

Observational study on the effect of Ayurvedic management in different clinical studies with special reference to TamakShwas.

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Abstract

In the today's scenario the cases of bronchial asthma were seen to be increasing tremendously. There are about 334 million patients suffering with bronchial asthma. It is affecting almost all age groups. In India there are around 15-20 million people are affected with bronchial asthma. The prevalence of asthma is increasing day by day with time with estimation of additional 100 million people to develop asthma by the year 2025. Bronchial asthma can be correlated with Tamakshwas in Ayurveda. Difficulty in breathing or shortness of breath can be simply termed as Shwas. Vata and Kapha are the two doshas which are mainly involved in Shwasaroga. Shwasa is mainly of five types in Maha Shwasa, Urdhwa Shwas, Chinna Shwasa, Kshudra Shwasa and Tamaka Shwasa.

Bronchial asthma is a chronic inflammatory disease of respiratory tract with airway hyper responsiveness producing symptoms such as wheezing, cough & dyspnea. Exposure to the dust, smoke, respiratory infections, new dietetic preparation, stress and change in climate are some of the causative factors of Bronchial asthma. In Modern medicine there is no permanent cure for asthma, only symptoms can be improved.

In Ayurveda Asthma can be treated effectively by using Panchakarma and internal medication and helps in decreasing the episodic recurrence. Keeping in mind this view present review article was done.

Keywords: Tamakshwasa, Bronchial asthma, Panchakarma.

Introduction

Tamakshwasa is one of the types of shwasaroga. Tamaka shwasa is formed from two words Tamaka and Shwasa. 'Tama' means darkness or to choke¹. In tamakashwasa aggravated vata causes Pratiloma gati or reverse movement. The vitiated vata reaches head – neck region. It increases the regional Kapha and these secretions obstruct the airway passage thereby producing ghurgurshabda or wheezing sound². In Modern science it is compared with Bronchial Asthma. Bronchial asthma is a chronic inflammatory disease of the airways, characterized by bronchial hyper reactivity and variable degree of airway obstruction³. and manifesting as periodic attacks of coughing, wheezing, breathlessness, and shortness of breath typically occurring at night or in the early morning hours.

There are about an estimated 15-20 million asthmatics in India. There is prevalence of between 10% and 15% in 5-11year-old children in India⁴Due to environmental changes such as smoke and air pollution asthmatic problems are increasing day by day. In Modern science there is no any permanent cure for asthma only they are having symptomatic relief for the same. Uncontrolled inflammation can lead to structural changes in the airway walls—a process known as remodeling⁵

Now a day's different types of medications are used which include oral or parental corticosteroids, long-acting β agonists, leukotrieneantagonists, theophylline, and rescue medications, such as short acting β agonists but they are having potential side effects if are used for long time. Bearing in mind the side effects that can occur during such therapy, there is need for exploration of traditional system of medicines.

Aim:Observational study on the effect of Ayurvedic management in different clinical studies.

Objectives:

- 1.To review the research articles related to Ayurvedic management in Tamakshwas.
- 2.To analyze the collected data.

Materials and Methods: -

Data source:The related data were collected from various research articles and classical text of Ayurveda.

Observation and Results-

The observation and results are being mentioned in Table.1.

Table 1: Studies conducted on Tamakshwas

Year	Title of study	Author	Outcome
2012 ⁶	Clinical effect of Virechana and Shamana Chikitsa in Tamaka Shwasa (Bronchial Asthma)	Kuntal.A. Ghosh et al.	In the overall effect of therapy, it was found that the response in group A was highly significant when compared to group B
2015 ⁷	Role of KrishnadiChurna in the Management of TamakShwasawith Reference to Bronchial Asthma	Sarve R.N etal	In this study, none of the remaining 49 patients of TamakShwasa were 'cured'. However, 21 patients (70%) from trial Group were markedly improved and 4 patients (13.33%) were improved after completing

			the treatment. In case of Control group 18 patients (60%) were markedly improved and 6 patients (20%) were improved.
2016 ⁸	A clinical evaluation of Shwasharmahakasaya in the management of tamakshwas (bronchial asthma)	Dr. Niten Barman	Effect of Therapy on Signs & Symptoms – Remarkable relief was observed in the symptoms like dyspnea 86.00%, Cough 88.00%, Prolonged expiration 85.00%, Crepitation 81.81% Rhonchi/ wheezing78.00%. Whereas the other associated symptoms such as Tightness of chest was relieved in 82.92% of cases, Rhinitis was relieved in 80.64% of cases, Exertional dyspnoea in 66.67% of cases, Weakness in 71.42% of cases, Headache in 86.36% of cases, Insomnia in 86.67% of cases and Fever in 80.00% of cases
2018 ⁹	A clinical study of Shunthyadi churna in the Management of Tamaka shwasa W.S.R. to Bronchial Asthma	Rajnik Yadav	In all the symptoms related to Shwasakastata, trial drug showed a remarkably high percentage improvement. Parameters like frequency of Shwasa Vega, duration of attack, Pranavaha Srotodusti Lakshanas and use of emergency medicine were reduced by 61.11%, 39.68%, 74.21% and 87.70% respectively. Kasa and Peenasa was reduced by 46.03% and 56.35% respectively
2018 ¹⁰	Clinical study to evaluate efficacy of 'Sauvarchaladichoorna' in management of 'Tamakshwas'	Suse Sandip Bhausahab	On Comparison between two groups done by applying "Mann - Whitney U test", there was significant difference found between two groups for the symptoms Kasa veg, Kapha Sthivan, Shwas Veggati, Asino

			Labhate Saukhyam; Trial Group is more effective than Control Group in relieving above symptoms. No significant difference found between two groups for the symptoms Pinasa and Ghurghurakam. That means both groups are equally effective in relieving these symptoms.
2020 ¹¹	Clinical Efficacy of Ayurvedic formulations, Kanakasava and Trivrit Churna, in the Management of Bronchial Asthma: A Prospective, Open-label, Multicentric Study	Shashidhar H Doddamani et al	In the present study, the combination produced significant change in the major clinical symptoms of bronchial asthma, such as breathlessness, paroxysms of breathlessness, wheezing, cough, tightness of chest, worsening of symptoms at night, and awakening due to exacerbations of symptoms at the end of the trial period.
2020 ¹²	A clinical study to evaluate the efficacy of syrup and capsule shwasi in the management of bronchial asthma w.s.r. tamakshwasa	Prof. Vijay Chaudhary et al	Overall observations of the present study on the basis of various scientific parameters revealed that Group-I patients who were treated with Capsule Shwasi showed promising results in management of bronchial asthma. However, Group-II patients who were managed with Capsule as well as Syrup Shwasi showed marginally better improvement in various subjective as well as objective parameters over Group-I patients. Thus, Capsule and Syrup Shwasi is proved to be safe and effective remedy for managing bronchial

			asthma.
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Discussion: -

Out of total 7 number of studies, all seven are clinical studies. According to Acharya Charak the main doshas involved in Tamakshwas are Vata and Kapha. In this different clinical studies, the different types of treatment modalities are used such as Panchakarma procedures and Sanshaman medication which are having efficacy to correct the derange Vata and Kaphadosha which are mainly involved in Samprapti of Tamakshwas through the specific properties of various drugs.

In the study conducted by Author Kuntal A. Ghosh and Paresh C. Tripathi, they have used Virechan karma for which they have used Aragwada. . Aragwadhais Madhura, Tikta Rasa; Guru, Mridu, Snigdha Guna; Shita Virya and Madhura Vipaka. Hence, the drug is useful as Vata-Pitta Shamaka. Due to Madhura, Snigdha Guna it helps in Vatashamana as well as Kaphanihsarana and due to Sransana property it excretes Kosthagata Kapha and Pitta causing downward movement of Vata (Vatanulomanam). Charaka has already advised Samshodhana in Tamaka Svasa & has given more emphasis on Virechana Karmato correct the de-arranged Doshas (Vata and Kapha).

In the study conducted by Author Sarve R.N, Tamaka Shwasa is having Kapha and Vata predominance. While mentioning management of this disease Acharyas explained that, those diets' and drugs that have Kaphavataghna, Ushna and Vatanulomana properties are useful in Tamaka Shwasa. All these drugs are mostly having Vata kaphahara and Vatanulomana property. Pippali is already proved to be act on Prana vaha srotas, Amalaki is itself Rasayan which increase the strength of patients. The other three ingredients Shunthi, Amalaki and Seeta is supposed to alleviate the Vata and Kapha and also increase the strength of patients.

In the study conducted by Author Dr Nitin Barman, the properties of all the plants are having kaphavataghanaproperties. Once the kapha is alleviated, the avarana of vayu gets removed and vayu can travel to its own path without any obstruction leading to relief in swasakasta. Bronchial asthma is a chronic inflammatory disorder of airways in which mast cell, eosinophils and T-lymphocytes play an important role. Recent researchers prove that the plant like Puskarmool, Shati, Tulsi have anti-allergy, anti-asthmatic, bronchodilator and expectoration like action. The ingredients may be collectively effective on airflow obstruction and bronchial hyper reactivity by bronchodilator, anti-inflammatory, anti-allergic and antiasthmatic property.

In the study conducted by Author Rajnik Jadav, they have used Sunthyadi churna the Dosha-Prashamana effect (Shunthi, Pippali, Maricha, Nagadala, Tvak) acts on the main Doshas which contribute to the Samprapti viz. Vata and Kapha. Deepana-Pachana Karma (Shunthi, Pippali, Maricha, Nagadala, Sukshaila) digest Ama. Vatanulomana property (Shunthi, Pippali) maintains the normal flow of Vata. Shwasa, Kasa, Shothahara Prabhava are also seen in the ingredients present in the sunthyadi churna. Srotorodhnivarana Prabhava (Shunthi, Maricha) removes Srotorodha from the Pranavaha and Rasavaha Srotas.

In the study conducted by Author Sandeep bhausaheb they have used sauvarchaldi churna in management of Tamakshwas, Sauvarchaladi Choorna contains four ingredi-ents namely Sauvarchal, Bharangi, Shunthi in equal proportions and Sharkara 2 parts. With properties of Katu, Tikta, Madhur

Rasa, Katu Vipaka & Ushna Veerya, 'Sauverchaladi Churna' promotes Agni-Deepana, Kapha vilayan, Vata-Kapha Shamana, Vatanuloman actions. These all actions finally lead to Shwasahara effect.

In the study conducted by Shashidhar H Doddamani, they have used Trivritachurna and Kanakasava polyherbal formulation that consists of Dhatura (*Datura metel* L.), Vasa (*Justicia adhatoda* L.), Yashtimadhu (*Glycyrrhiza glabra* L.), Pippali (*Piper longum* L.), Kantakari (*Solanum xanthocarpum* Schrad. & H. Wendl.), Shunthi (*Zingiber officinale* Roscoe), Bharangi (*Clerodendrum serratum* (L.) Moon), Nagakeshara (*Mesua ferrea* L.), Talispatra (*Abies webbiana* (Wall. ex D. Don) Lindl.) Draksha (*Vitis vinifera* L.), and Dhataki (*Woodfordia fruticosa* (L.) Kurz), The components of Kanakasava are predominantly Ushna (hot) and Teekshna, which might help in producing bronchodilation and may act as Srotoshodhaka, thereby producing symptomatic relief. Trivrit Churna is effective in producing Sukhavirechana, thereby promoting Vata-Anulomana and regulation of Agni, which are the chief components in the management of Shwasa Roga.

In the study conducted by Author Vijay they have used Syrup Shwasi and capsule Shwasi which constitute number of formulations like Shwasa Kuthara rasa and single drugs like Somalata, Dhatura, Pushkaramoola, Draksha etc that exhibit multiple therapeutic effects. *Onosoma bracteatum* prevents inflammation and broncho constriction which leads to normal lumen size of bronchioles and normal lung cell architecture. Somalata (*Ephedera gerardiana*) possesses bronchodilator, anti-inflammatory and anti-histaminic activity. Banafsha is being supposed to have anti-bacterial activity against respiratory tract pathogens

Limitation of the study:

Present work includes data obtained from researches conducted in last 9 years i.e. 2012-2020 only.

Conclusion-

From the above article with observation in different clinical studies it can be concluded that Ayurvedic Panchakarma procedures like Virechan and various medications (Herbomineral) drugs are very effective in treatment of Shwasroga.

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