



Review Article

SINGLE HERBAL DRUG THERAPY FOR TAMAKA SWASA (BRONCHIAL ASTHMA): A REVIEW

Maurya Santosh Kumar*

Assistant Professor, Department of Dravyaguna, Rajiv Gandhi South Campus, Banaras Hindu University, Barkachha, Mirzapur, India

*Corresponding Author Email: dravyapharma@gmail.com

Article Received on: 22/03/14 Revised on: 07/04/14 Approved for publication: 28/04/14

DOI: 10.7897/2230-8407.050575

ABSTRACT

Research in respiratory medicine and associated expertise is in an highly developed period now a day but, respiratory diseases are still a challenge in front of healthcare workers and are extending their violent area with every momentary. Unlike many diseases, which can be attributed to the life style of modern man, Tamaka swasa (Bronchial asthma) is one such condition which is life threatening. According to the clinical course of the disease both Kapha and Vata seems to be predominant. Vata holds prime importance in the management. As disease is considered to be yasya therefore, proper planning of treatment and implementation of excellent life style is necessary for better quality of life. Ayurveda can offer promising results in management of Tamaka swasa through a set of treatment modalities. Shodhana and Shamana are some of such modalities. Currently, an attempt has been made to explore the knowledge of single herbal drug therapy mentioned in Ayurvedic classics which may helpful to the traditional healers as well as common people in prevention of Tamaka swasa along with its samprapti (etiopathogenesis) in concise.

Keywords: Tamaka swasa, Bronchial asthma, Vata, yasya, herbal

INTRODUCTION

The use of medicinal plants for the treatment of asthma is widespread. Every complementary or alternative system of medicine has its own unique mode of administration of these plants.

Ayurveda is one such system that prevailed since 5, 000 years. It was considered the most superior and logically proven in those days and continues to shine in present generation. Ayurveda approach being rational in the use of natural therapeutics, suggest unconventional way of herbal usage. The approach is based on subjective perceivable qualitative perspectives of disease orientation and therapeutic agent. Major diseases conditioned are described in Ayurveda can be correlated with modern terminologies now a day. What modern science describes allergy is already seen in the ancient books in precised form under different diseases like Shitapitta, Udara, Kota (these three are different stages of urticaria), Visarpa, Kushta (skin disorders), Tamaka swasa etc. Those who take Hitahara (beneficial) i.e. Proper diet regularly are immune to many diseases, but on the contrary it is not necessary to have immunity against diseases every time. Dalhanacharya described swasa (dyspnoea) as difficulty in taking breath is known as swasa. There are 5 types of swasa roga (respiratory disease) mentioned in Ayurveda¹⁻³. Tamaka swasa is one among them. It is predominantly Vatakapahj vyadhi (disease), originating from Pittasthana (Amashaya)¹ and manifested through Pranavaha Srotas (Respiratory channel). Vata gets obstruction by Kapha and travels into Pratiloma gati (opposite direction) and in turn causes swasa. At initial stage, it is said to be curable, but in chronic cases, it becomes Yasya (manageable disease)¹. Clinical features of Tamaka swasa, in Ayurvedic classics seems to be resembles with the description of bronchial asthma in modern medicine. The word Tamaka swasa consists of two words, "Tamaka" means fainting/blackish discoloration in front of eyes and "swasa" refers to breathe⁴. Hence, Tamaka swasa is defined as "Vischeshat durdine tamye swasa sa tamako mataha,"² means the attack of swasa

with Tamapravesha (entry into darkness) which occurs especially during "Durdhina" (symptoms aggravates during cloudy days)¹. It is one of the life threatening diseases which afflict the human race; since centuries Tamaka swasa has remained as a challenging disease. Wherein, remissions and exacerbations are the typical features leaving the patient in a pathetic situation.

Etiopathogenesis (Samprapti)

Tamaka swasa is an illness of Pranavaha Srotas, caused due to the predominant morbidity of Vata and Kapha Dosha afflicting the Rasa Dhatu¹. The causative factors of swasa Roga in general are also considered as the etiological factors of Tamaka swasa. It may develop as an independent illness, as a result of exposure to specific etiological factors related to Vata and Kapha dosha⁵.

Environment etiological factors include cold weather, cloudy weather, dust, smoke etc and every person living in this environment is exposed to these etiological factors of the Tamaka swasa¹⁻³. The disease may also manifest as a result of certain disorder like Anaha (fluctuence), Jwara (fever), Kasa (cough), Pratishyaya (allergic rhinitis), Pandu (anemia), Kshathakshaya (generalized weakness), Rakta Pitta (intrinsic hemorrhage) etc.¹ and Acharyas in this context have considered Tamaka swasa as a Nidanarthakara Roga⁶.

Marmaghata (injury at vital part) is also one of the causative factors for swasa^{2,3}. Whatever the Nidana which are mentioned in classics may not cause the disease merely by indulging at once, because Nidanas (causative factors) also depends on Matra, kala, kriya (method of processing), Bhumi, Deha and Desha¹. Tamaka swasa is mostly precipitated or aggravated in the winter and Sharad rutu due to cold climate and concentration of the airborne pollens. As the disease is having dominance of Kapha during Shishira and Vasanta respectively, sanchaya (accumulation) and prakopa (aggravation) of Kapha takes place which adds to the nidana leading to the manifestation of the disease³. In classics durdina is considered as Durdina-Megachadita Dina i.e.

cloudy days². When we look into the pathogenesis of Tamaka swasa it is clear that the disease is heaving predominance of Kapha and Vata. The vitiated Vata causes the vitiation of urasta Avalambaka Kapha leading to the avarodha in pranavaha srotas, which plays important role in manifestation of disease. Therefore, in Ayurveda much importance has been given for Samprapti Vighatana (to break the pathogenesis) because Chikitsa is mainly to disintegrate the Samprapti. In classics while explaining the Samprapti of Tamaka swasa it seems to be explained in three folds which is in association with the hikka and swasa.

Samanya Samprapti of Hikka and Swasa

Due to the excessive indulgence in nidana, the vitiated Vata enters into the pranavaha srotas disturbs the uraha stita Kapha and dislodges it, leading to the manifestation of swasa and hikka by obstructing pranavaha srotas¹.

Samanya Samprapti of Swasa

Vitiated Kapha Dosha obstructs the relevant Srotas which in turn obstructs the movement of Vata. Thus obstructed Vata trying to overcome the obstruction travels in all direction resulting in swasa Roga. This Samprapti is common for all five types of swasa. Acharya Sushruta explains vitiated Prana Vayu takes Urdhwa Gati and combines with Kapha and produces swasa¹.

Vishista Samprapti of Tamaka swasa

The obstructed vayu in pranavaha srotas attains pratiloma gati leading to aggravation of Kapha later enters Griva (neck region) and Shiras (head region) causing stiffness in Griva and Shiras and also results in Pinasa¹. Thus obstructed Vayu drags Kapha from its site causing ghur ghur dwani and tivara vega swasa. Acharya Vagbhata while explaining Swasa samprapti includes Annavaha, Pranavaha and Udakavaha Sroto dusti and also the pratiloma gati of Vayu in siras³. While explaining Tamaka Swasa Acharyas mentioned Amashaya (stomach) as Udbhava sthana (place of origin of disease) and Urah (Thoracic region) as Vyaktisthana. Chakrapani commenting on this stated Pittasyaurdhwa sambandha, which is nothing but amashaya and further he explains that Vata and Kapha are capable of framing Samprapti but not the Pitta dosha because Urdhva and Adho Amashaya as seats for Kapha and Pitta respectively¹.

Pathologic cause of symptom manifestation

Accumulation of Sleshma when obstructs the Pranavaha Srotas, it predisposes to productive cough and is a predominant symptom of Tamaka swasa¹. As the sputum is cleared off, the obstruction is temporarily relieved and hence the patients feel easy breath. The morbid Kapha Dosha in association with Rasa Dhatu causes abnormal production of Sleshma in the Pranavaha Srotas¹⁻³. This Sleshma is described as thick, sticky and tenacious and thereby contributes obstruction in the Pranavaha Srotas. Excessively secreted tenacious Sleshma is expectorated out with much difficulty during the bouts of coughing. The Kanta Ghurghuraka (wheeze) or the rattling sound is also suggestive of increased Sleshma¹. Other than the usual presentation, involvement of the Pitta Dosha may be seen in certain patients of Tamaka swasa. When this is the case the overall presentation of the Tamaka swasa is also changed accordingly. The frequent episodes of Tamaka swasa are related to the exposure to Shita, Snigdha and such other factors that provoke the Vata and Kapha Dosha and this is

the usual presentation. If the association of Pitta Dosha is present this nature of the illness is reversed and hence exposure to these factors may bring about remittance of symptoms in the patient. This unique nature of the illness is attributed to Pitta Dosha involvement. Symptoms like Jwara, Murcha are suggestive of Pitta vitiation. Such a variant form of Tamaka swasa with the typical symptoms of Pitta Dosha is called as Pratamaka and Santamaka swasa¹. Vitiated Prana Vayu also irritates the Nasa causing increased secretion and manifestation like Pinasa, Kshawathu etc. The imbalance of Vata and Kapha Dosha afflicts the Rasa Dhatu in the pathogenesis of Tamaka swasa. During the attack of Tamaka swasa almost all the symptoms of Kapha Dosha vitiation are mediated through the Rasa Dhatu. Among the list of symptoms: productive cough, sputum etc are the symptoms pathognomonic of Rasa Dhatu abnormality. Moreover, abdominal symptoms like Adhmana, Anaha are also the result of incriminated Rasa Dhatu. As the disease runs a chronic course, the vitiated Vata Dosha dries up the circulating Rasa Dhatu contributing to the weakness and emaciation in the patient.

Chikitsa (Management)

The goal of prevention is to prevent development of the condition of tamaka swasa. The as well as prevent exacerbations of tamaka swasa in those who already have the condition and avoid deterioration in lung function or death from the condition. Preventing the development of a condition is clearly a more attractive option than treating an established condition. Although advances have been made in understanding prevention in relation to passive smoking and occupational diseases specially tamaka swasa (asthma), primary prevention is as yet an area of unproven benefit. Much more research is needed in this regard. The goal of management is to achieve Samyata of vitiated Dosha. Shodhana therapy is mainly indicated to eliminate morbid Dosha from body. Though Shodhana is better than Shamana it cannot be applied in every individual hence before performing Shodhana therapy one should consider about Doshik and physical status of patient. Vataashleshmahrari Hi Yuktam Tamake tu Virechnam¹. According to above verse of Charaka, Virechana (medicated purgation) is very useful in Tamaka swasa, particularly when it is combined with Vatahara and Kaphahara drugs. In modern science, the goal of asthma treatment has also shifted from symptomatic relief to disease control and it also ensures the patient's wellbeing⁷. Many Herbal preparations have been cited as the popular complementary treatment modality⁸⁻¹³.

Basically there are two type of therapy in Ayurveda, Shodhana and Shamana. Tamaka swasa is considered as Yappa Vyadhi¹, so treatment must be continued for longer period. As far as the treatment is going on, patient gets relief but if treatment is discontinued it will aggravate the disease pathology. It is not possible for every person to spend lot of money and time for management of disease. Due to allergic condition, acute exacerbation and Yappa condition of disease it is very essential to avoid Nidana. Prevention of asthma involves both the prevention of the initial development of asthma and the prevention of exacerbations in those who already have the condition. The challenge of the last 10 years has been to better understand what is happening within the airways so that treatment may be sued to maximum effectiveness. The challenge for the present is to organize Tamaka swasa care effectively and to ensure that both patients and health care professionals are educated to make

the most of the excellent treatments available. The challenge of the future is to understand why more people are developing tamaka swasa and takes steps to prevent the onset of the condition in at risk individuals.

Chikitsa Sutra

In Tamaka swasa Kapha obstructs the passage of Vayu and the obstructed Vayu traverses in reverse direction. In such condition Drug and food which possess Kapha and Vata alleviating property and which is having Ushna and Vatanulomana property are helpful in relieving the swasa. Virechana drugs having above said quality proves beneficial in the condition of swasa^{1,14}.

Shamana Chikitsa

Shamana therapy meant to achieve Dhatusamya by use of drugs internally. Those Diet and Drugs having KaphaVataghna, Ushna and Vatanulomana properties are useful in Tamaka swasa¹. Arundutta further says - Drugs having Dipana-Pachana activities are used for the management of Tamaka swasa³. However, various formulations and prescriptions have been advocated to cure Tamaka swasa in Ayurvedic Classical Texts. Present review deals with medicinal plant which is recommended for Tamaka swasa as single therapy.

Single Herbal Drug Therapy

A variety of medicinal plants are mentioned in different Ayurvedic classics. Some of the them are listed below which are clinically effective.

- Powder of Talisa (*Abies webbiana*) mixed with juice of Vasa (*Adhatoda vasica*) leaves should be used in cough caused by Kapha and Pitta¹⁵.
- Juice of Vasa should be taken with honey keeping on wholesome diet. It is useful in cough caused by Pitta and Kapha and intrinsic haemorrhage¹⁶.
- Powder of Haridra (*Curcuma longa*) cooked with Vasa juice and taken with the fatty layer of milk checks dry cough¹⁷.
- Decoction of Vasa, Guduchi (*Tinospora cordifolia*) and Kantkari (*Solanum surettence*) mixed with honey should be taken in case of cough caused by Pitta and cough, asthma, fever and wasting¹⁸.
- Cold infusion of Vasa checks cough, intrinsic hemorrhage and fever¹⁹.
- Seeds of Ankota (*Alangium salvifolium*) cooked into an edible preparation relieve bronchial asthma².
- Juice of the flower of Sirisa (*Albizia lebbek*) or Saptaparna (*Alstonia scholaris*) should be taken with Pippali (*Piper longum*) and honey. It is efficacious in predominance of Kapha and Pitta¹⁻³.
- Intake of the flower of Sirisa, Kadali (*Musa paradisiaca*) and Kunda (*Jasminum multiflorum*) with Pippali followed by rice water alleviates all types of asthma^{2,3}.
- Juice of Rasona (*Allium sativum* Linn.), Palandu (*Allium sepa* Linn.) or Chandana (*Santalum album*) mixed with breast milk should be put into nostrils^{1,3}.
- The powder of Agaru (*Aquilaria agallocha*) mixed with honey is taken¹.
- Incense of Agaru is prescribed in hiccough and bronchial asthma³.
- Powder of Kusmanda (*Benincasa hispida*) root taken with worm water⁵.

- Parched grains are churned drink made of barley and mixed with leaf-buds of Arka (*Calotris procera*) and honey relieves bronchial asthma².
- The soup of Kasamarda (*Cassia occidentalis*) leaves, Sobhanjana (*Moringa oleifera*) and dried radish alleviates hiccough and asthma¹.
- To quench thirst, the patient of hiccough and asthma should take decoction of Dasamula or Devdaru (*Cetrus deodara*) or wine¹.
- Pills made of jaggery and Camphor (*Cinnamomum camphora*) alleviates asthma immediately¹⁷.
- Alkaline soup should be prepared of the leaves of Matulanga nimba (*Citrus medica* Linn) and Patol (*Trichosanthes dioica*) and Mudga (*Vigna radiata*) added with Trikatu. It is useful in these disorder¹.
- One suffering from hiccough should take Matulanga juice added with honey and Sauvarchala¹⁶.
- Sunthi (dry *Zingiber officinale*) combined with Amalaki (*Emblia officinalis*) and Pippali and added with honey¹⁶.
- Paste of Bharangi (*Clerodendrum serratum*) and Sunthi or Maricha (*Piper nigrum*) and Yavakshar (Mixture of potassium salts) should be taken with decoction of devdaru, chitraka, asphota and murva¹.
- Bharangi should be taken with ghee and honey².
- One suffering from hiccough and asthma should take Bharangi mixed with hot water¹⁶.
- Sunthi with sugar, Bharangi and sauvarchal¹⁶.
- Sallaki (*Boswellia serrata*), Guggulu (*Commiphora mukul*), Aguru and Padmaka (*Prunus cerasoides*) mixed with ample ghee used for fumigation³.
- Dhanyaka (*Coriandrum sativum*) mixed with sugar should be given with rice-water¹⁸.
- Haridra should be burned by closed heating and ash 2 g be given with Honey. It alleviates Asthma and Cough¹⁷.
- The patient should inhale smoke of the wick made of Haridra Patra, Eranda (*Ricinus communis*) root, Devdaru and Mamsi (*Nardostachys jatamansi*) pounded together¹.
- Haridra put in saline water for twenty one days and then parched on fire, should be kept in mouth. It checks Hiccough, Cough, Asthma and disorder of Kapha¹⁷.
- Sauvarcala, Sunthi and Bharangi with double quantity of sugar should be taken with hot water. It alleviates hiccough and bronchial asthma¹.
- Likewise acts goat's milk processed with decoction of Sunthi and added with sugar^{2,20}.
- One should take internally or as snuff powder of Sunthi mixed with equal quantity of jaggery³.
- Madhuka (*Madhuca indica*) mixed with honey, Pippali with sugar and Sunthi with jaggery- these three snuffs alleviate hiccough²⁰.
- Decoction of Sunthi, Pippali, Sarkara and Amalaki mixed with honey checks hiccough, similarly acts the ash of peacock's feather with honey²¹.
- Juice of Kasmarda, Horses's faeces, Bhrrngaraja (*Eclipta alba*), Varttaka and Tulsi (*Ocimum basilum*) mixed with honey alleviate cough caused by Kapha¹.
- Powdered seeds of Timira (*Eleusine aegyptiaca*) and Karkatasrangi (*Pistacia integerrima*) or the former alone mixed with ghee and honey⁷.
- Madhulika (*Eleusine carocana*), Tugakshiri (*Curcuma angustifolia*), Sunthi and Pippali these are cooked in ghee and made into Utkarika (a semisolid dietary preparation). It is efficacious in bronchial asthma associated with Pitta¹.

- The tender leaves of Kakodumbara (*Ficus hispida*) are pounded and cooked in cow milk which is there after added with a bit of Pippali taken with milk in morning²¹.
- In asthma food and drink should be added with Puskarmula (*Inula racemosa*), Sati (*Hedychium spicatum*), Trikatu, Matulunga and Amalvetasa (*Garcina pedunculata*) along with ghee, bide and hingu².
- Powder of Sati, Puskarmula and Amlaki or simply Lauha bhasma should be taken with honey^{1,3}.
- Ghee cooked with double quantity of the decoction of Sariva (*Hemidismus indicus*) is useful².
- One suffering from asthma should take saturating diet of barley (*Hordeum vulgare* Linn.) impregnated many times with juice of bud of Arka².
- Decoction of Dashmul added with the powder of Puskarmula checks cough and asthma and alleviates pain in chest and heart¹⁶.
- Smoking on Turuska (*Liquidamber orientalis* Miller), Sallaki, Guggulu and Padamka should be used².
- Soup of the leaves of Kasmarda and Sigrū (*Moringa oleifera* Lam.) and of dry radish alleviates hiccough and asthma¹.
- Soup well prepared of Sigrū fruits with Maricha, Salt and Yavakshara checks hiccough and asthma¹.
- Flowers of Kadali (*Musa paradisiaca*), Kunda and Sirisa mixed with Pippali are pounded with rice water and given to the patient of bronchial asthma⁵.
- In order to relieve dyspnoea, one should take Kadali fruit boiled in cow's urine or fried or roasted on charcoal²¹.
- Ghee cooked with purgatives checks hiccough immediately similarly act the juices of amalaki and kapittha mixed with Pippali and honey¹.
- Bharangi and Sunthi or Maricha and Yavakshar should be taken with warm water²².
- Gruel cooked with Karkatsrngi is beneficial for those suffering from asthma and hiccough¹.
- Powder of Karkatsrngi and seed of radish mixed with honey and ghee for children¹⁸.
- Smoking should be used of Guggulu or realgar, or gum-resin of Sala (*Shorea robusta*) or Sallaki, Guggulu, Aguru and Padmaka (*Prunus cerasoides*) mixed with profuse ghee³.
- Smoke of gum resin of Sala should be inhaled².
- Kantkari (*Solanum surattense* Burn) in the quantity equal to an Amalka fruit, added with half quantity of Hingu and taken with honey alleviate asthma within 3 days².
- Only Bibhitak (*Terminalia bellirica*) is sufficient in all types of cough and asthma³.
- Bibhitak powder 10 g with honey taken after meals alleviates cough and dyspnoea²⁰.
- In Hiccough one should take Haritaki (*Terminalia chebula* Retz.) with warm water².
- Haritaki powder should be taken mixed with profuse Honey and Ghee².
- Jaggery cooked with Haritaki should be taken².
- Old Ghee cooked with Haritaki and Hingu is useful in Asthma, Cough, Hiccough and heart diseases².
- Paste of Haritaki and Sunthi or that of Puskarmula, Yavaksar and Marica should be taken by one suffering from Hiccough and Asthma¹⁶.
- Ghee cooked with juice of Nirgundi (*Vitex nergundo*) leaves^{2,3}.

- Decoction of Nirgundi, Guduchi, Haritaki and Maricha in equal part mixed with salt²¹.
- The ash (alkali) of Asvagandha (*Withania somnifera* Dunal) should be taken with honey and ghee^{1,3}.
- Ardraka (fresh *Zingiber officinale* Rosc.) juice mixed with honey should be taken in case of cough, bronchial asthma, coryza and fever caused by Kapha¹⁵.
- One should administer the juice of Ardraka mixed with honey which alleviates bronchial asthma, cough, coryza and Kapha^{5,16}.

CONCLUSION

In this review article, it has been prepared to accumulate the simple and single herbs which can be helpful in management of a distressing condition Tamaka swasa (Bronchial asthma). It is a chronic airway disease which causes disability and distress to the human being due to serious impairment in day today life. Most of the peoples uses drugs for the condition as OTC (Over the Counter) medicines or prescribed by some knowledgeable persons chiefly derived from plants and natural sources. The aim of medication is only the benefit of patients and does not matter to which class drug belongs. The Ayurveda offers a variety of preventive and therapeutic measures for the disease. The article may helpful to the traditional health worker in the control of this disease and those patients who are suffering from the same. There is a hope that investigations in alternative medicine will help to restore to health of such peoples safely and efficiently rather than managing.

REFERENCES

1. Jadayvi TA, editor. Agnivesa: Caraka Samhita. Varanasi: Chaukhambha Vidyabhanu; 2011. p. 533-539.
2. Sharma PV, editor. Susruta: Susruta Samhita. 1st ed. Varanasi: Chaukhambha Bharathi Academy; 2001.
3. Shastri HS, editor. Vagbhata: Astanga Hridaya. Varanasi: Chaukhambha Sanskrit Prakashan; 1997. p. 602-608.
4. Apte VS. The Student's English-Sanskrit Dictionary. New Delhi: Moti Lal Banarasi Das; 1973.
5. Mishra BS, editor. Bhavamishra: Bhavaprakash, 11th ed. Varanasi: Choukhambha Sanskrit Bhawan; 2009. p. 427-735.
6. Mishra BS, editor. Yogarathnakara. Varanasi: Choukhambha Prakashana; 2010. p. 427-35.
7. Behera D. Bronchial asthma. 2nded. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd; 2000. p. 23-27.
8. Bielory L, Lupoli K. Herbal intervention in asthma and allergy. J Asthma 1999; 36: 1-65. <http://dx.doi.org/10.3109/02770909909065150>
9. Chavan S, Reddy GR, Hartalkar J, Jawale P. A clinical study on efficacy of Nidigdhikadi kvatha on tamaka shvasa (Bronchial asthma). Int Res J Pharm 2013; 4(3): 141-4. <http://dx.doi.org/10.7897/2230-8407.04327>
10. Bhatt S, Upadhyay U, Upadhyay S, Soni H, Patel P. Evaluation of acute toxicity study and anti-asthmatic activity of Zeal herbal granules. Int Res J Pharm 2013; 4(5): 213-5. <http://dx.doi.org/10.7897/2230-8407.04544>
11. Kajaria D, Kajaria A, Tripathi JS, Tiwari SK. Evaluating anti-asthmatic effect of polyherbal Ayurvedic drug Bharangyadi on respiratory mechanics using matlab. Int Res J Pharm 2013; 4(2): 167-69.
12. Patel PD, Patel RK, Patel NJ. Analysis of prescription pattern and drug utilization in asthma therapy. Int Res J Pharm 2012; 3(7): 257-60.
13. Khatry S, Abbulu K. Holistic approach to management of asthma. Int Res J Pharm 2010; 1(2): 367-83.
14. Kajaria D, Tripathi JS, Tiwari SK. Scientific Explanation for Using Purgation Therapy in Tamaka Shvasa (Bronchial Asthma). Int J Herb Med 2013; 1(3): 46-9.
15. Pandey J, editor. Harita Samhita. Varanasi: Chaukhambha Visvabharati; 2010.
16. Tiwari PV, editor. Vrinda: Vrindamadhava. 1sted. Varanasi: Chaukhambha Visvabharati; 2007. p. 186-191.
17. Bhatt RK, editor. Shri Krishna Ram: Siddhahesajmanimala, 3rded. Varanasi: Chaukhambha Krishnadas Academy; 2003.
18. Saxena N, editor. Vangsen Samhita. Varanasi: Chaukhambha Sanskrit series office; 2004. p. 315-319.
19. Tripathi B, editor. Sharangadhar Samhita. Varanasi: Chaukhambha Surbharti Publication; 2004.

20. Tripathi ID, editor. Chakrapanidatta: Chakradatta. Varanasi: Chawkhambha Sanskrit Bhavana; 2010. p. 107-10.
21. Late Brahmasree Vayaskara Moss NS, editor. Vaidya-Manorama. Kottayam: Vaidhyasarathi; 1978.
22. Gupta AD, editor. Vagbhata: Astanga Samgraha. 2nd Vol. Varanasi: Chaukambha Krishnadas Academy; 2005. p. 35-39.

Cite this article as:

Maurya Santosh Kumar. Single herbal drug therapy for Tamaka swasa (Bronchial asthma): A review. *Int. Res. J. Pharm.* 2014; 5(5):360-364
<http://dx.doi.org/10.7897/2230-8407.050575>

Source of support: Nil, Conflict of interest: None Declared