



STUDY ON THE EFFECT OF KANTA SHODHAKA LOZENGES ON UPPER RESPIRATORY TRACT INFECTION (PHARYNGITIS)

**Gudekota
Aishwarya**

Final Year BAMS, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India.

Kamath Nagaraj*

Dean Innovations & Skill Development, Associate Professor, Department of Kriya Shareera, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital, Hassan, Karnataka, India. *Corresponding Author

ABSTRACT **Background:** Upper respiratory tract infections are most common and affects the nose, nasal cavity, mouth, throat (pharynx), voice box. It includes symptoms such as nasal congestion, loss of smell, post-nasal drip, sneezing, wheezing, Fatigue, pharyngitis, coughing, phlegm, headache, swollen lymph nodes. Pharyngitis is a condition where throat is red, swollen, sore. Lozenges are type of tablets taken through oral cavity. They are solid dosage forms that are dissolved in oral cavity slowly, intended to produce slow and constant effect on throat mucosa. They contain one or more ingredients and are sweetened so as to be pleasant tasting. *Kanta Shodaka* lozenges contain ingredients such as *Ardra*, *Sunti*, *Twak*, *Metika*, *Maricha*, *Pipali*, *Ela*. As per the classical reference all the drugs are intended to have *Kaphavata Hara* property. **Aims & Objectives:** To assess the effect of *Kantashodhaka* lozenges on upper respiratory tract infection (Pharyngitis). **Materials & Methods:** 20 patients of age group of 25 to 60 years irrespective of gender, caste, religion suffering from upper respiratory tract infections (pharyngitis) were selected using Standard Questionnaire and was given *Kanta shodaka* lozenges for 7 days. **Discussion & Conclusion:** Ingredients of *Kantashodhaka* lozenges have Various bioactive-phytochemicals including alkaloids, flavonoids, esters, and steroids were identified from the plant extracts and essential oils from the roots and fruits were antimicrobial, antiparasitic, anti-inflammatory, immunomodulatory property acts in reducing the symptoms of pharyngitis. *Kantashodhaka* Lozenges was very effective in the management of Upper respiratory Tract Infection (Pharyngitis).

KEYWORDS :

INTRODUCTION

Upper respiratory tract infections are most common and affects the nose, nasal cavity, mouth, throat (pharynx), voice box. It includes symptoms such as nasal congestion, loss of smell, post-nasal drip, sneezing, wheezing, Fatigue, pharyngitis, coughing, phlegm, headache, swollen lymph nodes. Pharyngitis is a condition where throat is red, swollen, sore.^[1] In *Ayurveda Shwasa* and *Kasa Roga* are explained which involves most of the presentations of Respiratory Tract Infections. In the pathogenesis of *Shwasa* and *Kasa Roga* vitiated *Kapha* and *Vata Doshas* are involved. Lozenges are type of tablets taken through oral cavity. They contain one or more ingredients and are sweetened so as to be pleasant tasting. In general used for topical effects, may also have ingredients that produce systemic effects.^[2] *Kanta Shodaka* lozenges contain ingredients such as *Ardra*, *Sunti*, *Twak*, *Metika*, *Maricha*, *Pipali*, *Ela*. As per the classical reference all the drugs are intended to have *Kaphavata Hara* property. Therefore, it relieves the symptoms of upper Respiratory Tract Infections. Lozenges are intended to dissolve slowly in the mouth suppress the symptoms, lubricates and soothe irritated tissue of the throat. Sucking on throat lozenges increase saliva production, which coats the throat cut down pain and itchiness. As the drugs in the *Kanta shodaka* lozenges, has analgesic and antiseptic effect.^[3] Lozenges are made available in convenient packaging and provides a pleasant dosage form for patients who are unable to swallow other types of solid dosage forms.^[4]

Kasa is *Vyadhi* of *Pranavaha Srotas*, as describe in *Ayurvedic Samhitas 'Prana'* is related with *Jivan/Life*, therefore any abnormality in its function leads to disturbance of all the body functions, as *Prana* is *Sarvagata*. Factors like harmful and deleterious food, smoking, polluted air and inhalation of chemicals and gases for long period can cause inflammation which leads to *Kasa* or other respiratory problems.^[5] According to *Ayurveda Kasa* is an independent disease so its description is found in detail. It has been also stated as *Hetu*, *Poorvaroop*, *Lakshan*, *Upadrava* and *Arishta* of *Rajayakshama*, *Visarpa*, *Jwar*, *Raktapitta*, *Udar*, *Gulma* etc. *Chikitsa* of *Kasa* is divulged in *Atharva Veda* by three mantra i. e. *Manas*, *Parthiva* and *Saamudri*.^[6] *Aharaj* and *Viharaj Hetu* *Sevan* causes *Vata Prakop* and *Kapha Vikruti* which leads to obstruction of proper functioning of *Pran Vayu*. Vitiated and *Pratilom Pran* along with *Udan* get upwards, takes over the function of *Udan Vayu* & gets lodged in *Kantha & Urah*. This *Vata* afflicts and pervades the channels of *Shir* causing *Netra*, *Prushtha*, *Urha* & *Parshva Akshep* which expels out with specific sound from broken bronze vessel along with *Dosha*.^[7] Pharyngitis is the inflammation of the mucous membranes of the oropharynx. In most cases, it is caused by an infection, either bacterial or viral. Other less

common causes of pharyngitis include allergies, trauma, cancer, reflux, and certain toxins. Pharyngitis is the inflammation of the mucous membranes of the oropharynx.^[8] In most cases, the cause is an infection, either bacterial or viral.^[9] In general, the prognosis for pharyngitis is good as both viral and bacterial infections are typically self-limited to 5 to 7 days. Mortality from pharyngitis is rare but does occur if the airway is compromised. Most cases of pharyngitis resolve within 7 to 10 days. Treatment failures are usually due to antibiotic resistance, poor compliance, and untreated close contacts.^[10]

AIMS & OBJECTIVES

To assess the effect of *Kantashodhaka* lozenges on upper respiratory tract infection (Pharyngitis).

MATERIALS & METHODS

20 patients of age group of 25 to 60 years irrespective of gender, caste, religion suffering from upper respiratory tract infections (pharyngitis) were selected using Standard Questionnaire and was given *Kanta shodaka* lozenges for 7 days.

OBSERVATIONS & RESULTS

Among 20 subjects only didn't had the fever before treatment whereas after treatment 15 subjects didn't had fever. Among 20 subjects 5 subjects didn't has sore throat before treatment whereas 14 subjects didn't had sore throat after treatment. Among 20 subjects only 11 didn't had tonsil inflammation whereas after treatment 15 subjects didn't had tonsil inflammation. Among 20 subjects 14 subjects didn't has tonsil exudates before treatment whereas 20 subjects didn't had tonsil exudates after treatment. Among 20 subjects 8 subjects didn't has sore throat before treatment whereas 17 subjects didn't had sore throat after treatment. Among 20 subjects 12 subjects didn't has sore throat before treatment whereas 18 subjects didn't had sore throat after treatment. Among 20 subjects 12 subjects didn't has Lymphadenopathy before treatment whereas 15 subjects didn't had Lymphadenopathy after treatment. Among 20 subjects 11 subjects didn't has Voice hoarseness before treatment whereas 15 subjects didn't had Voice hoarseness after treatment.

Table 1: Showing Wilcoxon Signed Rank Test For Parameters Of Pharyngitis

Parameter	Mean Rank	z value	Significance
Fever	9.50	-3.789	.000
Sore throat	8.00	-3.464	.000
Tonsil Inflammation	5	-2.887	.004

Tonsil exudates	3.50	-2.333	.03
Post Nasal Drip	6.50	-3.100	.000
Throat Pain	4	-2.414	.000
Lymphadenopathy	4	-2.412	.000
voice hoarseness	4.50	-2.640	.000

The Mean Rank of Fever before & after treatment was 9.50 with the z value of -3.789 at the significance level of p value< 0.0001. The Mean Rank of Sore throat before & after treatment was 8.00 with the z value of -3.464 at the significance level of p value< 0.0001. The Mean Rank of Tonsil Inflammation before & after treatment was 5 with the z value of -2.887 at the significance level of p value< 0.004. The Mean Rank of Tonsil exudates before & after treatment was 3.50 with the z value of -2.333 at the significance level of p value< 0.03. The Mean Rank of Post Nasal Drip before & after treatment was 6.50 with the z value of -3.100 at the significance level of p value< 0.0001. The Mean Rank of Throat Pain before & after treatment was 4 with the z value of -2.414 at the significance level of p value< 0.0001. The Mean Rank of Lymphadenopathy before & after treatment was 4 with the z value of -2.412 at the significance level of p value< 0.0001. The Mean Rank of Voice Hoarseness before & after treatment was 4.50 with the z value of -2.640 at the significance level of p value< 0.0001.

DISCUSSION

Ingredients of Kanthashodhaka lozenges have Various bioactive-phytochemicals including alkaloids, flavonoids, esters, and steroids were identified from the plant extracts and essential oils from the roots and fruits were reported as antimicrobial, antiparasitic, anthelmintic, mosquito-larvicidal, antiinflammatory, analgesic, antioxidant, anticancer, neuro-pharmacological, antihyperglycaemic, hepatoprotective, antihyperlipidaemic, antiangiogenic, immunomodulatory, antiarthritic, antiulcer, antiasthmatic, cardioprotective, and anti-snake-venom agents. Mainly antimicrobial, antiparasitic, antiinflammatory, immunomodulatory property acts in reducing the symptoms of pharyngitis.

CONCLUSION

Kanthashodhaka Lozenges was very effective in the management of Upper respiratory Tract Infection (Pharyngitis).

Acknowledgement:

Advanced Research Wing, Rajiv Gandhi University of Health Sciences, Bengaluru

REFERENCES

1. Bronchial Asthma, D. Behera, 1st Edition, 2000, Published by Jaypee Brothers Medical Publishers (P) Ltd, New-Delhi.
2. Concise Oxford Textbook of Medicine, by Ledingham J.G.G. and David Warell, 2000, Oxford University Press.
3. Current Medical Diagnosis & Treatment, by Lawrence M. Tierney, Jr. Stephen J Mcphee, Maxine A. Papadakis, 46th edition, 2007, Published by International Editions.
4. Samson Wright's Applied Physiology by Cyril A. Keele, Eric Neil, & Norman Joels, 13th Edition, Published by Oxford Medical Publication.
5. Researches in Ayurveda – Baghel M. S. 46. Research database on Ayurveda, Siddha, other Traditional medicine and related sciences, Vol. III, C.C.R.A.S, New Delhi, 2010.
6. Introduction to Kayachikitsa by C. Dwarakanath, 2nd Edition 1986 Choukhamba Orientalis, Varanasi.
7. Indigenous Drugs of India, by Chopra, Handa&Kapur, 2nd Edition, 1982, Published by Academic Publisher, Calcutta.
8. Madhava Nidana with Madhukosha Commentary by Vijayarakhita&Shrikanthadutta, Edited by YadunandanUpadyaya 30th edition.
9. Madhav Nidan, by Dr,Brahmananda Tripathi, published by Chowkhambhasurbharti prakashan,2014.
10. Medicinal Plants Chemistry & Properties by M. Danic, Published by Science Publishers, USA.