



Review Article

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ROLE OF CHATURBHADRA CHURNA IN THE MANAGEMENT OF TAMAKA SHWASA WITH SPECIAL REFERENCE TO BRONCHIAL ASTHMA IN CHILDREN: A REVIEW

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ABSTRACT

Balyavasta is period predominated by Kapha dosha and due to the peculiar nature of children prevalence of Kaphaja vyadhy's are very common in them. Bronchial asthma is one such respiratory disorder, which is very much similar to Tamaka Shwasa in explained in Ayurveda. Vitiated Kapha and Vata are the two key factors involved in its etiopathogenesis resulting in Margavarodha (Broncho constriction) leading to shwasakrichrta, Kapha nistheevana, muhur muhur shwasa etc symptoms. Ayurveda emphasise removal of margavarodha as well as Kapha-Vata hara line of treatment in the management of Tamaka Shwasa. Chaturbhadra churna with madhu as anupana is one such unique preparation, which is said to be highly potent enough in its management. Majority of ingredients in Chaturbhadra churna are ushna, tikshna and Vata-Kapha hara in nature. Few drugs are having Rasayana properties too. Madhu as an anupana can enhance the potency of other drugs. Overall, the whole formulation could be an Innovative and effective in the management of Tamaka Shwasa in Minimizing as we all preventing the recurrence of disease.

Keywords: Chaturbhadra churna, Tamaka Shwasa, Bronchial asthma

INTRODUCTION

Children play a vital role in the development of a country. However, the recurrences of various kinds of infections especially respiratory tract infections, among children are increasing day by day. Around Nine million children under the age of five years die annually worldwide due to various respiratory diseases; creating havoc among pediatric practice. This could be due to increased incidences of deforestation, pollution, unethical usage of various antibiotics, altered lifestyle etc.

Bronchial asthma is one such chronic airway inflammatory condition with prevalence rate of 5-11 % in school going children under 5-10 years², characterized by repeated bouts of cough, chest tightness, wheezing and shortness of breath, triggered by various allergens like dust, smoke etc. The chronic nature of disease not only affects the growth and development of child but also affects their extracurricular activities, education, psychological health and quality of life³. Majority of the medications suggested in its management like bronchodilators, antitussives, expectorants and various antibiotics although effective, have long term utility that is still questionable.

Balyavasta is a period predominantly characterized by Kapha dosha, and children are more prone to develop various Kapha pradhana vyadhis due to their peculiar nature, such as aparipakwadhatu (immaturity of dhatu), alpabala (less strength), sukumara (delicate body tissue) and aklesha sahatwa (inability to withstand)⁴. Tamaka Shwasa is a commonly seen Kapha pradhana vyandhi among children, which is very similar to Bronchial Asthma in allied science. Vitiated Vata and Kapha play a vital role in its etiopathogenesis⁵, wherein vitiated Vata moves in urdwagathi (upward direction) as resultant of margavarodha (bronchial obstruction) caused by vitiated Kapha. Due to this,

symptoms like shwasa krichrta (dyspnea), gugurukata (wheeze), urah sampurnata (chest tightness), muhur muhur shwasa (repeated bouts of dyspnea)⁶ occur.

Ayurveda emphasizes the importance on drugs/formulations that are beneficial in removing sroto avorodha and maintaining the physiological equilibrium of Vata and Kapha with drugs having Vata-Kapha hara, ushna, vatanulomaka properties.

Chaturbhadra churna⁷ is once such unique formulation with ingredients like Katphala, Pushkaramula, Pippali and Karkatashringi and madhu as anupana, which is said to be effective in the management of Shwasa roga. Most of the drugs in Chaturbhadra are katu, tikta, and kashaya in rasa, ruksha guna, ushna veerya and Kapha-Vatahara in nature, which is essential for samprapti vighatana of Tamaka Shwasa. Judicial usage of Chaturbhadra churna with madhu as anupana would be helpful not only in the management of Tamaka Shwasa but also in prevents the recurrence of the disease due to its Rasayana qualities.

In the present review, an attempt has been made to compile all the available classical reference to Chaturbhadra churna and critically analyze its indication, preparation methods, and ingredient ratios. The properties of each ingredient were also analyzed from both classical and modern perspective to explore the possible mechanisms behind its potential therapeutic effect in the samprapti vighatana of Tamaka Shwasa.

Literary data were collected from various classical textbooks, such as Bhaishajya Ratnavali, Vangasena etc. The pharmacological actions of individual ingredients were also compiled from published works, textbooks, online journals, Articles and internet materials. The details of the formulation

according to different authors are mentioned in Table 1. The properties of individual ingredients, rasapanchaka, karma are outlined in Table 2 and 3.

Chaturbhadra Churna: Method of Preparation and Properties

Chaturbhadra churna is a unique Poly herbal preparation with four major ingredients: Katphala (*Myrica nagi* Thumb), Pushkaramula (*Inula racemosa* Hook), Pippali (*Piper longum* Linn) and Karkatashringi (*Pistacia integerrima*) along with madhu as anupana. It is said to be effective in the managing of Shwasa roga. Most of the drugs are katu, tikta, kashaya rasa, ruksha guna, ushna Veerya and Kapha Vata hara in nature, which is highly beneficial in managing Tamaka Shwasa when administered with madhu.

Method of Preparation

Chaturbhadra churna is churna yoga with madhu as anupana, indicated in Shwasa roga. It can be prepared according to the guidelines of churna yoga described in the Ayurvedic pharmacopeia of India.

After cleaning the raw materials for physical impurities, all four ingredients of Chaturbhadra churna - Kataphala, Pushkaramula, Pippali and Karkatashringi are taken separately in equal quantities, and powdered in pulveriser, followed by sieving (Sieve no.85). The final product is prepared by mixing the fine powder of each ingredient, taken in equal quantities, homogenously in a mortar, followed by internal administration along with madhu.

Table 1: Composition of Chaturbhadra churna according to different authors

Name of the drugs	Latin name	Family	Part used	B.R ⁸	VA ⁹	Y.R ¹⁰	C.D ¹¹	B.P ¹²	V.M ¹³
Kataphala	<i>Myrica nagi</i> Thumb	Myricaceae	Bark	+	+	+	+	+	+
Pushkaramula	<i>Inula racemosa</i> Hook	Asteraceae	Root	+	+	+	+	+	+
Karkatashringi	<i>Pistacia integerrima</i>	Anacardiaceae	Galls	+	+	+	+	+	+
Pippali	<i>Piper longum</i> Linn	Piperaceae	Fruit	+	+	+	+	+	+
Madhu				+	+	+	+	+	+

B.R: Bhaishajya Ratnavali, VA: Vangasena, Y.R: Yogaratnakara, B.P: Bhavaprakasha, V.M: Vrunda Madhava

Table 2: Rasapanchaka and Doshagnata of Chaturbhadra churna¹⁴⁻¹⁸

Ingredients	Botanical name	Family	Rasa	Guna	Veerya	Vipaka	Dosha karma
Katphala	<i>Myrica nagi</i> Thumb	Myricaceae	Kashaya, Tikta, Katu	Laghu, Tikshna	Ushna	Katu	Kapha Vata hara
Pushkaramula	<i>Inula racemosa</i> Hook	Asteraceae	Tikta, Katu	Laghu, Tikshna	Ushna	Katu	Kapha Vata hara
Karkatashringi	<i>Pistacia integerrima</i>	Anacardiaceae	Kashaya, Tikta	Laghu, Ruksha	Ushna	Katu	Kapha Vata hara
Pippali	<i>Piper longum</i> Linn	Piperaceae	Katu	Laghu, snigdha, Ushna	Anushna shiata	Madhura	Kapha Vata hara
Madhu			Madhura, Kashaya Anurasa	Ruksha, laghu	Shita	Madhura	Kapha, Pittahara

Table 3: Karma [therapeutic indication] of Chaturbhadra churna according to different authors

Name of the disease	B.R	V.A	Y.R	C.D	B.P	V.M
Shwasa	+	+	+	+	+	+
Kasa	+	+	+	+	+	+
Kapahaja jvara	+	+	+	+	+	+
Kapahaja vydhi	+	+	+	+	+	+

B.R: Bhaishajya Ratnavali, VA: Vangasena, Y.R: Yogaratnakara, B.P: Bhavaprakasha, V.M: Vrunda Madhava

Dose: 1 Karsha Pramana (approximately 12 gm) in divided dose (muhura-muhura)

Anupana: Madhu

DISCUSSION

Chaturbhadra churna is a polyherbal preparation with four major ingredients: Katphala, Pushkaramula, Pippali and Karkatashringi, it is indicated in Shwasa, Kasa etc., with madhu as anupana, specifically in Shwasa roga. Most of the drugs is ushna veerya, katu tikta kashaya in rasa and is of laghu, ruksha tikshna guna and Vata Kapha hara in nature, making Chaturbhadra churna unique and effective in preventing and minimizing the clinical symptomology of Tamaka Shwasa due to its antagonistic properties of Kapha and Vata.

Katphala (*Myrica nagi* Thumb) is ushna veerya, katu rasa, katu vipaka, laghu ruksha and Kapha hara in nature. The laghu guna¹⁹ does lekshana and ropana, while the ruksha guna²⁰ does shoshana and Kapha nirharana, preventing margavarodha (Bronchial obstruction) and other consequence resulting from it.

Pushkaramula (*Inula racemosa* Hook) is classically explained under Shwasaharavarga²¹ and it is Kapha-Vatashamaka, tikta rasa, laghu, tikshna guna and ushana virya. tikta rasa²² has the properties of lekshana, kleda shoshana, and kanta shodhana, which helps in removal of thick bronchial secretion. Pushkaramula supports respiratory muscles and enhances the proper breathing mechanism. By its smoothening effect on the bronchial tree, it rejuvenates the respiratory system. It is anti histaminic, stimulant, expectorant and bronchodilator in action, which helpful for the normal functioning of respiratory system²³.

Karkatashringi (*Pistacia integerrima*) is Kapha-Vata hara in nature. Its ushna veerya and katu vipaka acts as kapha vilayana (liquification of Kapha) and kashaya rasa²⁴ specifically acts as kledashoshana, shodhana and lekshana, preventing the accumulation of dushta Kapaha in the srotomarga.

Pippali (*Piper longum* Linn) is described as "Piparti palayati purusham poorayati cha Kshinan dhatuniti"²⁵ which nourishes and rejuvenates the human body. Due to its katu rasa, laghu, snigdha, tikshna guna, anushnasheeta virya, madhura vipaka,

Kapha-Vatahara, and Rasayana properties, Pippali is highly appraised in the management of Tamaka Shwasa. The katu rasa and ushna veerya of Pippali help remove srotoavarodha caused by vikruta Kapha and maintain the equilibrium of all three doshas due to its rasayana property. Pippali has shown antibacterial, anti-inflammatory, insecticidal, CNS stimulant, antitubercular, anthelmintic, hypoglycaemic, antispasmodic, cough suppressor, anti-giardial, immunostimulatory, hepatoprotective, antinarcotic, antiulcerogenic etc²⁶.

Madhu is primarily madhura in rasa, ruksha, laghu guna, and Kapha hara in nature. It is the best yogavahi, enhancing the efficacy of other drugs in the formulation without changing its own properties²⁷.

CONCLUSION

Tamaka Shwasa is a major health problem in day-to-day pediatric practice, which requires proper attention and effective management. Chaturbhadra churna, a potent polyherbal formulation of four ingredients and madhu as anupana, is said to be effective in managing Tamaka Shwasa due to its unique rasapanchaka and Vata-Kapha hara qualities. The specific combination of Chaturbhadra churna has anti histaminic, stimulant, expectorant, bronchodilator, anti inflammatory, immune modulator and smooth muscle relaxant properties, which are highly needed in managing Tamaka Shwasa. This formulation is Innovative, easily available, and cost-effective compared to other classical preparations. Furthermore, research can explore its clinical applicability in Tamaka Shwasa and other Pranavaha sroto vikaras.

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