



A REVIEW STUDY ON ROLE OF PANCHAKARMA IN THE MANAGEMENT OF TAMAK SHWASA (BRONCHIAL ASTHMA)

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ABSTRACT

Many chronic recurrent airway disorders are increasingly seen at present era all over the global population. *Ayurveda* has described one of such disorder as *Tamak Shwasa*. The parallel in western medicine to this disorder i.e. Bronchial Asthma calls the attention of Medical world due to significant burden in terms of health care costs and reduced participation in family life.

Asthma is defined as a disorder characterized by chronic airway inflammation and increased airway responsiveness to a variety of stimuli. It is manifested physiologically by a widespread narrowing of air passage which may be relieved spontaneously or as a result of therapy and, clinically by paroxysms of dyspnoea, cough and wheezing.

Ayurveda has practical solutions for identifying & treating the underlying causes and can bring lasting relief to *Tamak Shwasa* (Bronchial asthma) sufferers. *Panchakarma* process like *Snehana*, *Swedana*, *Vamana*, *Virechana* etc. may likely to act on the required line of management in *Tamak Shwasa* (Bronchial asthma). As this therapy contains herbal components, it may establish quite safe & without any side effects even after prolonged use by the patients.

Since the management of Bronchial Asthma with allopathic medicine is purely temporary and at times associated with serious toxic effects therefore considering the demand of society and taking the responsibility it is necessary to evaluate *Panchakarma* Therapy as safe and effective *Ayurvedic* management for *Tamak Shwasa* (Bronchial Asthma).

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INTRODUCTION

Asthma is defined as a disorder characterized by chronic airway inflammation and increased airway responsiveness to a variety of stimuli. It is manifested physiologically by a widespread narrowing of air passage which may be relieved spontaneously or as a result of therapy and, clinically by paroxysms of dyspnoea, cough and wheezing. Asthma is an episodic disease with acute exacerbations, interspersed with symptom free episodes. This phase may be mild with or without superimposed severe episodes or much more serious with severe obstruction persisting for weeks, the later condition is known as 'Status Asthmaticus', a life threatening condition.

Need and significance of Present Research work-

As declared by WHO 100–150 million of global populations are suffering from Bronchial Asthma, out of which 1/10th are Indians and the prevalence of Asthma is increasing everywhere. Current estimates suggest that 300 million people worldwide suffer from Asthma and an additional 100 million

may be diagnosed with Asthma by 2025. According to the WHO by the year 2020 Asthma along with Chronic Obstructive Pulmonary Disease will become the third leading cause of death. It is a male predominate disease. Male and female ratio is 2:1. This alarming rise in the prevalence of *Tamak Shwasa* (bronchial asthma) can be accounted to factors such as Atmospheric pollution, rapid environmental changes, adaptation of newer dietetic preparations and tremendous psychological stress. Excepting the data collected by National Family Health Survey-2 (NFHS-2) during 1998-99, the estimated prevalence of Asthma in India is 2648 per 100,000 person. The prevalence among males are slightly higher than among females. Though the prevalence is higher amongst men it is women who suffer the most from asthma. The prevalence of persistent asthma increased from 20% to 27.5% and that of persistent severe asthma increased from 4% to 6.5% between 1994 and 1999.

Asthma is a syndrome characterized by airflow obstruction that varies markedly, both spontaneously and with treatment. Asthmatics harbor a special type of inflammation in the airways that makes them more responsive than non Asthmatics

to a wide range of triggers, leading to excessive narrowing with consequent reduced airflow and symptomatic wheezing and dyspnoea. Narrowing of the airways is usually reversible, but in some patients with chronic Asthma there may be an element of irreversible airflow obstruction.

Long term use of modern medicine produces the serious toxic effects such as- Palpitation, Nervousness, Bronchospasm, and Throat irritation, Hoarseness of voice and Acidity etc.

Along with this wide range of side effects, allopathic drugs do not cure the patients permanently. Whenever a patient comes in contact with a particular allergen he or she develops the disease again and an episode of acute attack of Bronchial Asthma is precipitated.

Since the management of Bronchial Asthma with allopathic medicine is purely temporary and at times associated with serious toxic effects therefore considering the demand of society and taking the responsibility it was decided, to evaluate the role *Ayurvedic panchakarma* therapy in the management for Bronchial Asthma

Shwasa Roga

Shwasa word is used to denote respiration (both phases) and exchange of air in the body. So the *Shwasa roga* may be defined simply as a disease in which the respiration and exchange of air is disturbed. In *Ayurveda*, *Shwasa Roga* is said to be the disorder of *Pranava Srotasa*. Vitiating of *Pranava Srotasa* leads to *atisrishta*, *atibaddha*, *kupita*, *alpa*, *sashabda Shwasa*.

Acharya Sushruta has mentioned the detailed definition of *Shwasa roga* in *Uttara Tantra* as- when the normal passage of *Prana Vayu* is obstructed by *Kapha*, it gets vitiated and starts moving in opposite direction (upward), which is unable to perform its normal physiological functions and produces *Shwasakashta*.

Classification of Shwasa Roga

On the basis of Clinical features

- a. *Maha Shwasa*
- b. *Urdhva Shwasa*
- c. *Chhinna Shwasa*
- d. *Tamaka Shwasa*
- e. *Ksudra Shwasa*

On the basis of Prognosis

- a. *Sadhya* (curable)
Kshudra Shwasa
- b. *Krichhra Sadhya* or *Yapya* (Palliable)

Tamaka Shwasa

- c. *Asadhya* (incurable)
Maha Shwasa
Urdhva Shwasa
Chhinna Shwasa

Tamaka Shwasa

The name of *Tamaka Shwasa* is due to the fact that, the symptoms or attack of this disease precipitates at night and also during the time of attack, the breathing difficulty is so severe that patient feels entering into the darkness (*Tama Pravesh*).

Both the *Vata* and *Kapha* have been considered to be the chief *Doshas* involved in the pathogenesis of *Tamaka Shwasa*. Among the five types of *Sharira Vayu* – *prana Vayu* get vitiated during this disease.

When *Vata* is obstructed by vitiated *Kapha*, it get reverses and affect the *Prana vaha Srotas* and producing *Dyspnea* associated with wheezing sound, Cough, labored breathing etc. Due to constant coughing patient become unconscious, greatly distressed and feels comfort for a while when the sputum being expectorated. His throat is severely affected, and speaks hardly. He feels discomfort in lying down position, so unable to get a sleep. He feels comfort in sitting or in propped up posture. He likes to take hot things only. His eyes are protruded, forehead is covered with sweat and he feels a great distress all the times. His mouth becomes dry. These symptoms are intensified by cloudy, humid and cold weather, easterly winds, foul smelling and by taking *Kapha* increasing things. The *Tamaka Shwasa* (Bronchial Asthma) is *Yapya*. It is curable if it is of recent origin.

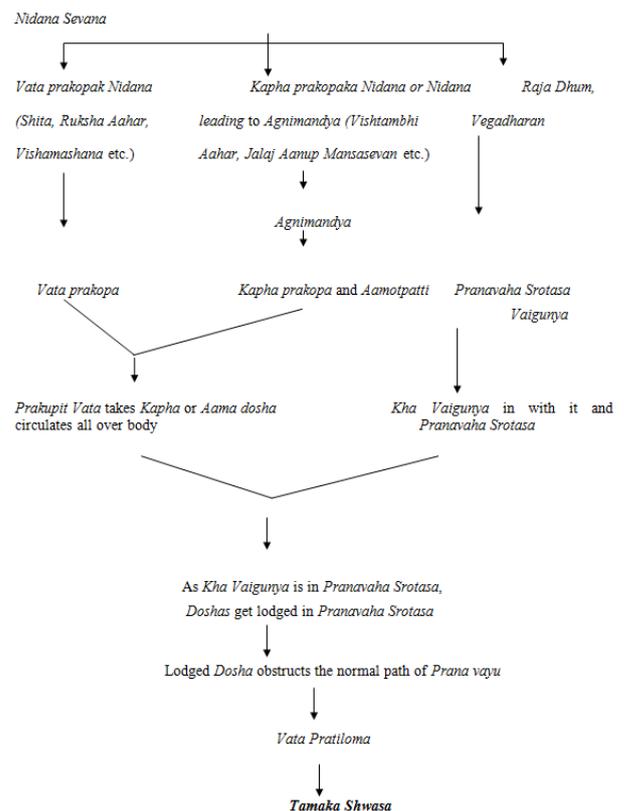
In *Tamaka Shwasa*, two allied conditions, i.e. *santamaka* and *pratamaka* have been considered by *Acharya Charaka* (*Ch. Chi. 17/63-64*).

Santamaka Shwasa

Santamaka Shwasa is aggravated in the night and patient feels relief with cold in contrary to *Tamaka Shwasa*, as the later is aggravated with cold and usually the attacks are precipitate early in the morning. The patient feels to be drowning in the sea of darkness, so it is known as *Santamaka Shwasa*. *Sheetopachara* is fruitful because of the presence of *Pitta dosa* in this disease.

Pratamaka Shwasa

In this clinical status a patient is overwhelmed by fever and fainting in addition to other symptoms of *Tamaka Shwasa*.



It is caused by *Udavarta*, dust, indigestion, old age and due to suppression of urge. According to *Chakrapani* though the *Kapha* and *Vata* are predominant *Doshas* in *Tamaka Shwasa*, *Pitta* is equally vitiated in this allied condition which is responsible for the above symptoms.

Flow chart of Vishishta Samprapti of Tamaka Shwasa

Samprapti Ghatakas of Tamak Shwasa

Dosha	- <i>Kapha and Vata (Kapha dominant)</i>
<i>Vata</i>	-(<i>Prana</i> (mainly), <i>Udanna</i> , <i>Samana</i>)
<i>Kapha</i>	-(<i>Avalambaka</i> and <i>Kledaka</i>)
Dushya	- <i>Rasadhatu</i>
Srotas	-Mainly <i>Pranavaha Srotas</i>
<i>Udakavaha Srotas</i>	
<i>Annavaha Srotas</i>	
Udbhava Sthana	- <i>Pittasthana (Ch)</i> <i>Amashaya (A.H)</i>
Adhithana	- <i>Uraha (Phupphusa)</i>
Sroto Dusti Lakshana	- <i>Sanga,</i>
<i>Vimargagamanam, Ati Pravritti</i>	
Aama	- <i>Rasagata (Mandagni</i> <i>janya Aama)</i>
Agni	- <i>Jatharagnimandya</i>
Swabhava	- <i>Chirkari</i>

There are three basic steps while treating the patients of *Tamak Shwasa*

- **Nidana Parivarjana**
- **Samshamana**
- **Samshodhana**

Nidana Parivarjana

First line of treatment is to avoid the causative factors. If the precipitating or predisposing factors are not avoided, the *Doshas* involved in the pathogenesis will further be aggravated and the prognosis will be worse.

Samshamana Chikitsa

In *Shamana Chikitsa*, *Acharya Charaka* has mentioned the drugs which have *Kapha Vataghna guna*, *Ushna* and *Vatanulomana* properties can effectively treat the *Tamaka Shwasa*.

Samshodhana Chikitsa

In *Samshodhan Chikitsa*, *Acharya* described *Panchkarma* procedures which eliminate the vitiated *Dosha* out of the body like *Snehan*, *Swedan*, *Vamana*, *Virechana* etc.

Snehana

In *Tamak Shwasa* both external and internal *Snehan* can be done with the help of various medicated oil and *Ghrit*. In this process certain medicated ghee/ oils are advised for ingestion. Usually ghee like *Vasa Ghrita*, *Kantkari Ghrita*, *Bharngyadi Ghrita*, *Yashtimadhu Ghrita* etc. is used for *Shodhan* purpose. These are administered in an increasing dosage schedule for not more than 7 days.

Snehana play important role in *Tamak Shwasa* to minimize the symptoms and normalize the function of vitiated *Vata*. For external *Snehan*, *Tila taila* mixed with *lavana* should be gently massaged on the chest to lose the tenacious sputum in the channels.

Internal *Snehan* is called as *Snehapaan*. Medicated *Purana Ghrit* or medicated oil can be used to control the symptoms of *Tamak Shwasa*.

Swedana

After *Snehana Nadi*, *Prastara* and *Sankara* type of *Swedana* may be applied.

The *swedana* renders the adhered *kapha* dissolved in the channels of the circulation and softened thereby. This therapy also causes downward movement of *Vayu*. The stable *Kapha* dissolved on account of the heat generated by this fomentation therapy.

Swedana is contraindicated in those persons who suffer from *Pittaja Vyadhi* such as *Atisara*, *Raktapitta*. *Swedana* should not give in pregnancy and *Dhatukhshaya* also.

Vamana:

After proper *Swedana*, *Snigdha Odana* (rice), with soup of fish or pig flesh and the supernatant of curd may be given to the patients for the *Utkleshana* of *Kapha*. Thereafter, *Vamana* should be performed with the help of *Madanaphala pippali*, mixed with *Saindhava* and *Madhu* (honey), taking care of to see that such an emetic is not antagonistic to *Vata*.

Acharya Sushrut has also mentioned *vaman* but instead of *vaman* he used *urdhvashodhan* word. *Sushrut* has advised to give *mridu vamana*. Thus, the vitiated and stagnant *Kapha* has been expelled from the system, the patient attains ease and once the body channels (*Srotas*) are purified, the *Vata* moves through the *Srotas* unimpeded.

Dhumapana

If some pathogenic material is still hidden, it should be eliminated by *Dhumapana* (smoking) – *Haridrapatra*, *Eranda moola*, *Lakshsha*, *Haritala*, *Devadaru*, *Manahshila* and *Mamsi* should be powdered together and made in to sticks. Such stick smeared with *Ghee* should be smoked. But the patient afflicted with burning sensation, vitiation of *Pitta*, excessive bleeding, excessive sweating, or excess dryness are unsuitable for fomentation therapy. Such patients could be given mild fomentation for moment in their chest and neck by sprinkling *Luke warm oil* mixed with *sugar*, and there after by *Appling Upanaha* with *Utkarika* (recipe for fomentation which is warm and in paste form) .

Virechana

According to *Acharya Charak* the intelligent physician should give *Chhardana* (emesis) medicated with drugs alleviating *Vata* and *Kapha* to patient suffering from *Kasa* and *Swarbhanga* along with *Shwasa*. He should give *Virechana* medicated with drug alleviating *Vata* and *Kapha*. *Charak* and *Vagbhata* described *Shwasa* as a disease in which *Virechana* is indicated.

In *Tamaka Swasa- Kapha* obstructs the *marga* (passage) of *Vayu*. The obstructed *Vayu* take the *Pratiloma gati* (*Vimargagamanana*) and *Virechana* drugs have a quality of *Vatanulomana*, *Kaphavataghna karma*, *Ushna Veerya* may be more beneficial in the condition of *Shwasa*. *Virechana* drugs remove mainly *Kapha* and *Pitta Doshas* and make *Vata* in *Anuloma gati*. The origin of *Shwasa roga* is *Pitta sthna* and *Virechana* purifies the *Pitta sthna* which in fact is the site of origin of *Shwasa roga*. Hence, it acts as a curative measure.

Basti

Anuvasana Basti play important role in *Tamak Shwasa* due to vitiation of *Vata*. Though *Shwasa* is *Kapha* predominant *Vyadhi* but sometimes it may occur due to vitiation of *Vata*. *Basti* is the best therapy for vitiated *Vata Dosha*. After proper *Snehana* and *Swedana*, *Anuvasana Basti* can give to the patients of *Tamak Shwasa*.

Nasya

Acharya Charak has mentioned the juice of Onion, Garlic and Carrot as *Nasya*. He also described the *Chandana* with *Nareekhsheer* for *Nasya*.

Daha Karma (Cauterization)

There is beautiful depiction of *Daha karma* in case *Shwasa*. In *Bhaiseejya Ratnavali*, *Daha karma* (Cauterization) is to be performed by a hot iron rod in the mid of sternum, in the middle finger of both hands and in the *Kanth Kupa* (i.e. between the thyroid gland and the upper end of sternum).

DISCUSSION

In *Ayurveda* if we search for a disease comparable to Bronchial Asthma then we find that *Tamaka Shwasa* is the most appropriate correlation. *Tamaka Shwasa* is a very broad term which includes many more diseases where dyspnoea is predominant symptom. But still we can correlate Bronchial Asthma to *Tamaka Shwasa*, because out of the remaining four, three are incurable and the fourth one is *Kshudra Shwasa* developed due excessive labor or taking excessive *Ruksh Ahara* and which is easily curable. The etiological factors of *Tamaka Shwasa* are mentioned with variable multiplicity of diet (*Ahara*), lifestyle (*Vihara*) and consequences of diseases (*Nidanarthakara Roga*). The dietetic causes (ingestion of toxins, unboiled milk, cold water and mutually contradictory food) vitiate the *Vata Dosha*, which may be similar to allergens working as triggering factors for asthma. The triggering factors related to life style include the environmental factors such as dust, smoke, cold water and climate. Excessive exercise and sexual intercourse, long walk beyond capacity and lifting or carrying heavy weight are the triggering factors observed in exercise induced asthma.

The *Pranvaha Srotas* has been taken as the main site of disease pathology, but it has origin from *Pittasthana*. In *Chakrapani*, it has been mentioned that *Amashaya* being the seat of *Pitta*, should be considered as the origin of this pathogenesis. *Vagbhata* has also mentioned that it is *Amashaya Samudbhava* disease.

Role of Snehan and Swedana

During the attack of *Tamak Shwasa* the tenacious sputum as well as stiffness of the *Pranvaha Srotas* prevents the free flow of *Pranavayu*. This results in *Pranavilomata*. Thus liquefaction of the sputum so that it can be easily expectorated; and also *Srotomardava* relieving the stiffness of the *Pranvaha Srotas* facilitates the free flow of *Pranavayu*. These two effects are best achieved by the *Abhyang* and *Swedan* on the chest. *Acharya Charak* has prescribed oil added with rock salt for the *Abhyang*. *Abhyang* is followed by *Swedan* and may be carried out by any of the methods like *Nadi Sweda*, *Prastar Sweda* and *Sankar Sweda*. This procedure is carried out on the first day of the attack as soon as the diagnosis is made and may be continued for about a week to get maximum benefits. *Swedan* is contraindicated if the patient of *Tamak Shwasa* is of *Pitta*

Prakruti, if he is also suffering from morbidity of *Pitta Dosha* or diseases due to vitiated *Pitta Dosha* like *Raktapitta Swedan* is even contraindicated in pregnant females. In the presence of such contraindications mild form of *Swedan* like application of *Utkarika* is advisable.

Kapha Utkleshan

Following the *Swedan Karma*, on the same night the patient is advised to take food that aggravate the *Kapha Dosha*. If the patient is habituated to vegetarian food, curd rice may be advised in the form of *Kaphakara Ahara*. If the patient is a non-vegetarian, then fish in the food is ideal. The *Kaphakara Ahara* facilitates the easy expulsion of the *Dosha* during the *Vaman Karma* that will be carried out on the immediate next day.

Role of Vaman Karma

Vaman Karma is indicated during the attack of *Tamak Shwasa* both in *Kapha* dominant and *Vata* dominant type as well. Since *Kapha Dosha* is invariably involved in both the types of *Tamak Shwasa* so the employment of *Vaman Karma* is justified. The initial treatment with *Snehan* and *Swedan* liquefies the tenacious sputum as well as softens the *Pranvaha Srotas* there by facilitating its removal by the *Vaman Karma*. Following *Snehan* and *Swedan* patient is advised to take *Kaphakara Ahara* and this improves the tendency *Kapha Dosha* getting eliminated. Thus after *Snehan* and *Swedan* patient is advised to take *Kaphakara Ahara* on the same night. The next morning is ideal time for the administration of *Vaman Karma*. Here the complete procedure of *Vamana Karma* with prior preparation is not necessary. Thus to abort the attack of *Tamak Shwasa* the *Vaman Karma* is done following *Balya Snehan-Swedana* and *Kaphaotkleshkara Ahara*. The removal of the accumulated *Shleshma* clears the air passage and thus *Pranavilomata* is reverted to normal course of *Vata Dosha*.²⁶ Patients suffering from *Tamak Shwasa* may be physically strong or debilitating for different reasons. *Vamana Karma* is only possible in physically strong. *Vaman Karma* is then followed

Role of Virechana Karma

The site of origin of *shwasa roga* is "*Pitta Sthana Samudbhava*." And this *pitta sthana* is described by *Chakrapani* as *Adho Amashya*. This is the region between the *Hridaya* and *Nabhi*. At this place the main pathology of *Shwasa Roga* takes place and the pre-dominant *Dosha Pitta* is present here. And to purify the site of origin *Virechana* is advocated. (Ch. Su.20/18). The patient of *Tamaka Shwasa* is often weak and in chronic stage, *Hridaya* as the *Mula* of *Pranavaha Srotas* is also involved. In this condition *Vamana* is very difficult and complicated procedures & the *Virechana* is easily done without threatening the life of the patient.

Accumulation of *Mala* and *Vayu* in *Udara* leads to *Apana Vayu Vitiation*, which is followed by vitiation of *Prana Vayu* leading to *Shwasa*. In patients of *Tamaka Shwasa*, *Anaha* like condition is often seen; *Virechana* by ensuring purgation is expected to relieve this condition and thus therapy is more helpful in the treatment of *Shwasa*. If *Tamaka Shwasa* presents due to *Saama Vayu* it leads to inflammation. As per modern view Asthma is considered as chronic inflammatory condition of airways. In the management of *Shotha*, *Virechana* is having prime importance, as *Shotha* results due to obstruction in natural path of *Vayu*. *Virechana* overcomes this obstruction

and reduces inflammatory condition. *Udakavaha Srotasa* is involved in pathogenesis of *Shwasa*. In deranged state it results into excessive *Kleda* formation. *Kleda* is having *Apa Mahabhuta* dominancy particularly in *Kapha pradhana samprapti* the vitiated status of *Kleda* is observed. The excessive secretions in the lungs are present at this stage. The word *Virechana* itself is formed from, *rech* "Dhatu" means for secretion. *Virechana* removes this *Kleda*, thus it reduces severity of *Shwasa*. *ShwasaVyadhi* is mentioned as *Aamashaya samutha* where derangement of *Agni* leading to *Agnimandya*. In this case *Virechana* will be helpful by maintaining proper status of *Agni*, which is the root cause for almost many diseases. Embryological development of *Phupphusa* occurs from *Shonita phena* i.e. main source is *Shonita*. In case of *Shwasa Vyaktisthana* is *Urah* where *Phupphusa* is situated, hence *Khavaigunya* mainly occurs here hence *Virechana* which is best treatment for purification of *Rakta* may be useful for clearing the *Khavaigunya* in *Phupphusa*. *Vamana* is done in initial stages where there is *pravruddakapha* (ch.chi.17/76) & *Virechana* is indicated after *Vamana*. In *Tamaka Swasa* spasm of diaphragm occurs, which causes aggravation of *Swasa Krichrata*. *Virechana* alleviates spasm & improves respiratory movements by reducing intra-abdominal pressure. *Virechana* may also help in reducing the absorption of histamine like substances & other toxic material from intestine there by prevents broncho spasm. As *Virechan* is regarded as best treatment for *Raktha & Pitta* .it is *Raktha Prasaadaka*, promotes healthy *Raktha*. Hence it relives or at least reduces the severity of the effects of allergy. Thus reduces attacks of asthma.

Role of Dhoomapana

Dhoomapana is used after *Vamana Karma* if some pathogenic material is still hidden, it should be eliminated. Following *Vamana Karma* the *Dhoomapana* is advised. This *Dhoomapana* is also aimed at elimination of *Kapha Dosha*. Employment of *Vamana* eliminates the accumulation of *Shleshma* in *Pranavaha Srotas*. This procedure though eliminates the *Shleshma* to a larger extent; this is likely to leave some amount of the *Shleshma* in the *Srotas*. This small amount of *Shleshma* remaining in the *Srotas* is then best removed by *Dhoomapana*. In a physically weak, or else the accumulation is least since the beginning; *Dhoomapana* may be effectively carried out even without prior *Vamana Karma*. Further the herbs used in *Dhoomapana* can relieve the stiffness of the *Pranvaha Srotas* adding to the benefit of the patient. *Kaphahara* and *Srotomardava* effect of *Dhoomapana* clears the air passage allowing the free movement of *Pranavayu*. As the medicines is directly delivered into the site of lesion i.e. *Pranavaha Srotas*, one can expect prompt and spontaneous remission of symptoms of *Tamak Shwasa*. *Dhoomapana* may be repeated several times depending upon the requirement.

CONCLUSION

- The process of *Snehana* stabilizes vitiated *Dosha*, stimulates *Agni*, Purifies *Koshta*, nourishes the body, strengthens the *Dhatu* and arrest the process of aging which help in the management of *Tamak Shwasa*.

- *Swedana* is the process which relives stiffness, heaviness and coldness of the body. It also separates the vitiated *KAPHA* from the *Srotas* which is very necessary in *Tamak Shwasa*.
- The *Shodhana Karma* like *Vaman*, *Virechana Nasya* can play very important in *Tamak Shwasa*. It eliminates the vitiated *Dosha*, toxins and waste products to regulate the proper *Gati* of *Vata* without disturbing the architecture and functions of the body.
- Administration of *Panchakarma* therapies for elimination of obstructing dosha is quite beneficial for the management of *Tamak Shwasa*
- Thus, *Panchkarma* therapy can be used as safe and effective therapy for the management of *Tamak Shwasa* (Bronchial Asthma) and can be considered as first line therapy along with oral medication in the management of *Tamaka Shwasa* (Bronchial Asthma).

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