

(CASE REPORT)



Ayurvedic perspective and management of *Tundikeri* (Tonsillitis): A Case Study

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Abstract

Introduction: *Shalaky Tantra* is a branch of Ayurveda comprising with study and treatment of *Urdhwajatrugata Roga* including *Mukha Roga*. *Tundikeri* is classified as one of the disease entities listed under *Mukharoga* caused because of *Kapha* and *Rakta Dosha Prakopa* having features as *Sthoola*, *Toda*, *Daha*, *Prapaki Shopha*. The inflammation of the Tonsils which are two oval shaped cushions at the back of the throat is known as Tonsillitis and connected with sore throat, trouble in gulping, fever. One of the most prevalent throat infections is Tonsillitis typically affects people in the duration of five to fifty age group which is brought on by an unhealthy diet, bad dental hygiene and a sedentary lifestyle.

Material and Methods: Ayurvedic oral medicines together with *Pratisarana*, *Kawal* and *Pratimarsha Nasya* were used to treat a male patient who was 34 years old and exhibited signs and symptoms similar to *Tundikeri* (Tonsillitis). Assessment of the patients was done on the basis of the Brodsky grading along with grading associated with other subjective parameters after completion of the thirty-five days therapeutic intervention. A follow up was also done in between and after the drug intervention phase.

Result: In within the span of 35 days, there was a notable improvement in the state of the illness and the result shows the effectiveness of the Ayurveda drugs, which are economical and safe for long-term use in the patients of *Tundikeri*.

Discussion: The science of allopathy is not very effective in curing Tonsillitis and preventing its recurrence. However, Ayurveda comprises various course of treatment mentioned in the *Samhitas* as oral medicines and also procedures as *Pratisarana*, *Nasya*, *Kawal* and this article shows the importance of various Ayurveda treatment modalities which are helpful in providing more fruitful outcomes in *Tundikeri*.

Conclusion: The current article focusses on the importance of oral Ayurveda drugs along with procedures to improve the grading of symptoms of *Tundikeri* (Tonsillitis) and cope up the disease.

Keywords: *Mukharoga*; *Nasya*; *Pratisarana*; Tonsillitis; *Tundikeri*

1. Introduction

Ayurveda's *Shalaky Tantra* branch focuses on studying and treating *Urdhwajatrugata Roga* which encompasses 65 types of *Mukha Roga* covering *Tundikeri (Talugata Roga)*¹ as declared by *Acharya Sushruta*. *Acharya Charaka* has identified four categories of *Mukha Rogas*² and *Acharya Vagbhata* has identified 75 distinct types of *Mukha Rogas*³. *Tundikeri* is described by *Acharya Vagbhata* as *Hanusandhi Ashrita* disease with *Kantha* as *Karpasphala*, *Pichila*, *Manda Ruka*, *Kathina Shopha*⁴. Tonsillitis can be connected to *Tundikeri* in Ayurveda⁵. Children have a higher prevalence between 4 and 8 years old and young adults between the ages of 15 and 25 are regularly affected by Acute Tonsillitis but it can affect any age group. About 1.3% of OPD visits are related to Tonsillitis, a common condition characterized by inflammation of the Tonsils⁶. The Tonsils like the Adenoids, Tubal Tonsil, and Lingual Tonsils are made up of lymphatic

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tissue and form part of Waldeyer's ring⁷ and Tonsils play a crucial role in the first line of defence against inhaled or ingested infections. Chronic and recurrent tonsillitis are characterized by frequent episodes of tonsil inflammation, which can significantly affect a patient's quality of life⁸. Various Viruses (Human Adeno Virus, Epstein Barr Virus, Double-Stranded DNA Virus, Influenza Virus) are the main causes of Acute Tonsillitis, Bacterial Tonsillitis include Streptococcus Pyogenes, Neisseria Gonorrhoeae, autoinfection through the pharynx's and mouth's natural flora, Pets and farm animals are common causes in addition to common household items (toothbrushes). In patients who are sexually active, additional causes may include HIV, syphilis, gonorrhoea, and chlamydia⁹.

Fever, tonsillar exudates, painful throat, tender anterior cervical chain lymphadenopathy are signs and symptoms of Acute Tonsillitis,¹⁰ additionally patients may report dysphagia and odynophagia and Ayurveda clinical features of *Tundikeri* are *Toda*, *Daha*, *Paka*, *Shopha*¹¹. The patient's medical history and current symptoms are far more important in making the diagnosis of Tonsillitis. Most people find that their Tonsillitis resolves on its own. Patients rarely need to be hospitalized for Acute Tonsillitis, hydration and analgesics is the basic line of treatment due to the prevalence of Viral etiologies¹² as there are no antiviral medical treatments along with it Allopathy line of treatment carries drugs that lower temperature and pain (Corticosteroids, ibuprofen, paracetamol), Antibiotics, Tonsillectomy as treatment. Certain absolute contraindications exist for the Tonsillectomy surgery, including active infections or acute exacerbations, age under three years, blood dyscrasias, cervical spine pathology, the use of aspirin or oral contraceptives, endemic polio, and the inability to manage systemic diseases effectively¹³. Medications like nonsteroidal anti-inflammatory drugs (NSAIDs) can offer relief from symptoms¹⁴. Cold foods, beverages may exacerbate the illness and if Tonsillitis is not treated promptly, it may result in more complications such as Acute Otitis Media, Peritonsillar Abscess, Cervical Abscess, Chronic Tonsillitis, and Parapharyngeal Abscess¹⁵ which are more dreadful. While Allopathy line of treatment just treats symptoms, it does not work completely on Tonsillitis pathophysiology and eradicate it from its base and prevent its recurrences, Therefore, it's imperative to identify a secure and efficient treatment that improves wellbeing in addition to symptom relief. The unearthed treasure of Ayurveda can be used to trace it. *Acharya Sushruta* states that *Tundikeri* is classified as *Bhedya Roga* and should be addressed according to the treatment protocol established for the condition known as *Galashundika*¹⁶. Ayurveda offers a variety of disease-curing therapeutic methods (*Pratisarana*, *Nasya*, *Kawal*) along with oral medicines having *Samprapti Vighatana* properties. This essay aims to describe the clinical picture of *Tundikeri* and Ayurveda role in its treatment.

2. Case description

A 34-year-old male patient who was Hindu by religion and having occupation of Painting appeared at the *Shalakya Tantra* OPD, National Institute of Ayurveda, Jaipur with the chief complaints of pain and burning sensation in throat, difficulty in swallowing and foul smell from mouth for one week. The patient had a history of same features one year prior and despite consulting with an Allopathic doctor, the relief provided was unsatisfactory and he had now again its recurrence consequently, the patient decided to explore alternative treatment options, specifically Ayurveda, for its potential management. He had no other comorbidities such as Diabetes, Hypertension, Tuberculosis, Thyroid disorders. Not any significant family history was identified. The patient reported no prior history of tobacco use, smoking, or alcohol abuse. Before starting therapy, the patient provided signed informed permission.

3. Clinical findings

The patient exhibits decubitus while in a sitting position and possesses a sturdy physique, afebrile along with stable vital signs (pulse rate: 76/min, respiratory rate: 18 breaths/minute, BP: 128/84mmHg). During the examination of the oral cavity, the following findings were noted: *Kathina Shopha*/Enlargement of the Tonsils (The Brodsky grading) was graded as Right Tonsil (Grade 1) and Left Tonsil (Grade 2); *Daha* (Burning sensation in the throat) was graded as 1; *Toda* (Pricking pain) was also graded as 1; *Galoparodha* (Dysphagia) was graded as 2; *Mukha Daurgandhya* (Halitosis) was graded as 2 and *Ragatwa* (Congestion) was graded as 2 (Table No. 2).

4. Timeline

Table 1 Depicts the timeline of events for the case as following

Days/Date	Treatment
2/8/2023-5/9/2023	Initial starting of the disease and treated with Allopathic medications.
20/9/2024	<i>Sitopaladi Churna</i> (3gm), <i>Mulethi Churna</i> (1gm), <i>Lakshmi Vilas Rasa</i> (500mg) adequately mixed and given with honey twice daily. <i>Avipatikara Churna</i> (3gm), <i>Pitantaka Churna</i> (1gm), <i>Kamadugdha Rasa</i> (500mg)) given before food twice daily. <i>Gojihwadi Kwath Kawal</i> given twice daily. <i>Sphatika Bhashma</i> (350mg) with honey for <i>Pratisarana</i> twice daily. Steam inhalation through mouth and nose with Halin capsules and later <i>Brihatmarichyadi Taila Pratimarsha</i> Nasya twice daily. <i>Haridra Khand</i> (1 tsf) with milk twice daily.
5/10/2024	Steam inhalation through mouth and nose with normal water twice daily.
18/10/2024	Same treatment was repeated as given on 20/9/2024 for 7 days and later medicine was stopped.

Table 2 Assessment Criteria for the case

S. No.	Symptoms	Grading
1.	The Brodsky grading ¹⁷ (<i>Shopha</i>)	0: Tonsils are within the tonsillar fossa 1: Tonsils occupy <25% of the oropharyngeal width 2: Tonsils occupy <50% but >25% of the oropharyngeal width 3: Tonsils occupy <75% but >25% of the oropharynx 4: Tonsils meet in the midline
2.	<i>Daha</i> (Burning sensation in the throat)	0: No burning in throat 1: Mild bunting after intake of spicy food 2: Burning sensation after intake of any food 3: Continuous burning throughout the day
3.	<i>Toda</i> (Pricking Pain)	0: No pain 1: Mild tolerable pain 2: Moderate tolerable pain even during rest 3: Severe intolerable pain affecting routine work
4.	<i>Galaparodha</i> (Dysphagia)	0: No pain while swallowing 1: Pain during swallowing of solid food 2: Pain during swallowing of liquid substances 3: Patient unable to swallow even saliva
5.	<i>Mukha Daurgandhya</i> (Halitosis)	0: No bad odour 1: Slight bad odour 2: Moderate bad odour decreases after mouth wash 3: Persistent bad odour even after repeated mouth wash
6.	<i>Rogatwa</i> (Congestion)	0: No Congestion (Normal Pink coloured mucosa) 1: Congestion seen over tonsils and uvula 2: Congestion seen over tonsils, uvula and pharyngeal wall 3: Congestion with haemorrhages

4.1. Therapeutic interventions

As part of the therapeutic approach, following 35 days of treatment regimen was given and a notable improvement in the patient's condition was observed.

- *Sitopaladi Churna* (3gm), *Mulethi Churna* (1gm), *Lakshmi Vilas Rasa* (500mg) adequately combined and recommended to be taken with honey two times a day for a duration of initial 15 days and last 7 days.
- *Avipatikara Churna* (3gm), *Pitantaka Churna* (1gm), *Kamadugdha Rasa* (500mg) was recommended to be taken before food two times a day with Luke warm water for a duration of initial 15 days and last 7 days.
- *Sphatika Bhasma* (350mg) with honey for *Pratisarana* on Tonsils for a duration of initial 15 days and last 7 days.
- *Gojihwadi Kwath* recommended for *Kawal* twice a day for a duration of initial 15 days and last 7 days.
- Steam inhalation through mouth and nose with Halin capsules and later *Brihatmarichyadi Taila* (*Pratimarsha Nasya*) recommended twice daily for initial 15 days and last 7 days.
- *Haridra Khand* (1tsf) with milk recommended twice a day for initial 15 days and last 7 days.
- Normal water steam inhalation through nose and mouth was advised twice daily for 13 days in between the initial 15 days and last 7 days.

4.2. Outcomes

The patient began to show symptoms/signs of improvement in *Tundikeri* (Tonsillitis) with Ayurvedic treatment and by the end of 35 days, there was relief in the symptoms as presented in this study as *Kathina Shopha*/Enlargement of the Tonsils (The Brodsky grading) was fully recovered in Right Tonsil and to grade 1 in Left Tonsil; *Daha* (Burning sensation in the throat), *Toda* (Pricking pain), *Galoparodha* (Dysphagia), *Mukha Daurgandhya* (Halitosis) was completely cured and *Ragatwa* (Congestion) was reduced to grade 1.

Table 3 Effect of the therapeutic intervention on symptoms of the case

S. No.	Symptoms	Grade before treatment	Grade after treatment
1.	The Brodsky grading (<i>Shopha</i>)	Right Tonsil: 1 Left Tonsil: 2	Right Tonsil: 0 Left Tonsil: 1
2.	<i>Daha</i> (Burning sensation in throat)	1	0
3.	<i>Toda</i> (Pricking Pain)	1	0
4.	<i>Galoparodha</i> (Dysphagia)	2	0
5.	<i>Mukha Daurgandhya</i> (Halitosis)	2	0
6.	<i>Ragatwa</i> (Congestion)	2	1

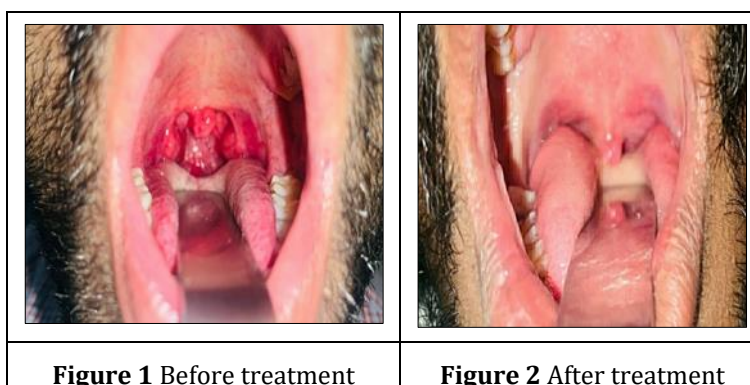


Figure 1 Before treatment

Figure 2 After treatment

5. Discussion

The recurrent infections of Tonsils have adverse effects on normal growth and development of the child and also quality of life in adults. Tonsillitis because of its recurrence, effects on the economy, society and workplace it considered a public

health concern¹⁸. Agnimandya, Kapha and Rakta Dosh¹⁹ vitiation in Kantha and Talu are the main factors behind the Samprapti of Tundikeri but there's inclusion of Vata and Pitta Dosh also in its causing factor. Ayurveda adheres to the principle of Nidana Parivarjana as its foundational management approach so initially patient was made aware of avoiding risk factors and committing to a healthy lifestyle. The drugs given in this study for Tundikeri management have probable mode of action to balances the vitiated Doshas, Samprapti vighatana property and establish equilibrium of Doshas and Dhatus. Sitopaladi Churna given for the management is an Ayurvedic formulation known for its immune-modulating, expectorant, analgesic, antitussive, anti-inflammatory characteristics²⁰ pacify Vata-Pitta Dosh so became helpful in managing vitiated Pitta Dosh and other symptoms of Tundikeri. Mulethi Churna given has pharmacological activities like Rasayana, Kanthya, effective in Raktapitta, Kasa, Mukhapaka and have anti-inflammatory, pain relieving and sore throat operator property so alleviate cough, Paka and also has anti-microbial property which shields the body from recurrent microbial infection in Tonsils. Lakshmi Vilas Rasa given mainly acts as Kaphaghana and all Mukharogas including Tundikeri is because of Kapha as told by Acharyas of Ayurveda and helpful in infections of Mukha (upper respiratory tract) and Abhrika Bhasma present in it works well in Pranavaha Srotovikara and also acts as a rejuvenating tonic.

Avipattikar churna advised is advantageous in *Agnimandhya*,²¹ *Pachana* profitable in *Samprapti vighatana* and also has purgative action thus used in *Shodhana* of vitiated *Pitta* in *Tundikeri*. *Pittantaka churna* enclosers *Swarna Gairika* which by its *Madhura Kashaya Rasa* and *Sheeta Veerya* subsides *Daha* in *Tundikeri*. *Kamadugdha Rasa* is helpful in *Vrana ropana* and is fast acting antacid preventing gastric regurgitation and irritation to Tonsils and it also contains many essential minerals (iron, oxygen, sodium, zinc, aluminium) for the maintenance of healthy body. *Gojihwadi Kwath* was given for *Kawal* to provide locally more effect as it is efficacious against Upper respiratory tract infection causing pathogenic microorganism, has mucolytic, expectorants, antibacterial, anti-oxidant property, *Kaphavilayana* and *Kaphanisarak* properties. *Sphatika Bhasma* is *Kanthya*, *Vrana Ropaka*, greater effective against Gram-negative bacteria. Furthermore, *Sphatika* effectively addresses certain spoilage bacteria and foodborne pathogens²² so prevent recurrent infections and given with honey as it have *Yogavahi* nature which enhances the pharmacodynamic effects of medications and exhibits *Vishanwat* (antimicrobial) and anti-healing properties attributed to its *Kashaya Rasa*, *Rukshya Guna*²³. Already *Madhu* is utilized topically in various researches with *Tankan* to address various oral conditions to address swelling and burning sensations²⁴. The *Kashaya* taste and *Rukshya* quality of *Madhu* facilitate the absorption of *Kapha*, which contributes to the alleviation of *Shotha*²⁵.

Steam has the ability to effectively infiltrate and access the deeper regions of the respiratory system aiding in the elimination of bacteria and viruses thereby it assists in congestion and the removal of mucus and phlegm from the respiratory system and Halin drops add on the effect of it and has anti-inflammatory, pain alleviating effect and also helpful in *Mukha Daurgandhya* in *Tundikeri*. According to classics of Ayurveda Nose is the doorway to *Shira* and helpful in managing all *Urdhvajatrugata Rogas* with the help of its systemic effect including *Mukha Rogas* and drugs present in *Brihat Marichyadi Taila* alleviate *Kapha* through *Katu*, *Tikta*, *Kashaya Rasa*, *Ushna Virya*, and decreases aggravated *Pitta* and *Rakta* of *Tundikeri* by *Madhura* and *Tikta Rasa*, and is good in *Vrana*. *Haridra Khanda* given is beneficial in Tonsillitis because of the antioxidant and antihistaminic qualities of Curcumin and other ingredients along with it has anti-allergy, *Raktashodhaka*, *Rasayana*, *Jeevaniya*, *Dhatuposhaka* property and *Lauha Bhasma* present in it provide an indirect effect on the immune system so provide natural immunity. *Haridra Khand* ingredients also have *Vata-Kaphashamaka*, *Tridosha Shamaka* properties and helpful in restoring affected *Dosha* to normal levels in *Tundikeri* and also *Goghrita* and milk present in it act to balance *Pitta* and *Kapha*.

6. Conclusion

The cardinal highlights of *Tundikeri* portrayed in Ayurveda classics are comparative to that of Tonsillitis in Allopathy science. There are a lot of *Sidhanata* given in Ayurveda classic texts to cope up *Tundikeri* and this article underscores the significance of Ayurveda drugs in addressing Tonsillitis symptoms (The Brodsky grading, *Daha*, *Toda*, *Mukha Daurgandhya*, *Galoparodha*, *Ragatwa*) and is helpful in raising awareness regarding the efficacy of Ayurveda in conditions where conventional medicine may have limited effectiveness.

Compliance with ethical standards

Disclosure of conflict of interest

There are no conflicts of interest.

Statement of ethical approval

The present research work does not harm humans/animals and ethically feasible as permission was taken from patient as well.

Statement of informed consent

Patient's consent form was secured in which the patient has granted permission for the treatment and the patient is aware that her name and initials will not be disclosed, and reasonable measures will be taken to protect her identity; however, complete anonymity cannot be assured.

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