



Case Report

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AYURVEDIC CONSERVATIVE MANAGEMENT OF ADENOTONSILLAR ENLARGEMENT (KANTHA SHALUKA AND TUNDIKERI): A CASE REPORT

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ABSTRACT

Adenoid and tonsils are lymphatic tissue that form the part of the waldeyers ring. Whenever there are viral or bacterial infections or allergens lymphatic tissue traps them. It provides local immunity and acts as the first line of defense mechanism for the aero-digestive tract. Adenotonsillitis is the inflammation of the adenoid and tonsils. Produces symptoms such as nasal obstruction, nasal discharge, snoring, mouth breathing, difficulty in swallowing, sore throat, recurrent ear infections, and otalgia, if left untreated, it can cause serious complications such as adenoid facies, sleep apnea, acute otitis media, hearing loss. In Ayurveda, there are 74 diseases affecting the mouth, which can occur in seven locations, Kantha Shalooka and Tundikeri are among the Kantagata rogas and can be correlated to Adenoid enlargement, and Tonsillitis respectively. Both are Kapha Rakta pradhana roga hence Kapha Rakta hara treatment was adopted. A 7-year-old child brought with complaints of difficulty in swallowing food and sore throat since 15 days H/o nasal blockage, snoring, mouth breathing, and sleep disturbance since 2 years. O/E child had Adenoid facies, and grade 4 kissing tonsillitis. The child was diagnosed as Adenotonsillitis. Chikitsa adopted was samanya mukhagata roga chikitsa which includes shamana aushadi, pratimarsha nasya, gandusha, and kantha pratisarana with Kapha-Pittahara drugs. Improvement was assessed with a subjective symptomatic graded scale for Tonsillar swelling by Brodsky Grading Scale and Adenoid hypertrophy by graded parameters for mouth breathing, snoring, sleep disturbances, and ear infection. The child improved with a decrease in relieving clinical features of Adenotonsillitis.

Keywords: Adenotonsillitis, Kantha Shalooka, Tundikeri, Adenoid hypertrophy, Adenoiditis, Tonsillitis.

INTRODUCTION

Adenoid and tonsils are lymphatic tissue that form the part of waldeyers ring along with lingual tonsils, tubal tonsils, and lateral pharyngeal band.¹ Located throughout pharynx, palate, posterior 2/3rd of the tongue. Whenever there are viral, bacterial infections or allergens lymphatic tissue traps them provides Local immunity, and acts as the first line of defense mechanism to the aero-digestive tract. It also provides naturally acquired immunity in early childhood and prepares the whole body for defense against infection.²

Adenotonsillitis is the inflammation of the adenoid and tonsils. Produces symptoms such as nasal obstruction, nasal discharge, snoring, mouth breathing, sore throat, difficulty in swallowing, fever, and repeated middle ear infections. In children, the prevalence has been estimated at 34.5%⁴. It is the most common illness that makes a child visit his doctor during childhood.

Usually, Adenoids tend to shrink their size after adolescence age. So, after 12 years of age adenoid enlargement cases are less common. But in contrast, Tonsillar enlargement remains whole life with minimal shrinkage when compared to adenoids.⁵

It is one of the disease entities that make the child to miss his school frequently. If not properly treated it can have complications like Recurrent middle ear infections, Sleep apnea, Adenoid facies (facial malformation), Peritonsillar abscess, Parapharyngeal abscess, Intratonsillar abscess, and Tonsillitis. The

treatment modalities for chronic Adenotonsillitis include conservative management as well as Adenotonsillectomy.⁶

Adenotonsillectomy is effective in reducing the number of infections and the symptoms but has got risk of postoperative complications like hemorrhage, dehydration, airway obstruction due to edema of the tongue, palate, and fever.⁷

Adenotonsillitis can be correlated to Kantha Shalooka and Tundikeri. Vitiated Kapha produces an immobile, rough, hard, cyst, resembling the seed of Kolaphala (Jujube fruit) in the throat, which produces pricking pain, called Kantha Shaluka.⁸ Vitiated kapha rakta produces swelling which resembles Karpasa Phala (Cotton Fruit), which produces shotha (swelling), Paka (suppuration), gala uparodha (throat congestion) in the throat called Tundikeri.⁹ "Mukhadantamulagalaja prayo roga kapha asra bhuyistha" Acharya Vagbhata told as all mukha, dantamula, kantha Roga are kapha rakta predominant hence kapha rakta hara treatment (Samprapti vighatana chikitsa), Samanya Mukhagata, and Kantagata Roga Chikitsa, Shothahara- Shamanaushadi, Pratisarana, Gandusha, Nasya, treatment adopted.^{10,11}

Objectives

1. To understand the pathophysiology of Chronic Adenotonsillitis in the perspective of Kantha Shalooka and Tundikeri respectively explained in Ayurveda classics.
2. Tonsillar swelling assessment by graded scales- Brodsky Grading Scale, Adenoid enlargement assessment by graded

scales- for Mouth breathing, Snoring, Sleep disturbances, and Ear infection.

Temperature: 97degree F.
 Pallor: Absent
 Mental status: Non-co-operative

MATERIALS AND METHODS

Case history: Chief complaints

A 7-year-old female child belonging to a middle-class family was brought to SDM Institute of Ayurveda Hospital Kaumarabhritya Opd no 23 Anchepalya, Bengaluru with complaints of difficulty in swallowing food and sore throat since 15 days, nasal blockage, snoring, mouth breathing, and sleep disturbance frequently since 2 years.

Associated Complaints: Also, complaints of loss of appetite, not gaining weight, and change in voice for 2 years.

History of present illness: The child was normal 2 years ago, but gradually developed difficulty in swallowing food and a sore throat since 15 days. Nasal blockage, snoring, mouth breathing, and sleep disturbance frequently since 2 years, the symptoms aggravated since 15 days with so for further management child consulted Kaumarabhritya OPD of SDM Institute of Ayurveda and Hospital, Anchepalya, Bengaluru.

History of past illness: The child was diagnosed with Adenotonsillitis at the local clinic and started on inhaler corticosteroids; the inhaler steroid was stopped due to nasal irritation. For further management, attendees visited the S.D.M. Institute of Ayurveda and Hospital Anchepalya, Bengaluru, Karnataka, India.

Family history: Grandmother h/o Asthma on inhaler steroids.

Personal history

Aharaja: Diet predominantly of madhura, snigdha, guru, sheetha.

Viharaja: Nil.

Habits: Nil.

Birth history: Term/ Normal Vaginal Delivery/ Birth weight 2.5kg.

No H/o NICU admission. No h/o consanguineous marriage.

Clinical findings

General Examination

General appearance: Fair

Pulse: 88b/min.

Respiratory rate: 26c/min.

Local examination

Face

Adenoid facies present +

Elongated face, Open mouth, Mouth breathing, Pinched nostril, High arched Palate, Short upper lip.

Sinus: No tenderness/ pain.

Oral cavity

Soft palate: Congestion +

Movement of the soft palate: Normal

Uvula: Normal

Tonsils: Bilateral enlarged grade 4, (kissing tonsils).

Teeth: Multiple caries teeth.

Tongue: Coated

Nose: Bilateral enlarged turbinates present.

Ear

Right: EAC and TM Normal

Left: EAC and TM Normal

Systemic examination

Respiratory Examination:

Inspection

Respiration: Mouth breathing present.

Shape of Chest: Bilateral Symmetrical

Scar: Absent

Palpation

Trachea position: Central.

Expansion: Symmetrical

Palpable: Absent.

Tenderness: Absent.

Percussion

Dullness: Absent.

Auscultation: Bilateral air entry: equal, Added sounds: Absent

Cardiovascular system: S1S2+

Gastrointestinal system: Soft, non-tender

Central nervous system: Conscious, oriented to time, place and person.

Musculoskeletal system: Has shown no abnormality.

Investigations

X-ray lateral neck s/o Grade 3 adenoid hypertrophy.

Ethical consideration: Informed consent/ assent taken from the child's guardian.

Table 1: Treatment

Sl. No	Treatment given	Duration			
A	Mukha Sthanika Upakarma				
	<table border="1"> <tr> <td>1.Kantha Pratisarana Maricha choorna 5 gm Pippali choorna 5 gm Tankana Bhasma 5 gm Yava Kshara 2 gm Saindhava 1 pinch Honey 1 Tsf</td> <td>2.Gandusha Triphala choorna- 5 gm Tankana Bhasma- 1 pinch In 200 ml water reduced to 100 ml.</td> <td>3.Pratimarsha Nasya Anutaila 4/4 drops both nostrils</td> </tr> </table>	1.Kantha Pratisarana Maricha choorna 5 gm Pippali choorna 5 gm Tankana Bhasma 5 gm Yava Kshara 2 gm Saindhava 1 pinch Honey 1 Tsf	2.Gandusha Triphala choorna- 5 gm Tankana Bhasma- 1 pinch In 200 ml water reduced to 100 ml.	3.Pratimarsha Nasya Anutaila 4/4 drops both nostrils	7 days
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B	Shamana Aushadha: Syrup polyherbal formulation 5 ml Twice a day, after food, orally.	7 days			

Table 2: Pratisarana Purva, Pradhana, Paschat Karma

Ingredient	Pippali, Maricha, Tankana, Yava Kshara, Saindhava, Honey
Instruments	Sterile cotton, Jobson probe, Gloves, clean bowl, tongue depressor
1. Purva karma	Proper cleaning of the mouth is done by rinsing the mouth with water.
2. Pradhana karma	A paste was prepared by taking churna and mixing it. Then, he was advised to apply on the tip of the Jobson probe covered with cotton and apply it all over the gums with a slight pressure 3–5 times in a clockwise direction.
3. Paschat karma	Kavala was advised with Triphala Kwatha with 1 pinch Tankana Bhasma.

RESULT

Regression of Patient symptoms was observed from the third day of treatment and remission of the symptoms was observed by 7th day of treatment. During the treatment, no complications were observed in the patient.

Table 3: Assessment of tonsillar swelling by Visual Analogue Scale for pain

Grade	Pain score	BT	AT
0	None	6 Moderate pain	2 Mild pain
1 to 3	Mild		
4 to 6	Moderate		
7 to 10	Severe		

BT: Before Treatment, AT: After Treatment

Table 4: Tonsillar Swelling Brodsky Grading Scale

Grade	Symptoms	BT	AT
1	tonsils within the tonsillar fossa	Grade 4	Grade 3
2	tonsils just outside of the tonsillar fossa and occupy, < 25% of oropharyngeal width.		
3	tonsils occupy 26-50% of the oropharyngeal width.		
4	tonsils occupy more than 75% of the oropharyngeal width.		

BT: Before Treatment, AT: After Treatment

Table 5: Assessment of Dysphasia by graded parameter

Grade	Difficulty in deglutition	BT	AT
0	No difficulty in deglutition.	Grade 3	Grade 1
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.		

BT: Before Treatment, AT: After Treatment

Assessment criteria Adenoid hypertrophy**Table 6: Assessment of mouth breathing by graded parameter**

Score	A. Symptoms Mouth breathing	BT	AT
1	Mouth breathing/snoring is absent	Grading 4	3
2	Mouth breathing/snoring present on few occasions		
3	Mouth breathing/ snoring present whenever asleep		
4	Mouth breathing /snoring always present.		

BT: Before Treatment, AT: After Treatment

Table 7: Assessment of Snoring by graded parameter

Score	B. Symptoms of snoring	BT	AT
1	Snoring is absent	Grade 3	2
2	Snoring was present on few occasions		
3	Snoring is present whenever asleep		
4	Snoring is present always.		

BT: Before Treatment, AT: After Treatment

Table 8: Assessment of Otological infection by graded parameter

Score	Symptoms	BT	AT
1	Absent	Grade 2	1
2	Occasional serous otitis media / Acute Suppurative otitis media		
3	Persistent Serous otitis media/ <3 episodes/ year of Acute Suppurative otitis media		
4	Unilateral or bilateral chronic Suppurative otitis media of tub tympanic type/atelectasis with impending cholesteatoma		

BT: Before Treatment, AT: After Treatment

Table 9: Assessment of Sleep disturbances by graded parameter

Score	Symptoms	BT	AT
1	Absent	Grade 2	1
2	Present occasionally during upper respiratory tract infections		
3	Present everyday with <= 3 episodes /night daily		
4	>3 episodes/night daily.		

BT: Before Treatment, AT: After Treatment



Image 1: Tonsillar swelling Before treatment
Image 2: Tonsillar swelling on day 7 of treatment
Image 3: Tonsillar swelling after treatment



Image 4: Adenoid facies



Image 5: X-Ray lateral neck s/o grade 3 Adenoid hypertrophy



Image 6: Kantha Pratisarana

DISCUSSION

“Mukhadantamulagalaja prayo Roga Kapha Asrabhuyestha” all mukha, galaja roga are Kapha Rakta predominant Kapha Pittahara treatment adopted. Kapha samutklesh lakshana were understood by the presence of kathina shopha and gala rodha. Pitta samutklesh lakshana were understood by the presence of raagatva which is indicated in rakta dusti also. Kosthagata ama was understood by the presence of reduced appetite and bowel. Samanya mukhagata roga, samanya kantagata roga chikitsa such as nasya, pratisarana, gandusha, kavala, kwatha pana adopted.^{12,13}

Gandusha with Triphala Choorna and Tankana bhasma enhances the effects of Pratisarana. Triphala: Contains Haritaki, Vibhitaki, and Amalaki having properties tridoshahara, shothahara, krimighna, and lekhana. It is an antioxidant and anti-inflammatory agent, reducing throat swelling and promoting mucosal healing. Tankana bhasma does Kapha-vishosana. It supports the reduction of inflammation and improves healing. Tridoshahara (balances doshas and reduces inflammation), deepana and pachana (enhance digestion and clears ama i.e. toxins), anti-inflammatory (reduces local symptoms of redness and swelling).¹⁴

Pratimarsha Nasya (Nasal Administration)

Anutail has properties like katu, tikta rasa; ushna virya; Kapha-Vatahara, shothahara and lekhana. Administered through the nostrils, anutaila directly reaches the nasopharyngeal area. It clears Kapha obstructions, reduces inflammation, and soothes the mucosa. Kapha-nissaraka (clears excess Kapha from the head and throat region), shothahara (reduces swelling and inflammation in the nasopharyngeal area), lekhana (facilitates mucosal healing by scraping accumulated secretions).^{15,16}

Kantha Pratisarana (Local Application)

Pratisarana is a procedure in Ayurveda where a medicated paste is applied to the affected area, offering both local and systemic benefits. The mode of action can be understood through the properties of the ingredients used: Maricha (*Piper nigrum*) having katu (pungent) rasa, ushna (hot) virya does Kapha-Vatahara, dipana (digestive stimulant), lekhana (scraping), shothahara (anti-inflammatory). The ushna virya and katu rasa help dissolve Kapha obstructions in the throat and reduce inflammation by improving local blood circulation. Pippali (*Piper longum*) having katu rasa, ushna virya act as Vata-Kaphahara, krimighna (antimicrobial), deepana and pachana (digestive). Enhances local immune response, stimulates circulation, and clears Kapha, reducing the swelling and congestion of tonsils. Tankana Bhasma (Borax) having katu rasa, tikshna (sharp), ruksha (dry) guna, does Kapha vishosana (drying of Kapha), lekhana, shothahara, antimicrobial. Tankana dissolves Kapha blockages in the tonsillar tissue, reduces inflammation, and prevents secondary infections. Yava kshara (barley alkali) has kashaya (astringent), madhura (sweet) rasa does Kapha-Pitta-hara, lekhana, medohara (fat scraping). Due to its nature Its penetrating nature helps reduce swelling and aids in clearing obstructions in the tonsillar and adenoid tissues. Saindhava lavana (rock salt) has lavana (salty) rasa, ushna virya, act as Kaphahara, ruchya (improves taste), and dipana. Maintains moisture balance, enhances the penetration of other drugs, and helps to break down Kapha congestion. Honey produces anti-inflammatory, wound healing, and antimicrobial effects. Acts as a base for the paste, promoting tissue healing and providing a soothing effect. The overall mechanism is Kapha-vishosana (dries and dissolves accumulated Kapha in the tonsillar and adenoid tissues).¹⁷

Orally given polyherbal formulation with immunomodulatory and anti-inflammatory properties. Contains Guduchi (*Tinospora cordifolia*), enhances immunity and reduces systemic inflammation. Guggulu (*Commiphora wightii*) acts as anti-

inflammatory and antimicrobial. Yashtimadhu (*Glycyrrhiza glabra*) soothes mucosa and promotes healing. Amalaki (*Emblica officinalis*) is antioxidant and supports immune function. Shankha bhasma (calcium carbonate) reduces mucosal irritation and balances Pitta.

Combined Mode of Action

The integrated approach of Pratisarana, Gandusha, Nasya, and systemic medication ensures local symptom relief by clearing Kapha and reducing swelling through scraping (lekhana) and anti-inflammatory actions. Immune modulation prevents recurrent infections and supports the child's natural defense mechanism. Systemic healing addresses systemic inflammation and clears ama, promoting long-term recovery. Prevention of recurrence by the combined regimen improves the body's ability to resist infections and promotes throat health. This holistic Ayurvedic management offers a safe, effective, and non-invasive alternative to adenotonsillectomy while preserving immune function.

CONCLUSION

Even though Adenotonsillitis self-limiting condition that regresses by adolescence. If left untreated can cause potentially serious complications and impact on patient's quality of life, so early diagnosis and interventions are needed. Ayurvedic medicines are effective in treating Adenotonsillitis instead of adenotonsillectomy and preserve the adenoid and tonsils as it provide immunity. Adenotonsillitis cannot be treated by following shamana aushadi only, avoiding nidana parivarjana (triggering factors). Aharaja nidana such as guru, snigdha, sheeta, abhishyandi foods should be avoided. Viharaja nidana, expose to pravata, atisheeta (cold breeze, AC, fan). Following oral hygiene by simple daily routine (dinacharya), dantadhavana (teeth brushing) daily twice, and gandusha/kavala (gargling) can prevent the disease.

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