCL	No brisk effervescence is formed	Absence of carbonate
5.	TEST FOR STARCH The extract is added with weak iodine solution.	No blue colour is formed.	Absence of starch
6.	TEST FOR IRON-FERRIC The extract is treated with concentrated Glacial acetic acid and potassium ferro cyanide.	No blue colour is formed	Absence of ferric Iron.
7.	TEST OF IRON FERROUS: The extract is treated with concentrated Nitric acid and ammonium thio cyanate.	Blood red colour is formed	Indicates the presence of ferrous Iron.

8.	TEST FOR PHOSPHAT The extract is treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate is formed	Absence of phosphate
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9.	TEST FOR ALBUMIN The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of Albumin
10.	TEST FOR TANNIC ACID The extract is treated with ferric chloride.	No blue black precipitate is formed	Absence of Tannic acid
11.	TEST FOR UNSATURATION Potassium permanganate solution is added to the extract.	It get decolourised	Presence of unsaturated compound
12.	TEST FOR THE REDUCING SUGAR 5ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2mts and added 8-10 drops of the extract and again boil it for 2 mts.	Colour Change occurs	Presence of Reducing sugar
13.	TEST FOR AMINO ACID: One 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 it well.	No violet colour is formed	Absence of Amino acid.

BIO – CHEMICAL ANALYSIS OF SUKKU-AMUKRA PATTRU

PREPARATION OF THE EXTRACT

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

QUALITATIVE ANALYSIS

S.NO.	EXPERIMENT	OBSERVATION	INFERENCE
1.	TEST FOR CALCIUM 2ml of the above prepared extract is taken in a clean test tube. 2 ml 4% Ammonium oxalate solution is added to it.	No white precipitate is formed	Indicates the absence of calcium
2.	TEST FOR SULPHATE: 2ml of the extract is added to 5% barium chloride solution.	No white precipitate is formed	Indicates the absence of sulphate
3.	TEST FOR CHLORIDE The extract is treated with silver nitrate solution.	No white precipitate is formed	Indicates the absence of chloride
4.	TEST FOR CARBONATE The substance is treated with concentrated HCL	No brisk effervescence is formed	Absence of carbonate
5.	TEST FOR STARCH The extract is added with weak iodine solution.	Blue colour is formed.	Presence of starch
6.	TEST FOR IRON-FERRIC The extract is treated with concentrated Glacial acetic acid and potassium ferro cyanide.	No blue colour is formed	Absence of ferric Iron.
7.	TEST OF IRON FERROUS: The extract is treated with concentrated Nitric acid and ammonium thio cyanate.	Blood red colour is formed	Indicates the presence of ferrous Iron.

8.	TEST FOR PHOSPHATE The extract is treated with ammonium Molybdate and concentrated nitric acid.	No yellow precipitate is formed	Absence of phosphate
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9.	TEST FOR ALBUMIN The extract is treated with Esbach's reagent.	No yellow precipitate is formed	Absence of Albumin
10.	TEST FOR TANNIC ACID The extract is treated with ferric chloride.	No blue black precipitate is formed	Absence of Tannic acid
11.	TEST FOR UNSATURATION Potassium permanganate solution is added to the extract.	It gets decolourised	Presence of unsaturated compound
12.	TEST FOR THE REDUCING SUGAR 5ml of Benedict's qualitative solution is taken in a test tube and allowed to boil for 2mts and added 8-10 drops of the extract and again boil it for 2 mts.	No colour Change occurs	Absence of Reducing sugar
13.	TEST FOR AMINO ACID: One 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 it well.	Violet colour is formed	Presence of Amino acid.

RESULTS & OBSERVATION

Results were observed with respect to the following aspects.

1. Age
2. Sex
3. Socio – Economic Status
4. Food habits
5. Etiological factors
6. Duration of illness
7. Clinical features
8. Mukkutra kalam
9. Paruva kalam
- 10.Thinai
- 11.Uyir Thadhukal
- 12.Udal Thadhukal
- 13.Enn vagai Thervugal
- 14.Re – occurrence
- 15.Type of illness
- 16.Investigations
- 17.Results

1. Age distribution

S.No.	Age	No.of cases	Percentage
1.	0-1 Year Kaapu & Chenkeerai	-	-
2.	1-3 Years Varugai, Thalatu Sappani & Mutham	-	-
3.	3-6 Years Ambuli, Chitril, Pillai paruvum (male) Paethai (Female)	4	20%
4.	6– 11Years Chiru paruvum (Male) Pethumbai (Female)	13	65%

5.	11-12 Years Mangai (Female) Valibam (Male)	3	15%
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Observation:

The above table shows that children in the age group of 6-11 years are mostly affected (65%) than the other age groups.

2. Sex distribution:

S.No.	Sex	No. of cases	Percentage
1.	Male	10	50%
2.	Female	10	50%

Observation:

The above table shows that there is no sex predilection for the disease.

3. Socio – economic status

S. No.	Socio-Economic status	No. of cases	Percentage
1.	Poor	17	85%
2.	Middle class	3	15%
3.	Rich	-	-

Observation:

The above table shows that the prevalence of the disease is more in lower socio – economic status (85%)

4. Diet habits

S. No.	Food habits	No. of cases	Percentage
1.	Vegetarian	2	10%
2.	Non- vegetarian	-	-
3.	Mixed diet	18	90%

Observation:

Though the above table indicates children under mixed diet are mostly affected, the type of diet does not have any influence on producing the disease.

5. Etiological factors:

S. No.	Etiological factors	No. of cases	Percentage
1.	Intake of cold food stuffs like Ice cream etc.	10	50%
2.	Drinking of contaminated water.	2	10%
3.	Climatic change	4	20%
4.	Pre-existing allergy	2	10%
5.	Family history	2	10%

Observation:

From the above table, 50% of the children are affected due to intake of cold ice-creams, and cold food stuffs, next higher incidence is due to climatic change while the other causes are minimal.

6. Duration of illness:

S. No.	Duration	No. of Patients	Percentage
1.	1-5 days	13	65%
2.	6-10 days	6	30%
3.	11-15 days	1	5%

Observation:

More than 60% of children had duration of illness only less than 5 days, and only 5% of population had illness for more than 10 days

7. Clinical Features:

S. No.	Symptoms	No. of cases	Percentage
1.	Sore throat	20	100%
2.	Dysphagia	16	80%
3.	Cough	16	80%
4.	Fever	9	45%
5.	Hoarseness of voice	3	15%
6.	Nasal stuffiness	1	5%
7.	Malaise	16	80%
8.	Earache	1	5%

9.	Head ache	2	10%
10.	Anorexia	8	40%
11.	Rhinitis	2	10%
12.	Distaste	2	10%
13.	Foul breath	-	-
14.	Constipation	4	20%
15.	Abdominal pain	-	-

S. No.	Signs	No. of cases	Percentage
1.	Inflammation of tonsils	20	100%
2.	Erethema of tonsils	20	100%
3.	Cervical lymphadenopathy	15	75%
4.	Whitish membrane on tonsil	2	10%
5.	Joint tenderness	-	-

Observation:

From the above table

- i) All 100% of children had sore throat, Inflammation of tonsils & Erethema of tonsils.
- ii) 80% of them had Dysphagia, cough, Malaise
- iii) 75% of them presented with cervical lymphadenopathy and the other features were common for all.

8. Mukkutra kalam:

S. No.	Mukkutra kalam	No. of cases	Percentage
---------------	-----------------------	---------------------	-------------------

1.	Vatham	20	100%
2.	Pitham	-	-
3.	Kabam	-	-

Observation:

From the above table it is clear that all 100% are under Vaadha kalam as the age group selected was 4-12 yrs.

9. Paruvakalam:

S. No.	Paruvam	No. of cases	Percentage
1.	Elavenil (Chithirai-Vaikasi)	2	10%
2.	Mudhuvenil (Aani – Aadi)	5	25%
3.	Kaar (Aavani-Purattasi)	7	35%
4.	Koothir (Ippasi-kaarthigai)	6	30%
5.	Munpani (Markazhi-Thai)	-	-
6.	Pinpani (Maasi-Panguni)	-	-

Observation:

From the above table it is inferred that 60% of children were suffering from the disease during kaar & Koothir kalam and 10% during Elavenil when “Kabham” starts to increase.

10. Thinai

S. No.	Thinai	No. of cases	Percentage
1.	Kurunji	-	-
2.	Mullai	-	-

3.	Marutham	18	90%
4.	Neithal	2	10%
5.	Paalai	-	-

Observation:

From the above table 90% children affected are living in Marutha Nilam and 10% from Neithal Nilam. According to siddha concept people from Marutha Nilam would not be affected by diseases but today's concept is entirely different from our ancestor's because his dietary and other habits have been completely changed. More over majority of patients came from in & around Tirunelveli which is a Marutha Nilam.

11. Uyir Thaadhukal:

Vaatham

S. No.	Types of Vatham	No. of cases	Percentage
1.	Praanan	-	-
2.	Abaanan	4(Constipation)	20%
3.	Vyaanan	20(Sore throat)	100%
4.	Udhanan	-	-
5.	Samanan	8(Anorexia)	40%
6.	Naagan	-	-
7.	Koorman	-	-
8.	Kirugaran	2(Rhinitis)	10%
9.	Devadhathan	16(Malaise)	80%
10.	Dhananjeyan	-	-

Observation:

All 100% of patients affected were having derangement in Vyaanan and Devadhathan was affected in 80% and Samanan was affected in 40% of children.

Pitham:

S. No.	Types of Pitham	No. of cases	Percentage
1.	Analam	8(Anorexia)	40%
2.	Ranjagam	10(Red. HB %)	50%
3.	Saadhagan	11(Dysphagia & Malaise)	55%
4.	Prasagam	-	-
5.	Aalosagam	-	-

Observation:

80% showed derangement in Saadhagan, 50% showed derangement in Ranjagam and 40% showed derangement in Analam.

Kabham:

S. No.	Types of Kabham	No. of cases	Percentage
1.	Avalampagam	20	100%
2.	Kiledhagam	8	40%
3.	Podhagam	2(Distaste)	10%
4.	Tharpagam	-	-
5.	Sandhigam	-	-

Observation:

100% of patients showed derangement in Avalampagam, 40% in Kiledhagam, 10% in Podhagam.

12. Udal Thaadhukal:

S. No.	Udal thaadhukal	No. of cases	Percentage
1.	Saaram	10 (Red. HB%)	50%
2.	Seneer	10 (Red. HB%)	50%
3.	Oon	-	-
4.	Kozhuppu	-	-
5.	Enbu	-	-
6.	Moolai	-	-
7.	Sukkilam or Suronidham	-	-

Observation:

In 50% of the patients Saaram and Seneer were affected.

13. Ennvagai thervu:

S. No.	Ennvagai thervu	No. of cases	Percentage
1.	Naa	9 (Fever)	45%
2.	Niram	7(Velluppu)	35%
3.	Mozhi	2 (Hoarseness of voice)	5%
4.	Vizhi	7 (Redness of eye, Fever)	35%
5.	Malam	4 (constipation)	20%
6.	Sparism	9 (Veppam – Fever)	45%

Naadi:

Naadi is not understood correctly in children perhaps due to their physical conditions and so it cannot be used in Pediatric diagnosis. Anyhow, Kaba Pitha Naadi or Pitha Kaba Naadi were felt in the elder children of about 10 years of age or above. This further confirmed the diagnosis.

Moothiram:

Neerkuri:

- Normal colour
- Normal Specific gravity
- No abnormal odor
- No Froth
- No Deposits

Neikuri:

S. No.	Neikuri type	Character noticed	No. of cases	Percentage
1.	Vaadham	Snake like spread	-	-
2.	Pitham	Ring like spread	6	30%
3.	Kabham	Pearl like spread	14	70%

Observation:

From the above table that % of Kabham derangement is more (70%) thus showing that the disease is due to “Kabha” Kuttram.

14. Re-occurane:

S.No	Onset of illness	No.of cases	Percentage
1.	1 st time	12	60%
2.	2-4 times	7	35%
3.	5 or more times	1	5%

Observation:

In 60% of children the disease occurred for the 1st time and in 35% for 2nd or 3rd time and in 5% for more than 5th time.

15. Type of illness:

S. No.	Type	No. of cases	Percentage
1.	Acute	17	85%
2.	Gradual (or) Chronic	3	15%

Observation:

From this table we come to know that are mostly (85%) children were Acutely affected than 15% of children who were chronically affected by the disease.

16. Investigations:

Hemoglobin level:

S.No.	HB	No. of case	Percentage
1.	Below 60%	10	50%
2.	Above 60%	10	50%

ESR (Erythrocyte Sedimentations Rate)

S. No.	ESR/Hour (in mm)	No. of cases	Percentage
1.	1-5mm	4	20%
2.	6-10mm	10	50%
3.	11-15mm	3	15%
4.	15-20mm	3	15%

Total leucocyte Count (TC)

S. No.	T.C / Cu.mm	No. of cases	Percentage
1.	8,000-10,000	11	55%
2.	10,000-11,000	9	45%
3.	11,000-12,000	1	5%

Observation:

From the above table

HB% -half of the cases were below 50% and the remaining half above 50%.

ESR-50% of the cases showed 6-10mm of ESR.

TC-more than 10 cases showed TC in the range between 8000-10000.

17. Results:

S.No	Result	No. of cases	Percentage
1.	Good	18	90%
2.	Fair	2	10%
3.	Poor	-	-

Observation:

Results were good in 90% of children while Fair in remaining 10%. There is no Poor response at all.

ANTI – MICROBIAL STUDY OF KALLUPPU MAATHIRAI

Aim:

To identify the Anti Microbial (Anti – Bacterial) activity of kalluppu Maathirai against streptococcus and staphylococcus and pseudomonas.

Medium: Muller Hinton agar

Components of Medium:

Beef extract	:	300 gms / lit.
Agar	:	17 gms / lit.
Starch	:	1.50 gms / lit
Casein Hydroxylate	:	17.50 gms / lit
Distilled Water	:	100 ml
PH	:	7.6

Procedure:

The media was prepared from the above components and poured and dried on a petri dish. The organism was streaked on the medium and the test drug (1 gm drug in 10 ml of water) was placed on the medium. This is incubated at 37°C for one over night and observed for the susceptibility shown up clearance around the drug.

Result:

The test drug kalluppu Maathirai was moderately Sensitive against streptococci and staphylococci.

Table:

Anti-Microbial susceptibility test report.

S. No.	Organism	Susceptibility	Zone of inhibition in mm.
1.	Staphylococcus	Moderately	16mm

		Sensitive	
2.	Streptococcus	Moderately Sensitive	15mm
3.	Pseudomonas	Resistant	-

DISCUSSION

The author selected the Topic Lasunathabitham and research was done in Govt. Siddha Medical College, in the P.G. Kuzhandhai Maruthuvam ward for twenty patients, case sheet was maintained for each individual.

From the results and observations mentioned earlier some of the factors seems to play an important role in the causation of the disease. These are discussed below.

1. Age – Children in the age group of 6-11 (school going) are mostly affected.
2. Sex distribution – There is no sex predilection for the disease.
3. Socio – Economic status – The disease is more common in lower socio – economic groups whose infections are more due to unhygienic conditions.
4. Etiological factors – The important factor causing the disease is consumption of cold foodstuffs like ice – creams, ice-cold water etc. Other important causes are drinking of contaminated water and climatic changes.
5. Durations of illness – Mostly the duration of the disease is less than 5days.
6. Clinical Features – The main clinical features noted are sore throat, Dysphagia, Fever, Cough, Inflammation and erethema of Tonsils associated with cervical lymphadenopathy.

7. Mukkutrakalam – Though the disease is much prone to children in Vadha kalam, sometimes it may also rarely occur in adults in Pitha kalam.
8. Paruvakalam – The Disease is more common in rainfall and summer ie. Kaar, koothir and Elavenil.
9. Uyir thadhukal –
Vaadham:

Vyanan derangement is seen in all patients where as devadhathan, samanana, Abanan and Kirugaran also showed its derangements in some.

Pitham:

Saadhagam and Ranjagam affected in many patients (in half of them) and Analam is next affected pitham.

Kabham:

Avalampagam is affected in all cases, kiledhagam was affected in almost half of the cases and podhagam in a few.

10. Udal Thaadhukal:

Saram and Seneer are commonly affected.

11. Envagai Thervu:

Naa - Coated tongue in was noticed 9 cases those who had fever.

Niram - 7 of them showed Velluppu
Niram (derangement of kabham)

Mozhi - Hoarseness of voice were noted in 2 of the cases.

- Vizhi - 7 of them showed Redness of the Eye because of increased temperature.
- Malam - 4 showed constipation.
- Moothiram - Neerkuri-No abnormalities
Neikuri-Mostly (14 cases) showed pearl like spread indicating the “Kabha”kuttram.
- Sparism - 9 showed ‘Veppam’ because of Fever.
- Naadi - Kabha pitham
(or)
Pitha kabham were felt in most of the cases (above 8 years)
(Below which Naadi is not understood so clearly).

12. Recurrence and Onset (type) of illness:

Mostly the disease occurred for the 1st time and is of Acute type.

13. Investigations:

Blood and Urine investigations were made. Blood investigations showed increased Leucocytosis. Increased ESR in all patients and reduced HB% in half of the patients. No abnormalities were seen in Urine tests.

14. MANAGEMENT:

- All cases were managed with 2 medicines internally namely
 - i) Kalluppu Maathirai – ½ o.d. (in the morning before food)

Fever
Cough
Cervical lymphadenopathy
Inflammation and Redness of tonsils

started to reduce on the second day itself.

Sore throat, dysphagia was controlled on second or third day itself.

Fever subsided by the first or second day.

There were no side effects observed.

In some patients only 4 days dose of medicine was enough to bring them to normal conditions.

At the end of the treatment the lab investigations showed reduction in leucocytes (which had been already increased due to disease), reduction in ESR (which had been already increased due to disease) and HB% increased.

15. From the description of individual drugs in Siddha texts,

Kalluppu and karisalai are good deobstruents, expectorants, and used in kabha diseases. Akaragaram is widely used in treating tonsillitis itself and more over a good Antipyretic. Sukku and Amukra are very good in anti – inflammatory actions. Thus all drugs mentioned above are specifically chosen by the author and used as medicines.

16. The pharmacological studies revealed that all these drugs have significant,

Analgesic

Anti-pyretic
Acute and chronic Anti – inflammatory actions.

17. The Biochemical analysis shows

- 1) That Kalluppu Maathirai contains sodium, chloride, calcium, sulphates and Ferrous Iron
- 2) A Karagara Kudineer contains Ferrous, calcium, unsaturated compounds and reducing sugar.
- 3) Sukku-Amukra pattu contains starch, unsaturated compound and Amino acid.

These minerals are very important in growth and development of children. Iron is very important for growing children and also treats Anemia besides.

18. The Micro- biological Analysis showed that Kalluppu Maathirai was moderately sensitive against streptococci and staphylococci.

Hence considering all the above points the drugs

Kalluppu Maathirai

Akaragara Kudineer and

Sukku - Amukra pattu were found to be good in the treatment of Lasunathabitham.

Sl. No.	I.P. No.	NAME	AGE	SEX	DATE OF ADMISSION	DATE OF DISCHARGE	NO: DAY TREA
1.	1533	Issaki Narayanan	9	M	14.06.08	18.06.08	5
2.	1578	Vigneshwaran	7	M	18.06.08	21.06.08	4
3.	1790	Manimegalai	8	F	9.07.08	12.07.08	4
4.	1801	Nandhini	12	F	11.07.08	17.07.08	7
5.	1876	Muthukumar	6	M	18.07.08	04.08.08	23
6.	2007	Marimuthu	6	M	02.08.08	08.08.08	7
7.	2052	Sreenivasan	7	M	07.08.08	10.08.08	4
8.	2257	Regina	10	F	25.08.08	01.09.08	7
9.	2325	Benazir Rani	4	F	02.09.08	05.09.08	4
10.	2336	Charan	7	M	03.09.08	07.09.08	5
11.	2337	Samyuktha	4	F	03.09.08	07.09.08	5
12.	2363	Srimathi	10	F	06.09.08	10.09.08	5
13.	2554	Sooriyalakshmi	12	F	25.09.08	28.09.08	4
14.	2603	Sandhiya	9	F	30.09.08	03.10.08	4
15.	2621	Rajendran	12	M	03.10.08	06.10.08	4
16.	2642	Sathya	9	F	06.10.08	13.10.08	8
17.	2666	Tamilarasan	7	M	08.10.08	11.10.08	4
18.	2667	Mariyappan	10	M	08.10.08	11.10.08	4
19.	2707	Vidhya	9	F	14.10.08	16.10.08	3
20.	2876	Balaji	11	M	07.11.08	11.11.08	5

S. No.	I.P. No.	Name / Age / Sex	Signs & symptoms	Duration of Illness (Days)	No. of days treated	Me g
1.	1533	Issaki Narayanan 9/MC	* Sore throat, cough, dysphagia, fever, cervical lymphadenitis.	4	5	
2.	1578	Vigneshwaran 7/MC	* Sore throat, cough, dysphagia, cervical lymphadenitis.	6	4	
3.	1790	Manimegalai 8/FC	* Sore throat, cough, dysphagia, Hoarseness of voice.	3	4	
4.	1801	Nandhini 12/FC	* Sore throat, cough, dysphagia, fever, cervical lymphadenitis, Whitish membrane on tonsils, distaste.	10	7	
5.	1876	Muthukumar 6/MC	* Sore throat, cough, dysphagia, fever, cervical lymphadenitis, Whitish membrane on tonsils, distaste, Headache, Nasal stuffiness.	20	23	
6.	2007	Marimuthu 6/MC	* Sore throat, cough, dysphagia.	3	7	
7.	2052	Sreenivasan 7/MC	* Sore throat, dysphagia, Hoarseness of voice.	3	4	
8.	2257	Regina 10/FC	* Sore throat, cough, dysphagia, fever, cervical lymphadenitis.	5	7	

9.	2325	Benazir Rani 4/FC	✦ Sore throat, cough, dysphagia, Anorexia, cervical lymphadenitis.	7	4	
10.	2336	Charan 7/MC	✦ Sore throat, cough, dysphagia, cervical lymphadenitis.	4	5	
11.	2337	Samyuktha 4/FC	✦ Sore throat, cough, Rhinitis.	3	5	
12.	2363	Srimathi 10/FC	✦ Sore throat, cough, dysphagia, fever, cervical lymphadenitis, Head ache	10	5	
13.	2554	Sooriyalakshmi 12/FC	✦ Sore throat, dysphagia, cervical lymphadenitis.	3	4	
14.	2603	Sandhiya 9/FC	✦ Sore throat, dysphagia, fever, cervical lymphadenitis.	4	4	
15.	2621	Rajendran 12/MC	✦ Sore throat, cough, dysphagia, fever, cervical lymphadenitis.	4	4	
16.	2642	Sathya 9/FC	✦ Sore throat, cough, dysphagia, fever, cervical lymphadenitis.	7	8	

17.	2666	Tamilarasan 7/MC	✳ Sore throat, cough, Rhinitis, Hoarseness of voice.	2	4	
18.	2667	Mariyappan 10/MC	✳ Sore throat, cough, cervical lymphadenitis.	3	4	
19.	2707	Vidhya 9/FC	✳ Sore throat, cough, cervical lymphadenitis.	4	3	
20.	2876	Balaji 11/MC	✳ Sore throat, cough, fever, cervical lymphadenitis.	7	5	

✳ **Inflammation & Redness of Tonsils.**

◆ **Kalluppu Maathirai, Akaragara Kudineer. # Kalluppu Maathirai,
Akaragara Kudineer,**

**S
ukku
–
Amuk
ra
patr
u.**

LABORATORY INVESTIGATION																
HAEMATOLOGICAL INVESTIGATIONS																
S. No.	I.P. No.	WBC Total count cu. mm		WBC Differential Count cu. mm						ESR mm/hr				Hb		Alb
		BT	AT	BT			AT			BT		AT		BT	AT	
				P	L	E	P	L	E	½ hr	1 hr	½ hr	1 hr			
1	1533	10000	9000	60	36	4	50	46	4	15	30	4	8	58	65	nil
2	1578	10000	9000	64	30	6	55	40	5	10	20	2	4	75	75	nil
3	1790	10200	8200	63	33	4	58	38	4	5	10	3	6	74	74	nil
4	1801	9800	9000	65	32	3	60	38	2	5	10	4	8	58	66	nil
5	1876	11600	1020	64	29	6	60	38	2	7	15	2	4	60	68	nil
6	2007	10100	9000	63	33	4	56	42	2	6	12	2	4	72	72	nil
7	2052	10500	9500	64	34	2	55	43	2	6	12	4	8	74	74	nil
8	2257	10000	9800	65	32	3	63	34	3	14	28	2	4	61	71	nil
9	2325	10100	9000	64	34	2	58	39	3	5	10	4	8	74	74	nil
10	2336	9100	9000	66	30	4	60	36	4	20	40	4	8	68	68	nil

LABORATORY INVESTIGATION																
HAEMATOLOGICAL INVESTIGATIONS																
S. No.	I.P. No.	WBC Total count cu. mm		WBC Differential Count cu. mm						ESR mm/hr				Hb		Alb
		BT	AT	BT			AT			BT		AT		BT	AT	
				P	L	E	P	L	E	½ hr	1 hr	½ hr	1 hr			
11	2337	9500	9400	58	32	10	57	41	2	20	40	5	10	75	75	nil
12	2363	10200	9700	56	40	4	50	47	3	10	20	5	10	60	65	nil
13	2554	9200	9000	52	44	4	48	48	4	6	12	4	8	60	62	nil
14	2603	10000	9800	68	30	2	66	32	2	10	20	5	10	70	70	nil
15	2621	9600	9200	58	36	6	57	39	4	10	20	5	10	71	71	nil
16	2642	10010	9000	56	40	4	54	42	4	8	16	4	8	59	68	nil
17	2666	9200	9000	60	31	9	50	47	3	15	30	5	10	71	71	nil
18	2667	9400	9000	56	40	4	54	42	4	5	10	5	10	59	63	nil
19	2707	9200	9000	64	34	2	60	38	2	10	22	5	10	74	74	nil
20	2876	9500	9100	56	42	2	50	48	2	10	20	5	10	60	76	nil

BT – Before Treatment AT – After Treatment L – Lymphocytes E-
Eosinophils EC – Epithelial Cells PC – Pus cells P – Polymorphs

BIBLIOGRAPHY

SIDDHA LITERATURES:

- Tamil – English Dictionary T.V. Sampasivampillai
- Tamil mozhi agarathi – Kathiraiverpillai
- Tamil Agarathi - Lexicon
- Balavagadam – Dr. Pon. Guru chironmani
- Siddha Maruthuvam – Dr. Kuppusamy Mudaliyar
- Siddha Maruthva Noi Nadal, Noi muthal Nadal Thirattu -
Dr. M. Shanmugavelu.
- Gunapadam mooligai Vaguppu – Dr. Murugesu Mudaliyar.
- Gunapadam Thathu, Jeeva Vaguppu – Dr. K.Thiyagarajan.
- Nagamunivar Thalai Noi Maruthuvam
- Padhartha guna vilakam – Thathu Jeeva Vaguppu – Dr. Kannu samiyam pillai
- Agathiyar Attavanai Vaagadam
- Yoogi vaithya chinthamani
- Yoogi Muni Pillaipini Maruthuvam – Dr. R. Sundarajan.
- Siddha Maruthuvaanga Surukkam – Dr. Uthamarayan.
- Noi illa Neri – Dr. Durairraasan.
- Indian Materia Medica – A.K. Nadkarni.
- Medicinal plants of India – S.N. Yoga Narisimhan.
- Indian Medicinal Plants by Kritika & Basu.
- Materia Medica of India and their therapeutics – Khory & Katrak

- Indian medicinal Plants - A compendium of 500 species – VaidhyarathaM.

Arya Vaidya Sala Kottakal.

- Compendium of Indian Medicinal Plants – Ram P.Rastogi, B.N. Mehrotra.

MODERN LITERATURES:

- Gray's Anatomy – Peter. L. Williams, Roger Warnick, Mardyson
- Human Physiology – Guyton
- Clinical Immunology – Vol. I. Parker
- Pediatric Otolaryngology – Ferguson, Kendig, W.S. Saunders
- Nelson' Text book of Pediatrics – Berhman vaughan
- Robbin's pathologic basis of diseases – Kotran, Kumar, Robbins
- Text book of Microbiology – Dr. Anantha Narayanan Dr. C.J. Panicker.
- Last's Anatomy Regional & Applied – R.M.H. Mc. Minn.
- Clinical Methods in ENT – P.T. Wakode.
- Text book of Ear, Nose & Throat diseases – Mhd. Maqbool. Suhail Maqbool
- Anderson's Pathology – Vol. II
- Histology & Genetics Dr. M. Ullah.
- Roitt's Essential Immunology - Ivan M. Roitt & Peter J. Delves.

SUMMARY

- ❖ The Siddhars separately mentioned many diseases and treatment pertaining to the pediatric community called “Balavagadam”.
- ❖ Lasunathabitham (Tonsillitis) is one of the common ailment in pediatric age group. The author’s aim is to safeguard the children from the disease and its complications.
- ❖ In Siddha literatures there are only a few evidences about the topic, however the symptoms mentioned in various Kabha diseases which are also the symptoms of Lasunathabitham have been analysed and discussed here.
- ❖ Lasunathabitham = Lasunam + Thabitham
The word Lasunam is described in Udal Kooru – Dr. R. Thyagarajan
L.I.M.
the term meaning Tonsil and thus Lasunathabitham meaning Tonsillitis.
- ❖ The symptoms of Lasunathabitham almost correlates with Tonsillitis of Modern medicine.
- ❖ A clinical trial was carried out in Govt. Siddha Medical College, Palayamkottai.

- ❖ Cases were selected from both Out – patient and In – patient department of P.G. Kuzhanthai Maruthuvam.
- ❖ All patients selected were between the age group of 4years to 12years, including both sexes.
- ❖ 20 cases were selected and admitted in the in-patient ward of Govt. Siddha Medical College, Palayamkottai.
- ❖ Parameters of case selection are Sore – throat, Dysphagia, Cough, Fever, Inflammation of Tonsil, Cervical lymphadenitis.
- ❖ Diagnosis was made using both Siddha aspects and modern aspects.
- ❖ Children in the age group of 6 to 11 yrs. (School going) 65% are mostly affected.
- ❖ The important factor causing the disease is consumption of cold foodstuffs like ice creams, ice-cold water etc. (50%) other important causes are drinking of contaminated water and climatic changes.
- ❖ The disease is more common in rainfall (60%) and summer (10%) ie. Kaar, Koothir and Elavenil.
- ❖ Derangement of Uyir thaadhukal:

Vatham – Vyana derangement is seen in all patients and kirugaran also showed its derangements in some.

Pitham – Saadhagam is affected in many patients, Ranjagam in half of them and Analam is the next affected pitham.

Kabham – Avalampagam is affected in all cases; Kiledhagam was affected in almost half of the cases and podhamgam in a few.

Derangement of Udal thaadhukal:

Saram and seneer are commonly affected.

❖ The medicines taken for the study in management of the disease are

- | | | |
|----------------------------------|---|---|
| (1) Kalluppu Maathirai | - | ½ tab. (500mg) o.d. in the morning |
| | | (before food) |
| (2) Akaragara Kudineer | - | 30ml B.D. (also for gargling) |
| (3) Sukku – Amukra Pattru (SOS)- | | 5g (approx) as External application over the submandibular cervical region(cervical lymphadenopathy). |

❖ Patients were advised to avoid cool climate and chill atmospheres, to avoid cold foodstuffs like ice creams, ice-cold water and from drinking contaminated water and to improve general hygienic measures.

❖ At the end of the treatment the lab investigations showed reduction in leucocytes (which had been already increased due to disease), reduction in ESR (which had been already increased due to disease) and HB% increased.

- ❖ The Pharmacological studies revealed that all three drugs have significant Analgesic, Anti-pyretic, Acute and chronic Anti-inflammatory actions. The Biochemical analysis revealed that the drugs contained essential nutrients for growing children. The Micro – Biological Analysis showed that Kalluppu Maathirai was moderately sensitive against streptococci and staphylococci.

- ❖ Results are good in 90% and fair in 10%. No side effects were observed.

- ❖ The drugs Kalluppu Maathirai, Akaragara Kudineer and Sukku-Amukra Patru were found to be good in the treatment of Lasunathabitham.

CONCLUSION

Lasunathabitham, a common respiratory tract infection was chosen as the dissertation topic and treated with trial drugs namely, Kalluppu Maathirai, Akaragara Kudineer (internal medicines), and Sukku-Amukra pattru (external medicine). The course and dose of the medicines are adjusted according to the age and weight of the child.

The results are good in 90% of cases and fair in 10% of cases.

The cost of the trial medicines are comparatively low.

No adverse or side effects were produced during the course of treatment.

So, it is concluded that the trial medicines mentioned above can be considered **effective** in treatment of Lasunathabitham (Tonsillitis).

MATERIALS AND METHODS

The dissertation work on Lasunathabitham was carried out at the postgraduate department of Kuzhanthai Maruthuvam, Govt siddha medical college, palayamkottai.

Selection of patients: -

For the clinical study, 20 patients were selected and admitted in the in-patient ward of government siddha medical college, Palayamkottai, of both sexes and varying age groups(4-12yrs).

Parameters of case selection were,

- Sorethroat
- Cough
- Fever
- Difficulty in swallowing
- Inflammation & redness of tonsils
- Cervical lymphadenopathy

In this study, certain criteria was followed, based on clinical symptoms, nutritional status, seasonal variation, economic status and family history. The patients with rheumatic fever and other such complicated cases were excluded. Confirmation of clinical diagnosis was made on both siddha and modern aspects.

In siddha aspect, the diagnosis was made under the following criteria.

- Uyir thadhukal
- Udal kattukal
- Envagai thervu
- Nilam
- Mukkutra kaalam
- Paruva kaalam
- Neer kuri
- Nei kuri

In modern aspects the routine blood and urine investigations were made.

Haematological Investigations:

- Total WBC count
- Differential WBC count
- Erythrocyte sedimentation rate
- Haemoglobin percentage

Urine analysis:

- Albumin
- Sugar
- Deposit

Management:

The trial drugs Kalluppu maathirai, Akaragara kudineer, Sukku-amukra pattru(sos) were selected after a detailed study of various Siddha literatures.

The pharamacological study and biochemical study of drug was conducted at the Department of Pharmacology, Department of Biochemistry, Govt. Siddha Medical College, Palayamkottai respectively and Anti-microbial analysis in a private centre.

A case sheet was maintained for each and every individual and the results and observations are noted.

REVIEW OF SIDDHA LITERATURE

லசனதாபிதம் (Tonsillitis)

வேறு பெயர்கள்: (Synonyms)

அண்ணாக்குத் தூறு - Ref. குணபாடம் - தாது சீவ வகுப்பு.

உள்நாக்கு அழற்சி - Ref T.V. சாம்பசிவம்பிள்ளை. தமிழ் அகராதி.

தொண்டைக் கட்டி
தொண்டைத் தூறு
தொண்டை நோய்

} - Ref. Lexicon - தமிழ் அகராதி

தொண்டையில் வளரும் சதை - Ref. நோய்களுக்கு சித்த பரிகாரம்
மரு.ம.சண்முகவேலு

& சித்தர் கைகண்ட மருந்து.

இயல்: (Definition)

“ லசனதாபிதம் = லசனம் + தாபிதம் ”

Tonsillitis = Inflammation of the Tonsils

லசனம் - என்பது தொண்டையின் அக்கம் பக்கங்களில்
மென்னண்ணத்தின் (Soft palate) முன்பின் நிலைகளுக்கு இடையில்
பக்கத்துக்கொன்றாய் (in between the faucial pillars on either side)
இருக்கின்ற வேப்பங்கொட்டை வடிவமான இரண்டு உறுப்புகளாகும்.

Ref. உடற்கூறு.

மரு.ஆர்.தியாகராஜன். L.I.M.

தாபிதம் - என்பது வீக்கம், சிவத்தல் , வெப்பம், வலி ஆகிய குறி குணங்களைக் குறிப்பதாகும். எனவே, “ லசனதாபிதம் “ என்பது தொண்டையின் பக்க சதைகளில் உள்ள தாபிதமாகும்.

நோய் வரும் வழி: (Aetiology)

இந்நோய் கபகுற்றத்தினால் ஏற்படுவதால் கபநோய்களுக்கு உண்டான நோய் வரும் வழியே இதற்கும் பொருந்தும்.

“ மீதியே தித்திப்பு புளிப்புத் தானும்
மிகத் தின்னுங் கிழங்கு வகையருந்தினாலும்
சாறியே சபித்தியமாங் குளிர்ந்த பண்டந்
தண்ணீர் தான்
.....
.....சேத்துமத்தின் மகிமை தானே ”

Ref .யுகி வைத்திய சிந்தாமணி.

எனவே,

i) ஐயத்தையுண்டாக்கும் உணவுப் பொருட்களான குளிர்ந்த பண்டம், தண்ணீர், இனிப்புப் பண்டம், பழைய உணவு ஆகியவற்றை உண்ணுதலாலும்.(Cold food stuffs, Cold water)

ii) குளிர்ந்த காற்றில் இருத்தலாலும். (Cold – air)

iii) தூசு, புகைகளில் ஈடுபடுவதாலும் இந்நோயுண்டாகிறது.(Dust and fumes).

“ குரல்வளை நிணங்கோழை.....
.....

இந்நோயில் உடலில் கொழுப்புமிசுந்து (The extrageneous fat growth) அது தொண்டையை அடைத்து, பேச்சொலி அக்கொழுப்பால் தடுக்கப்பட்டு குரல்கம்மல் உண்டாகும். (Hoarseness of voice). ஈதன்றி சிறு வயதினருக்கு குளிர்ந்த காற்று, குளிர்ந்த நீர், குளிர்ந்த உணவு இவைகளால் தொண்டை சிவந்து ஐயம் கூடி தொண்டையில் சதையை வளரச் செய்யும். இது நாளுக்கு நாள் வளர்ந்து கட்டிகளைப்போல் பருத்து குரல்வளையின் இருபக்கங்களையும் இறுக்கி குரல்கம்மல் நோயை உண்டாக்கும்.

Ref. சித்த மருத்துவம்.

மரு.

குப்புசாமி

முதலியார்.

வகைகள்: (Classification)

நாக முனிவரின் கருத்துப்படி தலைநோய்கள் மொத்தம் 1008. இதில் உண்ணாக்கைப்பற்றிய நோய்கள் 20 ஆகும். இதனை இப்பாடல் மூலமறியலாம்.

“ பகர நாலாயிரத்து நாநூற்று நாற்பத்தெட்டும்
புகலுறு பெண்ணான் கோரும்
.....சிரசில் நோய் செப்பிலாயிரத்தெட்டாகும்.

.....
ஆகுமெண்ணாக்கை தந்த மதனில்.....

.....
.....நாலாமென்ன.

பாகமா யறி யுண்ணாக்கில் பற்றுநோயிருப தாமே”.

Ref. நாகமுனிவர் தலைநோய் மருத்துவம்.

முற்குறிகுணங்கள்: (Premonitory Symptoms)

- i) தொண்டையில் ஏதோ பூசியது போன்ற உணர்ச்சி (some sort of annoyance in throat).
- ii) தொண்டையை இறுக்கியது போன்ற உணர்ச்சி (may be like dysphagia).
- iii) தொண்டை உலர்தல் (Dryness – sore throat like).
- iv) இருமி இருமி தொண்டை சிவத்தல் (Pharyngitis).

பொதுக்குறிகுணங்கள்: (Clinical Features)

இந்நோயில்

சுரம் (Fever)

தொண்டை நோவு (Throat pain)

வாய் நாற்றம் (Halitosis or foetid breath)

மூக்கில் நீர்வடிதல் (Rhinitis)

இருமல் (Cough)

காதில் சீழ்வடிதல் (suppurature otitis media)

போன்ற குறிகுணங்கள் காணப்படும்.

Ref. சித்த மருத்துவம்.
மரு. குப்புசாமி முதலியார்.

முக்குற்ற வேறுபாடு: (Siddha Pathogenesis)

உணவு வகைகளில் மிகுதியும் ஐயத்தை உண்டாக்கும் பொருட்களாலும், ஐயத்தை பெருக்கக்கூடிய மற்ற செய்கைகளாலும், ஐயக்குற்றம் தன்னிலை மாறி மீதமுள்ள இருகுற்றங்களையும் தனக்குத் துணையாகக் கொண்டு, தொண்டை, மூக்கு, அண்ணாக்கு, நுரையீரல், இவைகளில் மிகுந்த குற்றத்தின் அளவாக “தாபிதத்தை” எழுப்பி சுரம் முதலிய குறிகுணங்களைப் பிறப்பிக்கும்.

உடல் நிலைகளில் (ஆதாரங்களில்) மார்புக்கு இருப்பிடமான அநாகதத்தில் எழும் மேல்நோக்கும்கால் தன்னளவில் இருந்து மாறி நிற்பதாலும் இந்நோய் உண்டாகிறது.

- Ref. (i) சித்த மருத்துவம்.
மரு.குப்புசாமி முதலியார்
- (ii) பிள்ளைப்பிணிமருத்துவம்.

பிணி அறிதல்: (Diagnosis)

“ பிணியறிமுறைமை “ என்பது சித்தமருத்துவ நூல்களின்படி

பொறியால் அறிதல்

புலனால் தேர்தல்

வினாதல் என்னும் 3 விதிகளையும், அவற்றை துணையாய் பற்றி ஒழுகும் ஒழுக்கங்களைக் குறிக்கும்.

பொறி:- மூக்கு, (வாய்) நாக்கு, கண், தோல், செவி என்பனவாகும்.
புலன்:- நாற்றம், சுவை, ஒளி, ஊறு, ஓசை என ஐவகைப்படும்.
வினா:- என்பது கேட்டறிதல்,

பொறியாற்றேர்தல், புலனாலறிதல் வினாதல் என்பது பிணியுற்றோனிடத்தும், பிணிதீர்ப்போனிடத்தும் உள்ள பொறி, புலன்கள் பிணிகளைத் தெளிவாயுணர்த்துமாகையால், மருத்துவன் தன்னை நோக்கி வந்த பிணியுற்றவனைப் பற்றி அறியவேண்டியவற்றை அறிந்தும் தன்பொறி, புலன்களால் பிணியாளனுடைய பொறி, புலன் வழியாய் உணர்வதைக் கேட்டும், அவன் ஒருகால் எக்காரணத்தினாலோ தான் கேட்பதைச் சொல்லுதற்கு இயலாதவனானால் அவன் சுற்றத்தாரைக் கொண்டு அறியக்கூடியவற்றை அறிந்தும், பிணியைக் கணித்தல்பற்றி குறித்தலாகும்.

மேற்படி பிணியை அறிய மருத்துவ வல்லோர் கைய்யாண்ட முறையே “எண்வகைத் தேர்வு”.

இதனை

“ நாடிப்பரிசம் நாநிறம் மொழிவிழி
மலம் முத்திரமிவை மருத்துவராயுதம் “

என்பதாலும்

“ மெய்குறி நிறந்தொனி விழி நாவிருமலம் கைக்குறி “.

- தேரையர்.

என்பதாலும் அறியலாகும்.

நா :- நிறம், எச்சில் தன்மை, கோழை நிறம் , கனம், பேச்சின் தன்மை, ஒருபுறம் சாய்ந்திருத்தல், வெடிப்பு, புண், படிவு, சுழற்சி, நாற்றம், போன்றவை கவனிக்கப்படவேண்டும்.

நிறம் :- நோயாளியின் நிறத்தை கவனிக்க வேண்டும். இதன் மூலம் அவர் எந்த தேகி என்பதை ஒருவாறு கணிக்கலாம்.

வாததேகி - கருமை நிறம்

பித்ததேகி - சிவந்த நிறம் , மஞ்சள் நிறம்

கபதேகி - வெண்மை நிறம்

தொந்ததேகி - மாநிறம் (அ)இருகலப்பு நிறம்.

மொழி:-

நோயாளி பேசும் மொழியைக் கொண்டு அவருக்கு முக்குற்றங்களில் எந்த குற்றம் பாதித்திருக்கும் என்பதைக் கணிக்கலாம்.

வாதநோயாளிக்கு - சம ஒலியும்.

பித்த நோயாளிக்கு - உயர்ந்த ஒலியும்
(சிரித்துக் குழறிய தொனி)

ஐய நோயாளிக்கு - இன்னிசை போன்ற
ஈனத்தொனியும்

கலப்பு நோயாளிக்கு - கலப்புக்குற்றச்சார்பான
கலப்பொலியுமாயிருக்கும்.

விழி:-

இதில் காணும் நிறம், ஒளி, சாரும்பீளை, வழியும் நீர், படலம், உரை போன்றவற்றை கவனிக்கவும்

மலம்:-

மலத்தால் முக்குற்றமறிதல்.

வாதநோய்க்குள்ள மலம் - கருத்த நிறமும், சிக்கலுள்ளதாயும் இருக்கும்.
பித்த நோய்க்குள்ள மலம் - சிறுத்தும், வெம்மையாயும், சிவந்தும், மஞ்சள் நிறமாயும் இருக்கும்.
கபநோய்க்குள்ள மலம் - சீதமாகவும், வெண்மையாகவும் இருக்கும்.

தொந்தநோய்க்குள்ள மலம் - எல்லாநிறமும் கலந்தவாறு உள்ள மலம்.

முத்திரம்:-

நீர் பொதுகுணம் - நீர்க்குறி.

“ வந்த நீர்க்கரிஎடை மணம் நுரை எஞ்சலென் றைந்தியலுளவை யறைகுது முறையே”.

என்பதால் நீருக்கு

i) நிறம்

- ii) எடை
- iii) நாற்றம்
- iv) நுரை
- v) குறைதல் என 5 இயல்கள் உண்டு.

நெய்க்குறி: (நீரில் எண்ணெய்த்துளி விட்டுப் பார்த்தல்)

“ நிறக்குறிக் குரைத்த நிருமாண நீரில்
சிறக்க வெண்ணெய்யோர் சிறுதுளி...
.....
..... நெறிவிழியறிவும்..
சென்றது புகலூர் செய்தியை யுனரே”.

நோயைக் கண்டுபிடித்தல் பொருட்டு சொல்லியிருக்கின்ற விதிபொருந்திய சிறுநீரில் ஒரு சிறிய துளி எண்ணெயை நடுவில் கையசைவினால் எண்ணெய்த்துளி சிதறமால் விட்டு வெய்யிலானது அந்நீரில் படும்படி திறந்து , காற்றானது அதில் வீசி அந்த எண்ணெய்த்துளி ஆடாதபடி வைத்து, அவ்வெண்ணெய்த்துளியானது செல்லுகின்ற வழியில் கண்ணறிவையும், உயிரறிவையும் செலுத்தி, அத்துளி தெரிவிக்கும் நோய் விளக்கத்தை தெரிந்து கொள்ளவேண்டும்.

வாத நீர் - நெய்க்குறி :

“ அரவென நீணடின.:தே வாதம் ”

எண்ணெய்த்துளி பாம்பைப்போல் பரவினால் அது வாதநோயைக் குறிக்கும்.

பித்தநீர் - நெய்க்குறி :

“ ஆழி போற்பரவின் அ.:தே பித்தம் “.

எண்ணெய்த்துளி மோதிரம்போல் இடைவிட்டுப் பரவினால் அந்நீர் பித்த நோயைக் காட்டுவதாகும்.

கபநீர் - நெய்க்குறி :

“ முத்தொத்து நிற்கின் மொழிவதென்கபமே “.

எண்ணெய்த்துளி விட்டது விட்டவாறே சிறிதும் பரவாமல் முத்துபோல் நிற்குமானால் அது ஐயநீரைக் காட்டுவதாகும்.

தொந்ததோட நெய்க்குறி :

“ அரவிலாழியும் ஆழியில் அரவும்
அரவில்முத்தும் ஆழியில் முத்தும்
தோற்றில் தொந்த தோடங்களாமே “

பாம்பில் மோதிரம், மோதிரத்தில் முத்தும், பாம்பில் முத்தும், இரண்டிரண்டாய்த் தோன்றின் கலப்பு குற்றங்களாகும்.

நாடி :

ஆரை என்பின் மேலோடும் நாடி நரம்பு ரத்தக்குழாயின் மேல்விரல்களை வைத்து அழுத்தியும், தளர்த்தியும் பார்க்கும் போது $1 : \frac{1}{2}$; $\frac{1}{4}$ என்ற மாத்திரையளவில் தேகம் நன்னிலையில் இருப்பதை சித்தர்கள் கணித்திருக்கின்றனர்.

நாடி பார்க்கும் விதம் :

“ கரிமுகனடியை வாழ்த்திக்
கைதனில் நாடி பார்க்கில்
பெருவிரலங்குலத்தில்
பிடித்தடி நடுவே தொட்டால்
ஒரு விரலோடில் வாதம்
உயர்நடுவிரலிற் பித்தம்
திருவிரல் மூன்றிலோடில்
சிலேத்தும நாடி தானே “.

-- அகத்தியர் நாடி

பெருவிரல் பக்கமாக மணிக்கட்டுக்கு ஒரு அங்குலத்திற்கு மேல் ஆரை என்பின் மேலோடும் நாடி நரம்பு ரத்தக்குழாயின் மேல் மூன்று விரல்களை வைத்துச் சற்று அழுத்தியும் தளர்த்தியும், பார்க்க

ஆள்காட்டி விரலில் உணர்த்துவது வாதம் எனவும்

நடுவிரலில் உணர்த்துவது பித்தம் எனவும்
பொளத்திர (மோதிர விரல்) விரலில் உணர்த்துவது கபம்
எனவும்

அறியவும். இதில் வாதம் 1 மாத்திரையளவும்,

பித்தம் $\frac{1}{2}$ மாத்திரையளவும்,

கபம் $\frac{1}{4}$ மாத்திரையளவும் இருக்கும்.

அவ்வாறு இல்லாது வேறுபட்டிருக்குமாயின் அது நோயாகும். பாலர்கள்,
விருத்தர்கள் போன்றவர்களுக்கு நாடி தெளிவாக தென்படுவது இல்லை.

ஸ்பரிசம் :

ஸ்பரிசத்தால் முக்குற்றமறிதல்.

வாததேகிக்கு - குளிர்ந்த ஸ்பரிசமும், வறட்சியுமாக
இருக்கும்.

பித்தநோயாளிக்கு - வெப்பமாகவும், வறட்சியாகவுமிருக்கும்.

கப நோயாளிக்கு - குளிர்ந்ததாகவும், வியர்வையுடனும்
இருக்கும்.

லசனதாபிதமும் பிணியறிமுறைமையும்

- நா** : (1) நா பெரும்பாலும் மாபடிந்ததாய் இருக்கும்(Coated tongue)
(2) நாவில் சுவையின்மை காணப்படலாம்.(Distaste or Tastelessness)
- நிறம்** : (1) வெண்மையான தேகநிறம் பெரும்பாலும் காணப்படலாம்.
(2) அன்றியும் மற்ற தேக நிறமும் இருக்கலாம்.
- மொழி** : (1) தாழ்ந்த ஒலியாகவோ (Difficulty in speech or lowered voice)
(2) குரல் கம்மலாகவோ இருக்கலாம். (Hoarseness of voice)
- விழி** : - விழியில் பொதுவாய் எந்த மாற்றமும் தென்படாது.ஆனால் சுரம் இருக்கும் பட்சத்தில் கண் சிவந்து காணப்படலாம்.
- மலம்** : - மலக்குறியில் கபத்திற்குறிய மலக்குறியோ அல்லது நன்னிலையில் காணும் இயல்பான மலக்குறியாகவேயிருக்கும்.
- மூத்திரம்** : - கபதேகத்துக்குரிய நெய்க்குறியோ அல்லது தொந்ததேகத்திற்குரிய நெய்க்குறியோ அல்லது இயல்பான நெய்குறியோ காணப்படலாம்.

நாடி : குழந்தைகளுக்கு நாடி தென்படுவது சிரமம் எனினும் 10 வயதிற்கு மேற்பட்டவர்களுக்கு பார்க்கும்போது கீழ்கண்ட நாடிகள் காணப்படலாம்.

(1) பொதுவாய் பித்தகபமோ அல்லது கபபித்தமோ கலந்து காணப்படலாம்.

(2) “ தானமுள்ள சேத்துமந்தானிளகில்
வெப்பு.....
.....
பதமொடு தொண்டை கட்டும்.....

-- குணவாகட நாடி

தனித்த கபநாடியோ காணப்படலாம்.

ஸ்பரிசம் : (1) பொதுவாய் “ சுரம் “ காணப்படுவதால் தேகம் வெப்பமாகவே காணப்படும்.
(2) சுரம் விட்டபின் வியர்த்து குளிர்ந்தும் காணப்படலாம்.

மருத்துவம்:

நோயின் துன்பத்தை நீக்க நோயாளிகளுக்கு பல பயிற்சிகள் அளிக்கவேண்டியிருப்பினும் முக்கியமான மூன்று பயிற்சிகளை மருத்துவர் அளிக்க வேண்டும். அவை

1. காப்பு (Prevention)
2. நீக்கம் (Treatment)
3. நிறைவு (Restoration)

காப்பு: (Prevention):

காப்பு என்பது நோய் வருவதற்கு முன்னும் நோய் வந்த பின்னும் நோயின் தன்மை அதிகரிக்காமல் இருக்க செய்யப்படுவன ஆகும்.

நீக்கம் (Treatment):

நீக்கம் என்பது நோயுடைய துன்பத்தை நோயாளியுடைய தன்மைக்கும் நோயுடைய தன்மைக்கும் ஏற்ப மேற்கொள்ளும் மருத்துவ முறைகள் ஆகும். அதாவது

- முக்குற்றங்களை தன்னிலைப் படுத்த மருத்துவம் புரிய வேண்டும்.
- தன்னிலை மிகுந்த உடல் தாதுக்களை தன்னிலைப்படுத்த மருத்துவம் புரிய வேண்டும்.
- நோய்க்கான மருத்துவம் புரிய வேண்டும். (இவை ஒப்புரையாகவோ, எதிர் உரையாகவோ, கலப்புரையாகவோ இருக்கலாம்).

நிறைவு (Restoration):

நோயினால் நோய் நீங்கிய பின்னும் நோயாளி இழந்த பலத்தை பெறுவதற்காக செய்யப்படும் உணவு மற்றும் செயல்கள் ஆகும்.

“உற்றவன் தீர்ப்பான் மருந்துழைச் செல்வா னென்
றப்பனார் கூற்றே மருந்து”

திருக்குறள்

எனவே நோயுற்றோன் (Patient) நோய் தீர்ப்பான் (Doctor) மருந்து செய்பவன் (Pharmacist) மருந்து செலுத்துவோன் (Nurse) இந்நால்வரும் ஒரு மனதோடு கூடி ஒத்துழைத்தாலே நோய் தீரும் என வள்ளுவர் பெருந்தகை கூறுகிறார்.

லசனதாபிதமும், மருத்துவமும்:

காப்பு:

லசனதாபிதத்தில் காப்பு என்று நோக்குவோம் ஆகில் நோய் ஏற்படாமல் இருக்க நோயில்லா நெறியில் கூறி இருக்கும் கால ஒழுக்கத்தையும் நாள் ஒழுக்கத்தையும் சரியான முறைப்படி கடைபிடித்தல் வேண்டும்.

1. “நீர் சுருக்கி மோர் பெருக்கி
நெய்யுருக்கி உண்போர்தம்
பேருரைக்கப் போமே பிணி”.

சித்த மருத்துவாங்க சுருக்கம்.

2. “பாலுண்போம் எண்ணெய் பெறின் வெந்நீரில் குளிப்போம்”
3. “முதனாளில் சமைத்தக்கறி அமுதெனினும் அருந்தோம்”

4. “பெருந்தாக மெடுத்தினும் பெயர்த்து நீர் அருந்தோம்”
5. “தேறுமதி யொன்றரைக்கோர் தரம் நசியம் பெறுவோம்”
6. “வீறுசதுர் நாட்கொருகால் நெய்முழுக்கைத் தவிநோம்
விழிகளுக்கு அஞ்சனம் மூன்று நாட்கொருகா லிடுவோம்
நாறுகந்த புட்பமிலை நடுநிசியிற் முகரோம்”

2 - 6 தேரையர் பிணியணுகா விதி.

நீக்கம்:

இந்நோயில் கபக்குற்றத்தை தன்னிலைப்படுத்தும் மருத்துவமான கபத்திற்கு எதிர் குணமான தீ பூதத்தை கொண்ட மருந்துகளை கொடுக்க வேண்டும்.

இதன்பேரிலேயே கல்லுப்பு மாத்திரையும் இந்நோய்க்கு வழங்கப்பட்டது.

இங்கு உப்பு = தீ + நீர் என்பதால் தீ பூதம் எதிர் உரையாகவும் நீர் பூதம் ஒப்புரையாகவும் வழங்கப்பட்டது.

நிறைவு:

இந்நோய் முற்றிலும் குணமாக மருந்துமட்டுமின்றி உணவு முறைகளில் கூறியிருக்கும் பத்தியங்களையும் நோய் அதிகரிக்காமல் இருக்க கடைபிடிக்க வேண்டிய செயல்களையும் பின்பற்ற வேண்டும்.

செயல்கள்:

1. குளிர் காற்றிலும் தூசுள்ள இடங்களிலும் திரிதல் கூடாது.

2. ஒவ்வாமையை ஏற்படுத்தும் பொருள்களில் இருந்து பெரும்பாலும் தள்ளி இருக்க வேண்டும்.

பத்தியம்:

உண்ண வேண்டியவை:

கத்திரிக்காய்

பேய்புடல்

முருங்கைபிஞ்சு

களாக்காய்

கண்டங்கத்திரி

அத்திக்காய்

பீர்க்கம் பிஞ்சு

ஈரூள்ளி

கீரைகளில் மணத்தக்காளி, பொன்னாங்கன்னி, பசலை, வேளைக்கீரை, சேர்த்துக் கொள்ளலாம்.

தவிர்க்க வேண்டியவை:

அகத்தி கீரை

பாகல்

கொள்ளு

எள்

கடுகு

தேங்காய்

மாங்காய்

மீன்

கருவாடு

PREPARATION AND PROPERTIES OF DRUGS

I. கல்லுப்பு மாத்திரை

சேரும் சரக்குகள்:

கல்லுப்பு (சுத்தித்தது)

கரிசாலைச்சாறு (தேவையான அளவு).

செய்முறை:

கல்லுப்பை முதலில் கல்வத்திலிட்டு அதில் சிறுகச்சிறுக கரிசாலைச்சாற்றைவிட்டு அரைத்துப்பின் மாத்திரை பக்குவம் வரும்போது கழற்சியளவு உருண்டைகளாய் உருட்டவும். உருட்டிய உருண்டைகளை புது ஓட்டில் வைத்து பனிப்புடமிடவும்.

அளவு:

½ மாத்திரை, காலை மட்டும் (சிறுவர்களுக்கு)

தீரும் நோய்:

உள்நாக்கு வளர்ச்சி (லசனதாபிதம்).

நூல் ஆதாரம்:

அகத்தியர் அட்டவணை வாகடம்.

கல்லுப்பு சுத்தி:

கல்லுப்பை கல், மண் நீக்கி காடியிலிட்டு பிசைந்து வெயிலில் வைத்து உலர்த்தி பின் துடைத்து எடுத்துக் கொள்ளவேண்டும்.

கரிசாலை:

கரிசாலை சமூலத்தை நீரிலிட்டு மண் நீங்க கழுவி எடுத்துக் கொள்ள வேண்டும்.

சேரும் சரக்குகளின் குணங்கள்:

1.கல்லுப்பு

வேறுபெயர்: கடற்குருவி.

பொது குணம்:

“ஐயமறுஞ் சூலை யரோசிபித்தஞ் சத்தியொடு
வெய்யபிணி யட்டகுன்மம் விட்டேகும் - பெய்வளையே
வாதமதி தாகம் மலக்கட்டும் போமுலகிற்
கோதறுகல் லுப்பைக் கொடு”.

கல்லுப்பினால் கபம், குத்தல், அருசி, பித்தம், வாந்தி, உஷ்ணவாயு, எண்விதகுன்மம், வாதநோய், நாவறட்சி, மலபந்தம் இவை தீரும்.

Chemical name : Sodium chloride Impure
(or)
Sodii chloridum Impure

English name : Rock – Salt

Actions : Carminative
Digestive
Stomachic
Purgative

Uses: 1. When heated it is used to foment painful swollen parts.

2. The salt after purification the solution of which is used as a gargle in chronic diseases of pharynx and larynx.

Note: இந்த உப்பானது சாதாரணமாக சாப்பிடும் உப்பின் (ie.NaCl) குணத்திற்கு சிறிது தாழ்ந்தது. இது சாதாரண உப்பைப் போல் அதிக கசிவிறாது.

கடலுக்குள் தானாகவே உப்பு உறைந்து பாறைப் போல் காணப்படும். இதை போகர் கல்லுப்பு என்கிறார்.

Ref: பதார்த்த குண சிந்தாமணி

2. கரிசலாங்கண்ணி

வேறுபெயர் - கரிசாலை, கைகேசி, கைய்யாந்தகரை, பிருங்கராஜம், கரிப்பான்.

பொது குணம்:

“குரற்கம்மற் காமாலை குட்டமொடு சோபை
யுற்பாண்டு பின்னோயொழியு – நிரற்சொன்ன
மெய்யாந் தகரையொத்த மீளியண்ணு நற்புலத்துக்
கைய்யாந் தகரையெத்தக் கால்”.

- அகத்தியர் குணவாகடம்.

கைய்யாந்தகரையால் குரல்கம்மல், காமாலை, குட்டம், வீக்கம், பாண்டு, தந்தரோகம், போன்றவை தீரும்.

Botanical Name - Eclipta alba (வெள்ளைக்கரிசாலை)
(or)
Eclipta erecta.

Family - Asteraceae

Chemical constituents - Resin Alkaloid - Ecliptine

Part used - Whole herb

Actions - Cholagogue
Tonic
Alterative
Emetic
Purgative
Hepato – tonic
Deobstruent

சுவை - கைப்பு
தன்மை - வெப்பம்
பிரிவு - கார்ப்பு

மருத்துவப் பயன்கள்:

- i. கரிசாலைச்சாறு 2 துளி, 8துளி தேனில் கலந்து டி கொடுக்க கைக்குழந்தைகளுக்கு உண்டாகும் நீர்க்கோவை தீரும்.
- ii. இலைச் சாற்றை காது வலிக்கு காதுகளில் விடலாம்.

II. அக்கிரகாரக் குடிநீர்

சேரும் சரக்குகள்:

அக்கிரகாரம் - 1பங்கு
நீர் - 8பங்கு

செய்முறை:

அக்கிரகாரத்தை ஒன்றிரண்டாக உரலிலிட்டு இடித்து அதில் நீர் 8பங்கு விட்டு அடுப்பில் வைத்து சிறுதீயிலிட்டு எரித்து நான்கிற்கு ஒரு பங்கு வற்றும்வரை காய்ச்சி எடுக்கவும்.

அளவு:

30 மி.லி., 2வேளை
காலையில் வாய்க்கொப்பளிக்கவும் பயன்படுத்தவும்.

தீரும் நோய்: உள்நாக்கு வளர்ச்சி தீரும்

நூல் ஆதாரம்: Indian Medicinal plants – Kritikar & Basu.

அக்கிரகாரம் சுத்தி:

அக்கிரகாரத்தை கல், மண், தூசு நீக்கி எடுத்துக் கொள்ள வேண்டும்.

சேரும் சரக்கின் குணம்:

அக்கிரகாரம்:

வேறு பெயர் - அக்கிராகாரம், அக்கராகாரம்.

Botanical name - Anacyclus pyrethrum.

Chemical constituents - Essential volatile oil
2 Fixed oils
Alkaloid - "Pellitorin" (or) "Pyrethrine"
Resin - Pyrethrin
Gum
Salts and Trace of Tannin

Part used: Root

சுவை - கார்ப்பு
தன்மை - வெப்பம்
பிரிவு - கார்ப்பு

Actions:

Stimulant
Sialogogue
Rubefacient.

பொது குணம்:

“அக்கிரா காரத்தை ஆரறியப் போறார்காண்
உக்கிரகா லத்தோஷ மோடுமே திக்குமொழி
கொண்டாற்கு நாதிரும்பும் கொம்பனையே! கேளீர்
கண்டிர்க்குத் தோடமிலை காண்”.

“அக்கிரகாரம் அதன்பேர் உரைத்தக்கால்
உக்கிரகால் அத்தோடம் ஓடுங்காண் - முக்கியமாய்க்
கொண்டால் சலம்ஊறும் கொம்பனையே! தாகசரம்
கண்டால் பயந்தோடுங் காண்”.

- அகத்தியர் குணவாகடம்

இதனால் பயங்கரமான காலின்குற்றம் (வாததோடம்) நீர்வேட்கை தீரும். இதை வாயிலிட்டு அடக்கிக்கொள்ள நாவறட்சி நீங்கும் நாவில் நீர் ஊறும்.

மருத்துவம் பயன்கள்:

1. பல்வலி, உள்நாக்கு வளர்ச்சி, தொண்டைக்கம்மல், நா அசைவற்றுப்போதல், முப்பிணி தீரும்.
2. It is used as an anesthetic gargle or lotion or mouth wash in sore – throat (Materia Medica of India and their therapeutics) - Khory & Katrak.
3. A decoction of the root is useful as a gargle in carries teeth, toothache, sore throat and Tonsillitis.

The Indian Materia Medica vol. I
A.K. Nadkarni & Popular
Prakashan.

III. சுக்கு அமுக்கிரா பற்று

சேரும் சரக்குகள்:

சுக்கு
அமுக்கிரா

செய்முறை:

இரு சரக்குகளையும் உரலிலிட்டு ஒன்றாக இடித்து சலித்து எடுத்துக்கொள்ளவும்.

பயன்:

இதனை பாலில் கலந்து தொண்டையில் சதை வளர்ச்சிக்கு மேற்பூச்சாய் பூசவும்

நூல் ஆதாரம்:

சித்தர் கைகண்ட மருந்து.

சேரும் சரக்குகளின் குணங்கள்:

1)சுக்கு

வேறு பெயர்கள் - அருக்கன், ஆர்த்ரகம், கடுபத்திரம், சுண்டி, சொண்டி, அதகம், உலர்ந்த இஞ்சி.

Botanical name : Zingiber officinale

Family : Zingiberaceae.

Chemical constituents: Fat

A crude liquid

Oleo resin – “Gingerol” (or) “Gingerin”

Volatile oil contains Camphene

Phelladrene

Borneol
Zingiberine.

Part used : Rhizome (Dried)

Actions : Aromatic
Stomachic
Sialagogue
Stimulant
Carminative

Externally - Rubefacient
Local Stimulant.

பொதுகுணம்:

“ குலைமந்தம் நெஞ்செரிப்பு தோடமேப்பம் மழலை
மூலம் இரைப்பிருமல் மூக்குநீர் – வாலகப
தோடமதி சாரந் தொடர்வாத குன்மநீர்த்
தோடம்ஆ மம்போக்குஞ் சுக்கு.

.....
.....”

அகத்தியர் குணவாகடம்.

சுக்கினால் இரைப்பு, இருமல், நீரேற்றம், தலைநோய், ஐய சுரம்,
செரியாமை, வெப்பம் போம்.

மருத்துவப் பயன்கள்:

1. சுக்கை மென்று சாரை மாத்திரம் விழுங்க தொண்டைக்கட்டு தீரும்.
2. சுக்கை அரைத்து மேற்பூச்சாய் பூச வீக்கம் தீரும்.

(குணபாடம் - மூலிகை வகுப்பு)

3. Relaxed sore throat, hoarseness and loss of voice are sometimes benefited by chewing a piece of ginger so as to produce a copious flow of saliva.

Ref: The Indian Materia Medica Vol I –

A.K. Nadkarni K popular prakashan.

2) அமுக்கிரா

வேறு பெயர்: அசுவகந்தம், இருளிச்செவி, கிடிச்செவி,
வராககர்ணி.

Botanical name: *Withania somnifera*

Family: Solanaceae.

Chemical constituents:

Bitter Alkaloid – Somniferin

Resin

Fat

Colouring matters

Phytosterol

Ipuranol

Mixture of saturated and unsaturated
acids.

Part used: Root (Rhizome)

பொது குணம்:

கொஞ்சந் துவர்ப்பாங் கொடியகயம் சூலையரி
மிஞ்சுகரப் பான்பாண்டு வெப்புதப்பு – விஞ்சி
முகவுறு தோடமும்போ மோகம் ஆன லுண்டாம்
அசுவகந் திக்கென் றறி.

அகத்தியர் குணவாகடம்.

அமுக்கினாங்கிழங்கைப் பச்சையாய்க் கொண்டுவந்து, பசுவின்
நீர்விட்டரைத்துக் கொதிக்கவைத்து கிரந்தி (கழலை) கண்டமாலை
(கழுத்துக் கழலை) வீக்கம், இடுப்புவலி இவைகளுக்குப்பற்றிட இவைகள்
தீரும்.

மருத்துவப் பயன்கள்:

இதை சுக்குடன் சேர்த்து வெந்நீர் விட்டரைத்து வீக்கங்களுக்குப் பற்றிட
கரையும்.

(குணபாடம் - மூலிகை வகுப்பு)