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A Siddha Management of Chronic Tonsillitis - A Case Report

Case Report

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Abstract

Aim and objective: In the present scenario the medicine system from the west has started acknowledging the importance and wisdom of the ancient medicine system such as Siddha, Ayurvedha, Unani. There are many diseases that need surgical procedures till date, so in order to find a probable cure now a paradigm shift is really important. Tonsillitis is an infection of the tonsils associated with a sore throat, difficulty in swallowing, fever, etc. Still, surgical removal of tonsils is one of the most frequent procedures during childhood. In the Siddha system of medicine tonsillitis can be compared with *Virana silatham*. To evaluate the effect of Siddha medicine in the management of tonsillitis. Materials and Methods: The subject approached Out Patient Department of Siddha Clinical Research Unit(SCRU),under Central Council for Research in Siddha(CCRS), Safdarjung Hospital Campus, New Delhi with symptoms of sore throat, ear pain, difficulty in swallowing, sleep apnoea, which involved problems of breathing at night and foul smell from the mouth for past four months systemically. Discussion: The manifestation of symptoms and their severity depends on the extent of involvement of *Uyir thathukkal* (*Vali,Azhal, Iyyam*). Though the disease is *Iyyam* and *Azhal* predominant, there is derangement of *Iyyam* and *Azhal Dosham* in *Virana silatham*. Results: In this case, the subject showed a marked improvement as depicted in the photographs taken at different levels of treatment, also there was a significant improvement noted in both subjective and objective parameters. By adopting the Siddha treatment approach with an external treatment modality an attempt is made to bring about satisfactory results.

Key Words: *Siddha medicine,* Chronic tonsillitis*, Virana silethumam, Iyyam.*

Introduction

Tonsillitis defined as inflammation of the tonsils. Usually, the term tonsillitis refers to the inflammation of palatine tonsils. Tonsillitis is characterized by inflammation of the tonsils, sore throat, swollen cervical lymph nodes and fever usually caused by an infection. Tonsillitis is caused by a bacterial infection or a viral infection and the most common bacterial infection is caused by group A beta-haemolytic streptococcus (GABHS). It is one of the commonest infectious diseases, most frequent in children aged 5 to 10 years and young adults between 15 and 25 years (1). GABHS accounts for 5% to 15% of adults with pharyngitis and 15% to 30% of patients between the ages of five and fifteen. Viral aetiologies are more common in patients under five. GABHS is rare in children under two years of age (2).

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According to Siddha literature, there are about 4448 types of diseases. The other names for tonsillitis disease in the Siddha system are i.e. i) *Kala Chundi* (inflammation of the two small glandular bodies situated one on each side of the back of the mouth at its juncture with the throat it is the enlarged tonsils said to be caused by the deranged blood and *Kabam*-Tonsillitis), ii) *Kala Vanguram* (enlargement of the tonsils due to inflammation of the throat) (3) and iii) *Virana silethumam* (The clinical picture of *Virana silethumam* includes sore throat with mucous and pustular exudates, swelling of anterior and posterior cervical area with fever, rigor, burning sensation all over the body, cough, crying out of severity, ulceration of throat and tongue) (4). It occurs due to variations in *Iyyam* humor (Bio-Energy Water) and *Azhal* humor (Bio-Energy Fire). Keeping the above facts in mind and attempt has been made to find an alternative drug in Siddha to combat the chronic tonsillitis. There are certain Siddha medicines such as *Thalisadhi Chooranam, Muthuchippi Parpam, Vasantha Kusumagaram Mathirai, Thalisathi Vadagam, Thippili Rasayanam,* Poondu Thaen which makes the treatment for tonsillitis easier without any side effects and also minimizing the risk of recurrence. These Siddha medicines are the ideal for the treatment of chronic tonsillitis.

Methodology

Patient history

A 10-year-old female child was brought to the Out Patient Department of Siddha Clinical Research Unit, under CCRS, Safdarjung Hospital Campus, New Delhi by her parents with complaints of swelling in the throat region associated with ear pain, difficulty in swallowing, sleep apnoea, which involved problems of breathing at night and foul smell from the mouth which was occurring recurrently for the past 6 months and aggravated in the last 4 months.

The patient was apparently normal 6 months back. Then she developed pain in the throat region and swelling, associated with difficulty in swallowing, ear pain, which aggravated during intake of cold, refrigerated food items and cold drinks etc. In the beginning, they had consulted at Sanjay Gandhi Memorial Hospital in Mangolpuri, Delhi where they have suggested surgical management and were later given a course of medications, which they had taken, but could not get any satisfactory relief. As days passed, she had more difficulty in swallowing the food and with pain, ear pain, sleep apnoea and foul smell from her mouth. The condition got aggravated over the last4 months. Then, the parents had decided to take the child for a better evaluation and management Siddha Clinical Research Unit, under CCRS, Safdarjung Hospital Campus, New Delhi. After proper interrogation with the parents and thorough evaluation regarding the condition of the child, she was treated in out-patient department of Safdarjung hospital. No past surgical history was undergone by the patient. Personal history-general examination findings were observed as noted in table 1.

Chief Complaints

Thondai Vali (Dysphagia), *Thondai Alarchi* (Hyperaemia), *Vaainaatram* (Halitosis).

General examination

Local examination

Inspection Oral Cavity

- Soft palate Congestion +
- Movement of soft palate Normal
- Uvula Congestion +
- Tonsils Both Tonsil enlarged, Grade 3
- Right - Congestion+ Oedema+, Swollen+, Hypertrophied+
- Left- Congestion+, Oedema+, Swollen+, Hypertrophied+

Ear

- Right - Pain +; Left - Pain +

Palpation

- Jugulo-digastric lymph nodes - not palpable, moderate pain+

Assessment of general condition

Bowel - Regular, 1-2 times/day Appetite - Reduced, Micturition - Regular, 6-7 times/day, Sleep – Disturbed Sleep, Temperature - 98.6° Fahrenheit.

En vagai thervugal (Eight-fold Siddha diagnostic system of clinical assessments)

The personal history of patient and *En vagai thervu* findings were observed as noted in table- 2.

Table -2: ***En vagai thervugal*** **(5)**

S.NO		SIDDHA INVESTIGATIVE PARAMETERS	FINDINGS
1		***Naathervu***-Examination of tongue	
	i.	*Niram* (Colour)	Pink
	ii.	*Thanmai* (Character)	Coated tongue, denuded
	iii.	*Pulan* (Sense)	Saliva tends to taste sweet
2		***Niram thervu***-Examination of colour	Pale
3		***Mozhithervu***-Examination of speech	Hoarseness
4		***Vizhithervu***-Examination of eye	
	i.	*Niram* (Colour)	Normal
	ii.	*Thanmai* (Character)	Normal
	iii.	Pulan (Sense)	Normal
5		Malam thervu-Examination of stool	
	i.	Niram (colour)	Yellow
	ii.	Nurai (Forth)	Absent
	iii.	Elagal/Erugal (Consistency)	Elagal (Semisolid)
6		Moothiram thervu-Examination of urine	
	i.	Neerkuri	
		Niram (Colour)	Crystal clear
		Adarthi (Specific gravity)	Normal
		Manam (Odour)	Normal
		Enjal(Deposits)	Absent
	ii.	Neikuri	
7		Sparisam thervu-Examination by touch	Warm/tenderness over the right tonsillar
8		Naadi thervu-Examination of pulse	Iyya azhal naadi
	i.	Thanmai (Character)	Rapid and thin
	ii.	Nadai (Pattern)	Normal

Assessment Criteria

Table 3: Assessment Criteria

Tonsillar swelling (Brodsky Grading Scale) (6)	
Grade 0	Tonsils within the tonsillar fossa
Grade 1	Tonsils just outside of tonsillar fossa and occupy, ≤ 25% of oropharyngeal width
Grade 2	Tonsils occupy 26-50% of the oropharyngeal width
Grade 3	Tonsils occupy 51-75% of the oropharyngeal width
Grade 4	Tonsils occupy more than 75% of the oropharyngeal width
For Pain (Visual Analogue scale)	
0	None
1 to 3	Mild
4 to 6	Moderate
7 to 10	Severe

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For halitosis (8) Organoleptic scores	
Grade 0	No malodour
Grade 1	Slight malodour
Grade 2	Clearly noticeable malodour
Grade 3	Strong malodour
Dysphagia	
0	No difficulty in deglutition
1	Mild pain during deglutition of hard food particles.
2	Moderate pain during deglutition of semisolid food particles.
3	Severe pain during deglutition of even liquid food articles.
Congestion	
0	No congestion (normal pink coloured mucosa).
1	Congestion present over tonsils and uvula.
2	Congestion saw over tonsils, uvula and pharyngeal wall.
3	Congestion with haemorrhages

Subjective Parameters
- Pain in the throat.
- Dysphagia.

Objective Parameters
- Pain in the throat.
- Dysphagia.
- Tonsillar swelling
- Congestion
- Halitosis
- Pictorial representation

Investigation
TC, DC, ESR, AEC.

Treatments adviced

As per the references available in the Siddha classics, following classical formulations were prescribed.

Table 4: Treatments given from 01.12.2022 to 02.02.2022

	S.No	Name of the Medicine	Source	Dosage	Dose interval	Target/ mode of action
Internal Medicine	1	*Thalisadhi Chooranam* (*Chooranam*- Medicinal powder)	Herbal preparation with *Abies webbiana* (Wall ex D. Don) Lindlas a major ingredient	1g	Twice a day	Synergistic action exhibits anti-inflammatory, antiseptic, antispasmodic and diuretic properties (9)
	2	*Muthuchippi Parpam* (*Parpam*- Calcined oxide)		100 mg	Twice a day	Dried oyster shells had an effective bacteriostasis. The aqueous extract of *Muthuchippi parpam* found to possess antioxidant and antimicrobial activities (10)
	3	*Vasantha Kusumagaram Mathirai* (*Mathirai*- Tablet)	Herbo metallic formulation	1 tablet	Twice a day	Antimicrobial activity against *Neisseria mucosa, Klebsiella pneumonia, Streptococcus pneumonia, Staphylococcus aureus, Pseudomonas aeruginosa*, and *Aspergillus niger* and the use of these formulations in respiratory illness (11)
	4	*Thippili Rasayanam* (*Rasayanam*- Dainties)	Herbal formulation with *Piper* longum as major ingredient	3 g	Twice a day	Anti-inflammatory and Antiseptic activity (12)
	5	*Thalisathi Vadagam* (*Vadagam*- Lozenge/ troch e)	One of the main ingredients in *Thalisadhi vadagam is thalisapaththri*	1 tablet	Twice a day	*Abies webbiana* was evaluated for antimicrobial activity (13)
	6	*Poondu Thaen*	Herbal formulation with Garlic and honey	3 ml	Twice a day	Garlic: Garlic is alleged to have antimicrobial, antifungal and anti-viral, immunomodulatory effects (14) Honey: Antioxidant, anti-inflammatory, antimicrobial effects (15)
External Medicine	7	*Chukku Thylam* (*Thylam*- Medicated oil)	One of the main ingredients in *Chukku thylam* is *Chukku* (Dried *Zingiber officinale* Roscoe)	20 ml	Oil bath weekly once	Expectorant action dispelling mucus and cough (16)

	8	*Thiripala Kudineeer Chooranam* (*Kudineeer*-Decoction.)	Herbal formulation with *Kadukkai* (*Terminalia chebula* Retz.), *Nellikai* (*Emblica officinalis* Gaertn) and *Thaandrikkai* (*Terminalia bellirica* (Gaertn.) Roxb.)	30 ml	Gargle twice a day	Antimicrobial Activity, Anti-inflammatory (17)

PATHIYAM **(Instructions/advice regarding dietary habits, do's and do not's during intake of medicine (18)**

DO'S

Rice *kanji* (*Oryza sativa* Porridge*), Panchamutti kanji* (Five grain gruel is a healthy as well as protein enriched porridge which contains *Oryza sativa*, *Vigna mungo, Cajanus cajan, Vigna radiata, Cicer arietinum*), Tender vegetables like *Murungai* (*Moringa oleifera* L.), *Avarai* (*Dolichos lablab* L.), *Kathari* (*Solanum melongena* L.), Athi (Ficus *racemose* L.).

DON'TS

Oily foods, Intake of salt and sour tastes, Chilled foods, *Suraikaai* (*Lagenaria siceraria (Molina)*, *Poosanaikaai* (*Cucumber maxima* L.), *Vellarikaai* (*Cucumis sativas* L.)

Advice on completion of treatment

- Avoid mouth breathing, exposure to cold air, high altitudes
- Gargling was advised thrice a week (*Thiripala kudineer* and salt, turmeric water)
- Oil bath with *Chukka thylam* was advised weekly once

Results and Outcome

Table 5: Outcome of The Treatments

Patient and care taker's Feedback	Clinician Assessed Outcomes
Enlargement of tonsils has reduced significantly.	Grade III Tonsillitis has reduced to Grade I.
Pain reduced.	Dysphagia has reduced significantly from grade 3 to grade 1.
Tonsillar exudates were removed while applying *Poondu Thaen*	No malodour.
Difficulty in swallowing has reduced.	Appetite has very well improved.
Get rid from Sleep apnoea.0	Hyperaemia and pain in the throat region have significantly reduced from grade 3 to grade 0
Foul smelling from the mouth has reduced completely.	No recurrent infections observed.
Child felt hunger better than before which is consider as good sign of recovery.	Absence of remission till date.

Figure 1: Reduction of tonsillar size before and after treatment

Discussion and Conclusion

Tonsillitis is an infection of the tonsils that causes sore throat. Most common in children, tonsillitis can affect all ages. Treatment depends on the cause of the infection. Strep throat (tonsillitis caused by bacteria) is treated with an antibiotic medication. Antibiotic use can have several negative effects on the gut microbiota, including reduced species diversity, altered metabolic activity, and the selection of antibiotic-resistant organisms. There is also evidence that early childhood exposure to antibiotics can lead to several gastrointestinal, immunologic, and neurocognitive conditions (19). Surgery to remove tonsils (tonsillectomy) may be used to treat frequently recurring tonsillitis, chronic tonsillitis or bacterial tonsillitis that doesn't respond to antibiotic treatment. Post tonsillectomy bleeding can occur till the whole

wound is completely healed, which is normally after three weeks. Life-threatening haemorrhages may occur often after smaller bleedings, which can spontaneously cease. All different surgical techniques have the risk of haemorrhage (20). In this case, the patient had complaints of swelling in the throat region associated with ear pain, difficulty in swallowing on examination right and left tonsil congested, oedematous and hypertrophies. Patients sleep was disturbed hence the condition was diagnosed as *Virana silatham*.

The mode of action of any Siddha drug is based on the affected *Uyir thathu (Vali*-Bio Energy Movement*, Azhal*-Bio-Energy Fire *and Iyyam)* of that particular disease (21). In *Virana silatham Iyyam and Azhal* will be deranged. Initially to pacify the aggravated *Iyya azhal* medicine like *Thalisathi chooranam* with *Muthuchippi parpam* is given with honey as an adjuvant. Tablets like *Vasantha kusumagaram* with honey and *Thalisathi vadagam* is given as chewable. *Poodu then* is specially indicated for *Virana silatham* in Siddha literature. It consists of *poondu* (garlic-*Allium sativum* L.) and *thaen* (honey). It is advised to prepare at home and given regularly as a topical application (22). Due to its *Veppa veeriyam* (*Veppam-, veeriyam-Potency*) of garlic (23), it opens the microchannels and removes the tonsillar exudates. Due to the anti-inflammatory property of garlic and honey, it corrodes the hypertrophied muscle tissue (24 & 25) The complex ingredients of garlic show scientifically proven action of paradoxical results on the gut microbiome. Experiments with separated compounds showed that fructans work as prebiotics for the gut microbiome while garlic organosulfur compounds (OSCs), such as allicin, thiosulfinates, and ajoene, act as antibacterial agents. Therefore, it is necessary to clarify the influence of whole garlic intake in daily life on the gut microbiome (26). Honey enhances the endogenous colonic probiotic bacteria (bifidogenic effects) that has several beneficial effects (27) To pacify deranged *dosham* oil pulling and head bath with *Chukku thilam* is advised weekly once. Siddha hypothesizes that oil pulling activates salivary enzymes which absorb toxins such as chemical toxins, bacterial toxins and environmental toxins. Externally, decoction of *Thriphala kudineer chooranam* is advised to gargle twice a day (28). This combination of internal and external Siddha medicines decreases the vitiated *Iyyam and Azhal* and hence, it is effective in reducing the signs and symptoms of tonsilitis. These medicines were selected based on its Siddha pathological and pharmacological action to rectify the deranged *Iyya azhal* due to anti-inflammatory and anti- histamine effect of the ingredient patient showed significant improvement in symptoms. Dietary changes, *pathiyam* and life style modification were prescribed.

After 3 months of follow up patient consulted (ENT) physician of Safdarjung Hospital, New Delhi, investigation such as X- ray was taken to look for adenoids and an audiometer test done seemed to be normal and was advised of the ENT physician that there is no need for surgery. Patient was under on follow-up for the period of 4 months and was advised to take Siddha medicine *Thipilli rasayanam* to prevent the occurrence of the disease.

In the present case, *Virana silatham* the aggravated dosham is *Kapha pitham*. These lines of treatment were followed to pacify it. After treatment Grade III tonsilitis has reduced to grade I, other symptoms such as halitosis, pain, dysphagia has reduced significantly.

Appetite improved markedly well. Overall, the subject showed a significant improvement noted in both subjective and objective parameters. No adverse effect was observed. The drugs such as, *Thalisathi chooranam* with *Muthuchippi parpam* combination, *Vasantha kusumagaram*, *Poondu then*, *Thippili rasayanam* showed significant improvement was observed in all the associated symptoms on the treatment of *Virana silatham*.

Declaration of patient consent

The authors certify that they had obtained all appropriate patient consent forms. In the form the patient's mother has given her consent for her daughter's images and other clinical information to be reported in the journal. The patient's mother understood that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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