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Review Article

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THERAPEUTIC POTENTIAL OF SAMSHARKARA CHURNA IN THE MANAGEMENT OF KAPHAJA KASA IN CHILDREN

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INTRODUCTION

One among the eight braches of *Ayurveda*, *Kaumarabhritya* is a specialty which deals with the problems related with infants and children. It is said that all diseases are not life threatening but some are increasingly unknowingly irritating to the individual in his routine activity. If neglected for long time, some of them may lead to a series of complications later. A very common clinical condition, *Kasa* (Cough) is one amongst them, is increasingly prevalent now a days, demanding greater concern over it.^[1]

Evidence-based guidelines in contemporary science have shown that there are no effective medications to either cure or relieve the

symptoms of acute cough in children.^[2,3] thus the present era demands a need for a safer & effective management option.

Ayurveda has an eminent role in the management of Respiratory diseases. Kasa, in Ayurveda, has been explained as a symptom of various clinical conditions as well as an individual disease. Kasa involves most of the presentations of respiratory tract diseases. In the pathogenesis of disease Kasa, vitiated Kapha obstructs the free flow of Prana Vata in Kantha and Uras. It is classified into five types in the classics and it is also specified that Kasa if not treated properly will lead to depletion of the body elements.

Amongst all treatment forms available in *Ayurvedic* literature, oral drug administration i.e. the *Shamana* line of management is quite important & most preferable in children as the

mode of administration is easy and effective. By looking at the individual herbal constituents of *Samsharkara Choorna*, it appears that this combination might be effective in combating the signs and symptoms associated with *Kaphaja Kasa*. Therefore, the present literary review is an attempt to explore the therapeutic potential of *Samsharkara Churna* in the management of *Kaphaja Kasa* in Children.

Aims and Objective - Present study has been carried out to explore the therapeutic potential of *Samsharkara Churna* in the management of *Kaphaja Kasa* in Children.

Materials and methods- It is a literary review to understand the therapeutic potential of *Samsharkara Churna* in the management of *Kaphaja Kasa* in Children with the help of data collected from classical and contemporary *Ayurvedic* texts and published research articles.

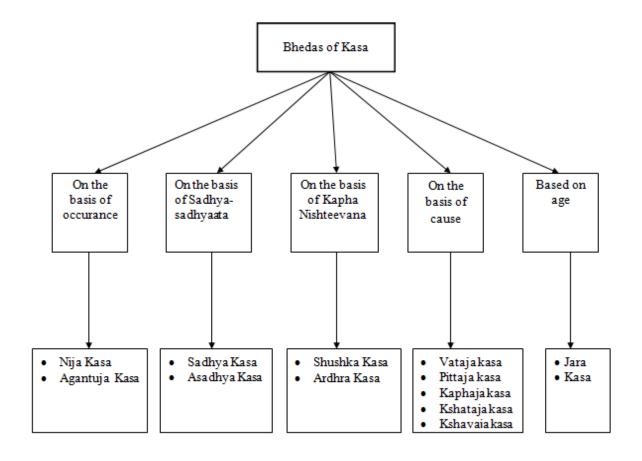
DISCUSSION

According to Sanskrit English dictionary the word "Kasa" means cough. [5] According to Acharya Charaka the abnormal upward course of morbid Prana Vata causing constriction of the Srotas of the Netra, Prashta, Ura, Parshva with its forceful expulsion through the mouth either alone or associated with the morbid Kapha generating hoarse sound similar to the one produced by the breaking of the bronze vessel is known as Kasa. Chakrapani Dutta comments on the word Kasa as "Uraprabuthi Shatanayo Kasa Eti Anavastha Saamya Uchyate" which means, retraction of chest wall during coughing. [6]

Acharya Sushruta defines kasa as: "Sambhinna Kaansyaswana Tulya Ghosha" the disease that produces a typical sound, which mimics the sound produced from a broken bronze vessel.^[7]

Classification of Kasa

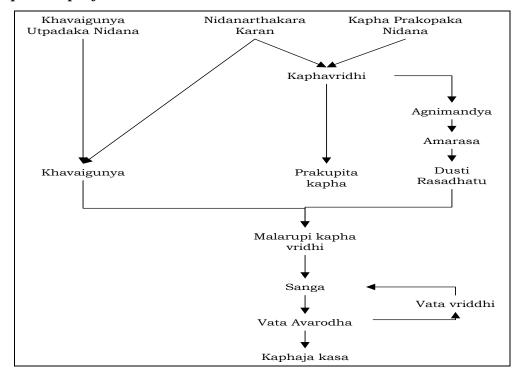
Pathological Classification of Kasa



Nidana of Kasa- Kasa is the most common disease which involves *Pranvaha Srotas*. Normal function of *Pranavaha Srotas* is carried out by *Prana & Udana Vayu*. The causative factors which lead to alteration in the normal functions of these, can lead to the manifestation of *Kasa*, thus are referred to as *Nidanas*. Also the *Pranavaha Srotas* is more prone for infections as it is directly related with the external environment through the nose and mouth. The *Nidanas* responsible for the disease *Kasa* can be classified mainly into two groups.

- Samanya Nidana Inhaling distressing smoke and dust, excessive exercise and rough food, suppression of urges etc. (Su. Sam.Utt,. 52/4)
- Vishesha nidana^[8]
- O Vataja kasa Rooksha Ahara, Sheeta Ahara etc.
- o Pittaja kasa- Katu, Usham, Vidahi Ahara Sevana etc.
- o Kaphaja kasa Guru, Abhishyansdi Ahar etc.

Samprapti of Kaphaja Kasa^[9]



Management OF *Kasa* in Children- Almost all of the *Ayurvedic* Classics have described in detail about the treatment of disease *Kasa* as a whole as well as about the individual varieties of *Kasa*. Management principles & various types of medicaments along with their diverse mode of usage have been described in detail.

In general, *Shaman* & *Shodhana* are the two basic line of treatment mentioned in classics. But the management of *Kasa* in children is not discussed in detail anywhere. Based on the *Rogi* and *Roga Bala* the mode of treatment of *Kasa* has to be decided. Though *Shodhana* therapy is mentioned for *Kasa Roga*, it is better to implement *Shamana* line of management in children with *Kasa*. An attempt to explain the chiktisa *of kaphaja Kasa* in children has been done as follows.

Chikitsa Sutra - In Kaphaja Kasa, initially Vamana has to be performed if the child is able to withstand followed with Pathya consisting of Yavanna, Kaphanashaka Katu, Rooksha and Ushna Ahara.^[10]

Nidana Parivrjana - Treatment aimed should have the first preference for removing the cause i.e., avoiding these factors in aggravating *Kaphaja Kasa*. Also the *Nidanas* of *Kaphaja Kasa* like *Diwaswapna* etc should be avoided.

Shodhana Chikitsa^[11,12] In a fully developed Kaphaja Kasa Shodhana is the prime line treatment as Dosha is generally in large quantity reliable to emit through the Shodhana procedures. Vamana gets the first preference, as it is aimed best for Kapha dosha. By this the vitiated Kapha dosha gets eliminated from the Uras, there by breaking the Samprapti and letting the Prana Vayu do its normal functions.

Shamana Chikitsa - After attaining proper Shodhana, Measures for Shoshana of remaining Kapha is taken with many Kasahara drugs and Yogas. The drugs which have qualities such as Katu Rasa, Ushna, Laghu, Ruksha which possess the Kaphahara property are administered. Abhyantra chikisa with Vati, Choorna, Lehya etc with Kaphaghna Dravyas can be administered.

Samsharkara Churna as Shamana Chikitsa - In our classics many single and compound preparations have been mentioned in classics for the treatment of disease Kasa. some scholars opined that Samsharkara Churna is one the most efficient drug compound mentioned amongst them. Though mentioned under Arsharoga- adhikara by Bahishajya Ratnavali^[13] & is told to be effective in Agni-Mandhya, Kasa, Aruchi, Shwasa, Kantha Roga and Hrudya Roga. By looking at the individual herbal constituents of Samsharkara choorna, it appears that this combination should be very effective in combating the signs and symptoms associated with Kaphaja Kasa. It is composed of following drugs.

Summary of Drugs used^[14]

Drug	Name	Family	Part Used	Quantity
Shunthi	Zingiber officinale	Zingiberaceae	Dried Rhizome	1 part
Maricha	Piper longum	Piperaceae	Fruit	2 part
Pippali	Piper nigrum	Piperceae	Fruit	3 part
Nagkeshara	Mesua ferrea	Guttiferae	Stamen	4 part
Tejapatra	Cinnamomum tamala	Lauraceae	Leaves	5 part
Dalchini	Cinnamomum zeylanicum	Lauraceae	Dried Inner Bark	6 part
Ela	Elettaria cardamomum	Zingiberaceae	Dried Fruit	7 part
Sharkara	Sacchrum officinale	Gramineae	Juice	28 part

Pharmacological properties of ingredients of Samsharkara Churna^[14]

Drugs	Rasa	Guna	Virya	Vipaka	Doshkarma
Shunthi	Katu	Laghu, Snigdha	Ushna	Madhura	Vata-kaphahara
Maricha	Katu, Tikta	Laghu, Ruksha, Tikshna	Ushna	Katu	Kapha-vatahara
Pippali	Madhura, Katu, Snigdha	Laghu, Snigdha	Anushna	Madhura	Tridoshahara
Nagkesara	Katu, Tikta, Kashaya	Ruksha, Laghu	Ushna	Katu	Kaphahara
Dalchini	Madhura, Katu, Tikta	Laghu, Ruksha, Tikshana	Ushna	Katu	Kapha-vatahara

Tejpatra	Madhura, Katu	Laghu, Pichhila, Tikshna	Ushna	Katu	Kapha-vatahara
Ela	Madhura, Katu	Laghu	Sheeta	Madhura	Vatahara
Sharkara	Madhura	Snigdha	Sheeta	Madhura	Pitta-vatahara

Contemporary aspect of *Kasa* (Cough) - As per pathology of cough the micro organisms and environmental factors like dust, smoke, irritant gasses are the cause for inflammation to the mucous membrane, stimulates mast cells which release histamines, bradykinines, prostaglandins etc irritate the mucous membrane result in over production of mucus secretions in to the lumen of respiratory tract. Collection of these secretions causes obstruction to the bronchus. Histamine etc also act as a bronchoconstrictor and interfere with the clearance of mucus. Irritation (in dry cough) and over production of mucus stimulates the cough centre, as a defense mechanism cough reflex is produced by the body to expel excessive secretions. If the secretions are sticky it is difficult to expel it out.^[15]

As per previous research works ingredients of *Samsharkara Churna* have been widely explored through in Vivo and In vitro studies and shown various therapeutic activities for e.g. *Shunthi* has anti-inflammatory effect which is comparable to prednisolone. (Sharma & singh; 1980) This helps to combat pathology & prevents further infection. *Pippali* also has shown anti-allergic activity (Dahanukar et al, 1981). It was also found useful in childhood asthma (Dahanukar et al, 1986). *Sharkara* is having soothing effect over the throat, prevents irritation and there by prevents stimulation of cough centre. All other ingredients of *Samshrkara Churna* also shown various activities such as hepato protective, Antitubercular etc. which are useful in counteracting the cough pathology.

As per Ayurveda Kapha and Vata are the predominant Dohas involved in the Samprapti of Kaphaja Kasa and the Srotus involved are Pranavaha, Rasavaha, Annavaha and Udakavaha. Vitiated Kapha settles in the place of Khavaigunya (in pranavaha Srotas) and obstructs the normal movement of Vata. The combination of drugs from Samsharkara Churna taken for present study helps in Samprapti Vighatana of Kaphaja Kasa. These drugs synergistic act by Agni-Deepana, Aampachana, Vatanulomana, Hridya, Lekhana, Chedana, Kaphanissarana, Srotoshodhana and Vyadhi-Pratyanika properties.

According to the Samanya – Vishesa principle, drugs (maricha, dalchini & tejpatra) with the opposite Gunas like Katu Rasa, Laghu, and Tikshna Guna, causes alleviation of Kapha Dosha, with opposite properties like Madhura, Guru, Manda, and so on, of Kapha Dosha. Pippali, maricha & dalchini with Tikshna Guna causes Bhedana of Kapha, which is stuck to

the *Srotasa* by *Picchila* and *Sandra Guna*. Once the *Dosha* is separated from the *Srotasa*, the *Ushna Guna* of the drug *Trikatu*, *Nagkesara* and *Tejpatra* causes *Vilayana* of *Kapha* and generates easy expectoration. *Sharkara* again causes *Chedana* of *Kapha*, thus acts as mucolytic agent. *Kaphanishthivana* causes *Srotoshuddhi*, and hence, *Vata Sanga* and *Vimarga-gamana* are corrected. That leads to *Vyadhi Shamana*. *Pippali* is *Tridoshahara* specially *Kaphavatahara* and is *Rasayana* which prevent further recurrent attacks of *Kasa*. [16]

CONCLUSION

Present study reveals that *Samsharkara Churna* is appropriate for *Kaphaja Kasa* in children because the formulation is well designed in *Gunas* as required for pediatric use. In children *Shodhana Chikitsa* administration is difficult to practice so *Shaman Aushadha* play main role to bring back normal harmony of the *Srotas*. Hence it can be concluded that *Samsharkara Churna* is safe and effective in curing signs and symptoms of *Kaphaja Kasa*.

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