

MANAGEMENT OF TAMAKASHWASA (BRONCHIAL ASTHMA) IN CHILDREN- A CRITICAL REVIEW

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ABSTRACT

Today, when population is moving with modernization in the 21st century, a lot of new diseases emerge out; many are life style disorders. Asthma is the most common chronic lower respiratory disease in childhood throughout the world and Ayurveda address it as “*TamakaShwasa*”. Some clinical studies have been carried out on diagnosed cases of *TamakaShwasa* in the department of Kaumarbhritya of IPGT & RA Jamnagar, which have shown promising outcomes. This presentation is a review on the principles of management of *TamakaShwasa* (Childhood Bronchial Asthma) through Ayurveda with supporting evidences from the studies conducted which includes combination of *ShamanaChikitsa* and lifestyle management. The overall effect of therapies on the disease is highly significant and relieves the signs and symptoms of “*TamakaShwasa*”, adding quality of life to the life of sufferers.

Keywords: *TamakaShwasa*, Bronchial asthma, Ayurvedic management, *Shamanachikitsa*,

INTRODUCTION

Ayurveda deals with preventive, promotive as well as curative aspects. As the time changes, the lifestyle of people is changing day by day. Therefore some diseases, which are troublesome to the people since ancient time, are becoming major health hazards of the society, e.g. *Madhumeha* (Diabetes), *Rajyakshma* (Tuberculosis), *Arbuda* (Cancer), *Shwasa* (Asthma) etc. Out of the most morbid disorders, the disease *Shwasa*

(Asthma) is also becoming a major health problem of the society. Moving towards 21st century a new concept of multifactorial causation of a disease has arisen due to changing pattern of life style, living standard, demographic factors, urbanization, over growth of industrialization & auto mobilization. All of the above increases causative factor of *PranavahaSrotasaDushti* like dust, allergens, pollutant, toxic gases,

vehicle smoke, cigarette smoking and stress. Now a days, these all causative factors are responsible for the disease of the *PranavahaSrotasa* remarkably like *Pratisyaya, kasa, Hikka & Tamakshwasa*. As stated by Acharya Charak, there *AashukariPranahara* are many diseases which are fatal, but *shwasa* and *hikka* are at the top position. *Shwasa* is present at the time of birth and end of life. *TamakaShwasa* classified as *Vata Pradhana* and *KaphaPradhanavyadhi*. *Vata* moving in the reverse order pervades the channels (of vital breath), afflicts the neck and head, and stimulates *Kapha* (phlegm) to cause *Margavarodha* (blockage of respiratory passage) by producing broncho constriction. *TamakaShwasa* is a type of *Shwasaroga* affecting the *PranavahaSrotas* and characterized by *Pranavilomata* (abnormal breathing pattern), *HridayaPidana* (chest tightness), *RuddhaShwaasa* (difficulty in breathing), *Ghurghurukama* (wheeze) and *Kasa* (cough) are the cardinal features of the disease¹.

Signs and symptoms of *TamakaShwasa* are very much similar to that of bronchial asthma. Bronchial Asthma is the most important chronic breathing pathology in childhood.² Apart from being the leading cause of hospitalization for children, it is one of the most important chronic conditions causing elementary school absenteeism.^{3,4} On one hand faulty life style causes bronchial asthma. Bronchial asthma is a disease characterized by an increase responsiveness of the airways to various stimuli. It manifests by widespread narrowing of the airways causing paroxysmal dyspnea, wheezing or cough.⁵ Epidemiologic studies have identified a number of risk factors associated with the development of asthma, including sensitization to aeroallergens, maternal diet during pregnancy and/or lactation, pollutants, microbes and their products, and psychosocial factor.⁶

Aims and Objectives:

- Review of the previous research works in terms of effect of therapy on cardinal features and etiological factors related to life style changes in *TamakaShwasa*.
- To evaluate the role of life style changes as etiological factors of *TamakaShwasa* and to highlight the importance of life style management of *TamakaShwasa* in children.

Materials and methods:

Four (4) clinical researches have been carried out on diagnosed cases of *TamakaShwasa* of both sex in the department of Kaumarbhritya at I.P.G.T. &R.A., Jamnagar.

Methods: Different classics, Modern books, journals etc

Works done at KB Dept. IPGT&RA, Jamnagar:

Ph. D Work:

1. A clinical and experimental study on childhood *TamakaShwasa*. By Dr. Pramod Jaiswal. IPGT&RA, GAU, Jamnagar, Dec. 2001
2. A comparative study on *TamakaShwaasa* (Bronchial Asthma) with *Ashtaangaavaleha* and *VyaaghreehareetakeeAvaleha* in children. Dr. Arvind Kumar Dubey IPGT & RA, GAU, Jamnagar, Dec. 2012.

MD Work:

1. A clinical and experimental study on the efficacy of *SunthiPushkarmuladiYoga* in the management of *TamakaShwasa* w.s.r. to Childhood Asthma. Dr. N. Hemalatha, IPGT&RA, GAU, Jamnagar, Nov. 2006.
2. A comparative study of *BharangyadiAvaleha* and *VasaAvaleha* in the management of *TamakaShwasa* w.s.r. to childhood Asthma- Salim D Gohel, IPGT&RA, GAU, Jamnagar, 2009.

OBSERVATION:

Following studies had been conducted on Tamakashwasa in Kaumarbhritya dept.

Study 1: A clinical and experimental study on childhood TamakaShwasa. By Dr. Pramod Jaiswal. IPGT&RA, GAU, Jamnagar, Dec. 2001

In this clinical study Interventional drug was Ashwagandhakshar, comparator group was Shringyadichoorna and control group was shwaskutharrasa. Total no. of patients was 102 out of them, 82 patients completed the course and 20 patients were discontinued from the study.

Effect of therapy:

After completion of therapy in shwaskashtata Ashwagandhakshar group showed 81% improvement against 98.16% by Shringyadichoorna. After completion of therapy in Ahwagandhakshar group 81.64% relief from kasavega. While in

Shringyadichoorna group shows 94.17% relief. In pinasa, Ashwagandhakshar group shows 82.76% improvement while in shringyadichoorna group relief in pinasa was 96.67% which was highly significant. Both the drugs less or more equally effective to manage the disease. Shringyadichoorna were found to be more effective than Ashwagandhakshar.

Study 2: A clinical and experimental study on the efficacy of SunthiPushkarmuladi Yoga in the management of TamakaShwasa w.s.r. to Childhood Asthma. Dr. N. Hemalatha et al (2006)

In this clinical study ShunthiPushkaramuladi yoga was used as drug of intervention its clinical efficacy was compared with a placebo (made of wheat) group and a total of 27 patients were enrolled in this study and 17 dropouts. It has been statistically seen in the data presented below that the Test drug has highly significant result over Placebo in the management of the Disease Tamakashwasa.

Table 1: Effect of therapy on chief complaints in group SP & P

Features	Group SP		Group p		p value
	(d±SEM)	%d	(d±SEM)	%d	
Shwasakashtata	2.18±0.23	97.72	0.167±0.167	5.56	<0.001
Frequency of Shwasa Vega	3.27±0.272	94.7	0.5±0.224	16.67	<0.001
Ghurghurakam	1.81±0.41	81.82	0.5±0.224	25	<0.02
Kaasa	2.09±0.16	93.94	0.83±0.30	41.66	<0.01
Duration of ShwasaAvadhi	2.64±0.31	97.73	0.33±0.211	25	<0.001
Intensity of Shwasavega	3.360±0.33	92.87	0.33±0.211	8.89	<0.001
Chest tightness	2.18±0.5	93.94	0.50±0.224	16.66	<0.001
PranavahaSrotodushti	4.10±0.26	93.77	0.683±0.251	19.64	<0.001

Study 3:

A comparative study of Bharangyadi Avaleha and VasaAvaleha in the management of TamakaShwasa w.s.r.to childhood Asthma- Salim D Gohel, IPGT & RA, GAU, Jamnagar, 2009.

In this clinical study BharangyadiAvaleha was used as drug of interventionist clinical efficacy was compared with Vasa Avaleha. In the present study, total 26 patients were registered. Out of which, 18 patients completed the course of the treatment and 08 patients were dropped out. Thus it has been

statistically seen in the data above presented that the *Bharangyadi Avaleha* has statistically

insignificant results over *Vasa Avaleha* in the management of the disease *Tamakshwasa*.

Table 2: Comparative effect on symptoms of *Tamakshwasa* in group B.A. and V.A.

Group A (B.A.)				
Features	B.T.	A.T.	% Relief	P value
<i>Shwasakashtata</i>	3.1	0.36	88.24	<0.001
<i>Frequency of Shwasa Vega</i>	2.91	0.37	87.5	<0.001
<i>Duration of ShwasaAvadhi</i>	2.55	0.18	92.86	<0.001
<i>Ghurghurakam</i>	2.36	0.25	89.47	<0.001
<i>Kaasa</i>	3.09	0.90	70	<0.001
<i>Paarshvashoola</i>	1.17	0	100	<0.001
<i>Kaphanistheevan</i>	1.67	0.00	100	<0.05
<i>Duration of ShwasaAvadhi</i>	2.55	0.18	92.86	<0.001
<i>Peenasa</i>	2.73	0.73	73.33	<0.001
<i>AsinoLabhateSaukhyam</i>	1.86	0.00	100	<0.001
<i>Kanthodhvamsa</i>	1.75	0.00	100	<0.05
<i>Shiroraha</i>	1.6	0.00	100	<0.05

Table 3: Comparative effect on symptoms of *Tamakshwasa* in group B.A. and V.A.

Group B (V.A.)				
Features	B.T.	A.T.	% Relief	P value
<i>Shwasakashtata</i>	2.71	0.14	94.74	<0.01
<i>Frequency of Shwasa Vega</i>	2.29	0.29	87.5	<0.001
<i>Duration of ShwasaAvadhi</i>	2.14	0.14	93.33	<0.001
<i>Ghurghurakam</i>	2.29	0.00	100	<0.001
<i>Kaasa</i>	2.14	0.43	80	<0.001
<i>Paarshvashoola</i>	1.17	0	100	<0.001
<i>Kaphanistheevan</i>	1.6	0.00	100	<0.01
<i>Duration of ShwasaAvadhi</i>	2.14	0.14	93.33	<0.001
<i>Peenasa</i>	2.26	0.14	93.75	<0.01
<i>AsinoLabhateSaukhyam</i>	1.83	0.17	90.91	<0.001
<i>Kanthodhvamsa</i>	1.2	0.00	100	<0.01
<i>Shirograha</i>	1	0.33	66.67	<0.1

Study 4:

A comparative study on *TamakaShwaasa* (Bronchial Asthma) with *Ashtaangaavaleha* and *VyaaghreehareetakeeAvaleha* in children. Dr. Arvind Kumar Dubey IPGT & RA, GAU, Jamnagar, Dec. 2012.

In this clinical study *Ashtaangaavaleha* was used as drug of intervention and comparator

drug was *Vyaghreehareetakeeavaleha*, and total no. of patients registered are 100. Out of them, 74 patients completed the course of treatment and 26 patients were discontinued from the study. There was 66.66% of relief in the overall condition of *TamakaShwasa* found in group AG and it was 63.15% in group VG.

Table 4: Comparative effect on symptoms of *Tamakashwasa* in group AG and VG

Features	% of relief		Mean difference	P
	AG	VG		
<i>Shwasakashtata</i>	-48	-45.2	0.07	>0.05
<i>Frequency of Shwasa Vega</i>	-76.0	-70.0	0.03	>0.05
<i>Ghurghurakam</i>	-66.6	-68.9	0.06	<0.05
<i>Kaasa</i>	-67.7	-76.8	-0.37	<0.01
<i>Paarshvashoola</i>	-63.5	-70.4	-0.17	>0.05
<i>Kaphanistheevan</i>	-68.7	-57.5	0.39	>0.05
<i>ShleshmaVimokshanteMuhurtamLabhateShukham</i>	-71.2	-60.6	0.20	>0.05
<i>Peenasa</i>	-76.2	-66.1	0.12	>0.05
<i>Na ChaapiNidraamLabhate</i>	-84.7	-75.4	0.20	>0.05
<i>Kanthodhvamsa</i>	-75.6	-66.6	0.07	>0.05
<i>Krichchhrabhashita</i>	-74.5	-70.1	0.03	>0.05

DISCUSSION

Vata as well as *kaphadosha*, *Rasadhatu* and *Pranavahasrotas* are the Primary factors involved in the Pathogenesis of *Tamakashwasa*. *Kaphadosha* and *rasa dhatu* are same in relation to their properties and responsible for significant Pathogenesis in children. *Vata* vitiation is an imp. factor in the initiation of disease. It is practically noticed that the acute exacerbations are mostly due to *vaata Prakopakahetus* like *Raja*, *dhuma*, refrigerated food (*Atisheeta* and *ruksha*), *vyayam* and

emotional factors like *shokabhaya* etc. The disease appears as a result of multiple factors including environment pollution and faulty dietary habits. In the treatment of *tamakashwasashamana* therapies are better than *shodhana* due to various complications, chronic use of drugs, and reoccurrence of disease and finally delicacy of child. All medicines which are used in above research works are having *kapha-vata* mitigating action and *vaatanulomana* especially of *Ushnaveerya* will serve the purpose and also *brimhaniya*.

The all above formulations having the dominance of *katu*, *madhura* and *tiktarasa*, *vipaakamadhur* and *tridoshara* especially *vaatakaphahara* properties.

Different works done on *TamakaShwasa* at I.P.G.T. & R.A. reviewed by Dr. Arvind D. et al concluded that internal medications used in his studies and by improving life style tried to break the *sampraptighatiaka* of the disease, balance of *kapha* and *vata* dosha, removal of obstruction in *PranavahaSrotasa* and normalization of Agni.⁷

CONCLUSION

Children are more prone to develop the life style diseases because of the some reasons enlisted below-

- Age of growth and development
- Lack of awareness about the health
- Increased nutritional demands
- Low immunity against infections
- Systems and organs are in developing conditions

“Therefore, very small change in the life style of children can grossly affect their health.”

Etiological factors for disease are multiple but prevention is the single way to reduce the burden. Changing life style changes the food culture of human being. Refrigerated food, curd, ice-creams, cold drinks, chocolates, and bakery products, junk food is found to be main factors in disease (Bronchial Asthma) etiology. Late night sleeping, excessive use of TV, electronic media, faulty child rearing, increased stress, anxiety and burden of carrier to child are also life style changes that are responsible for persistence of disease in community. Whatever the etiological factors including the genetic predisposition and

course of disease pathology, the Ayurveda fundamentals of life style like *Dinacharya*, *Ritucharya*, *AcharaRasayana* and use of *RasayanaDravyas* are looks to be very promising to reduce the disease burden. Result of *shamana* is more promising than *shodhana*. All these protocol are cost effective and easy to administer even in today's life style, and therefore have very crucial role to prevent the life style diseases like bronchial asthma.

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