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# PURGATION THERAPY IN BRONCHIAL ASTHMA ("TAMAKE TUVI-**RECHANAM")-A CASE REPORT**

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### **ABSTRACT**

With the highest frequency in developed nations, asthma is a widespread illness that is becoming more and more common worldwide. Approximately 300 million individuals globally have asthma, and by 2025, an additional 100 million are expected to be impacted by the condition. Ayurveda has been an outstanding source of Internal detoxification therapy and herbal medicine since prehistoric times. Patients seeking alternative and complementary medicine to treat their asthma are doing so since current asthma therapy is not working well enough owing to side effects. A 52-year-old male patient with a known case of recurrent bronchial asthma who is undergoing scheduled purgation therapy for the condition ("TAMAKE TU VIRECHANAM") has shown significant improvement with long-lasting benefits and fewer adverse effects.

Keywords: Tamaka Swasa, Bronchial Asthma, Virechan.

### INTRODUCTION

Difficulty in breathing or shortness of breath may be termed Swasa Roga. It may be primary - originating from the respiratory system or secondary - originating from other body systems, but the impact is on the

respiratory system. Bronchial Asthma is a chronic inflammatory disease of the airway. It leads to recurrent episodes of wheezing, breathlessness, tightness of the chest, and cough, particularly at night or early morning. As per Ayurveda, Swasa is mainly caused by the Vata and Kapha doshas. Swasa is broadly classified into five types: Mahaswasa (Dyspnoea major), Urdhawaswasa (Expiratory Dyspnoea), Chinna swasa (Chynestroke respiration), Kshudra swasa (Dyspnoea minor) and, Tamaka swasa (Bronchial Asthma).

Tamaka Swasa is one among the Pranavaha Srotho Vikara. It is a Swatantra Vyadhi (independent disease) with its etiological factors, pathophysiology and management. According to Charaka, it is considered Yapya Vyadhi (palliative disease), while Sushruta considers it Krichchra Sadhya Vyadhi (challenging to cure). Therefore, the proper line of treatment and an excellent lifestyle are necessary for a better quality of life. Currently, an attempt has been made to explore the efficacy of such formulations in reducing the signs and symptoms of Tamaka Swasa. A case of a 52-year-old male patient who presented with the symptoms of recurrent episodes of wheezing, breathlessness, tightness of the chest and cough, particularly at night or early morning Dyspnoea on exertion, chest discomfort, cough with whitish colour sputum and generalised weakness of Tamaka Swasa was treated by Ayurvedic Standardized purgation therapy along with anti-asthmatic herbal drug shows marked improvement was seen. After four weeks of follow-up, no episodes of the above complaints have been reported.

#### **Case Report**

52-year-old male patient who presented with the symptoms of recurrent episodes of dyspnoea on exertion, chest discomfort, cough with whitish colour sputum, particularly at night or early morning, wheezing, frequent respiratory infection, anxiety and generalised weakness along with loss of appetite and constipation since last two year came to our institute. History of jaundice and chikungunya 21 years ago, Right side hemiparesis before 22 years. The patient was admitted to GACH, Nagpur, for Urticaria 4 Years ago and for haemorrhoid nine years ago; the patient was admitted to Lata Mangeshkar Hospital, Nagpur, for Tympanoplasty. He was taking Shwasamrita and Syp. Crux whenever he gets the symptoms for more than two years. There is no histo-

ry of diabetes or hypertension. k/c/o bronchial Asthma for 18 years. By occupation, the patient works in plumbing and takes a vegetarian diet. His son has had bronchial asthma since birth. All other family members are said to be healthy.

He was normal 18 years back, but gradually he Felt chest discomfort, cough with whitish colour sputum, particularly at night or early morning, wheezing, and dyspnoea on exertion to an unbearable stage and that forced him to consult their family physician on an urgent basis. The physician had suggested he go for medication, which could give her a temporary relief of 3 months. Later on, the patient consulted a Pulmonary Medicine doctor, where the patient was diagnosed with "Bronchial Asthma" through X-ray, haematological and clinical examinations. The patient was on allopathic treatment for 17 Years and found symptomatic relief. Before the last three years, the patient took medication like Tab. Deriphyllin100 mg 10D and Tb. Dexamethasone 10 mg SOS. The patient did not get relief from repeated episodes of pain and inflammation, so he visited our institute for conservative management.

### Clinical findings-

The patient was conscious, well-oriented, and spoke usually. Pallor, icterus, clubbing, and cyanosis were absent. All routine investigations were done, and an increased ESR level of 56 mm/1hr was achieved; the others were within normal limits.

Dashvidha Pariksha (~ tenfold examination ) shows VataPitta Prakriti (~physical constitution) Vikruti -Prana, Udana, Apana Vata and Avalambaka Kapha, Madhyama Samhanana (~medium body constitution), Avara Sara (~lowermost purest body tissue), Avara Vyayam Shakti (~lowermost capability to carry on physical activities), Madhyama Abhyavarana and Jaranashakti (~middlemost food intake and digestive power) Pramana - height -158 cm, weight-48 kg, BMI - 19.23 kg/m<sup>2</sup> Vaya - Madyama and Asthavidha Pariksha (~ eightfold examination) shows Nadi(~pulse) was Vatkaphaj, frequent Mal Vibandh (~ constipation) *Mutra* (~urine) was expected, Jivha (~tongue) was coated, Shabd (~speech) was clear and low, Sparsh (~temperature) was average, Drik (~vision) was expected, Aakriti (~body built) was Krisha (~lean ) BMI 19.23 kg/m². Rasavaha, Raktavaha, Mansavaha, Medovaha, Asthivaha, Majjavaha, Annavaha, Pranavaha, and Pureeshvaha Srotodushti was observed (Vitiation in micro-channels related to plasma, blood, muscular tissues, adipose tissue, and bones) in this patient. In a systematic respiratory system examination, chest inspection is bilaterally symmetrical. Accessory muscles used for respiration are present, i.e., sternocleidomastoid muscles. Type of breathing - ab-

dominal thoracic, No chest deformities, No scars. Respiratory rate: 22/min. On Palpation: Tenderness is absent, and the position of the trachea is centrally placed. Vocal fremitus - bilaterally symmetrical. In Percussion: Resonant all over the lung field. Hepatic and cardiac dullness were noted. Auscultation: wheeze is present in the right and left lung, middle and lower lobes. Vocal resonance is bilaterally symmetrical. CVS, nothing abnormal is detected.

#### **TIMELINE:**

2003	He started experiencing chest discomfort, cough with whitish colour sputum, particularly at
	night or early morning, wheezing, and dyspnoea on exertion to an unbearable stage, and that
	forced him to consult their family physician on an urgent basis.
2004	The patient consulted a Pulmonary Medicine doctor, who diagnosed the patient with "Bron-
	chial Asthma" through X-ray and clinical examinations. The patient has been under allopa-
	thic management for the past 17 years.
October 2021	The patient did not get relief from repeated episodes, so he visited our institute in OPD and
	IPD for conservative management. He was admitted to the IPD of Govt. Ayurveda College,
	Nagpur, on 6 October 2021.
0-5 <sup>th</sup> Day	Rukshan Pachana Kwatha and Gandarva Hartaki Churna for 5 Days
6 <sup>th</sup> -12 <sup>th</sup> Day	Sarvanga Snehan and Swedan with Til Tail and Snehapan with Vasa, Yastimadhu, Kantakari,
	Pippali, Gambhari, Shati, Tulsi Beeja, and Ela Siddha Ghrita.
13-15 Day	Virama Kala and Sarvanga Snehan and Swedan
16 Day	Virechan
16-22 Day	Sansarjan Krama (after completion of Sansarjan Krama pt. discharged on 27/10/21)
22-52 Day	Kapikachu Bheeja churn

# Diagnostic Focus and Assessment Criteria of assessment

A detailed history and physical examination were done using both Ayurvedic and modern examination methods: Agnibala, Dehabala, and Prakriti were recorded. Adopting the scoring method, symptoms of the illness like breathlessness, cough, sputum, etc., and physical signs like respiratory rate, heart rate, and expansion of chest parameter reading were taken as assessment criteria in this study.

**A. Subjective criteria:** Presence of symptoms <sup>[1]</sup> of Tamaka Shwasa. The symptoms were based on textual references like Pratiloma Vayu (prolonged expiration), Ghurghuraka (wheeze), Ativa Tivra Vegam Ca

Shwasam Pranaprapidakam (dyspnea of exceedingly deep velocity, which was immensely dangerous to life), Shlesmanyamucyamane Tu Bhrsam Bhavati Duhkhita (as the phlegm does not come out, the patient became more restless), Uddhvamsate Kantha (choked throat), Asino Labhate Saukhyam (comfortable in orthopnea position), Tasyaiva Ca Vimoksante Muhurtam Labhata Sukham (patient found momentary relief after the expulsion of phlegm), Shayanah Shwasapiditah (patient had more dyspnea when lying down), Ruksa Bhasana (hoarseness of voice). Gradation: 0-No complaint, 1-Mild, 2-Moderate, 4-Severe.

**B.** Objective criteria: As objective criteria, the following investigations were carried out – (a) Blood: Total leucocytes count, differential leucocyte count,

haemoglobin percentage, Erythrocyte Sedimentation

the chest.

Rate (ESR), (b) Radiological examination: X-ray of

# Therapeutic focus- Panchakarma Procedure

### A. Poorva Karma

# 1. Rukshan Pachana Kwatha for 5 Days

S.No.	Niram Avastha Lakshana	$\mathbf{D_1}$	$\mathbf{D}_2$	$\mathbf{D}_3$	D <sub>4</sub>	$\mathbf{D}_5$
1.	Kshuta-Kshamta	_	_	_	✓	✓
2.	Gatra-Laghavta	_	_	_	_	✓
3.	Jwar-mardavam	_	_	_	✓	✓
4.	Mala-pravritti	_	_	✓	✓	✓
5.	Mutra-pravritti	_	✓	✓	✓	✓
6.	Sweda-pravritti	_	✓	✓	✓	✓

# 2. Samyak Snehapana Lakshana<sup>[2]</sup>

S.No.	Samyak Snehapana Lakshana	$\mathbf{D}_1$	$\mathbf{D}_2$	<b>D</b> <sub>3</sub>	D <sub>4</sub>	<b>D</b> 5	$\mathbf{D}_6$	<b>D</b> <sub>7</sub>
	Quantity of Sneha	30 ml	30 ml	45 ml	60 ml	75 ml	90 ml	105 ml
	Time of Intake in the AM	7:00	6:45	6:05	7:20	7:15	8:00	7:25
	Kshuta-Dipti time in PM	2:00	1:00	2:10	3:15	4:35	6:30	6:00
1.	Agnidipti	_	_	_	_	+	+	+
2.	Snehodvega	_	_	_	_	_	+	+
3.	Asamhata Varcha	_	_	_	_	_	+	+
4.	Anga Laghavta	_	_	_	_	_	_	+
5.	Gatra Mardav	_	_	_	_	+	+	+
6.	Purisha Snigdhata	_	_	_	_	_	_	+
7.	Twak Snigdhata	_	_	_	_	_	_	+
8.	Vatanulomana	_	_	_	_	+	+	+
9.	Glani	_	_	_	_	_	+	+
10.	Vimalendriyata	_	_	_	_	_	+	+

### B. Pradhan Karma-Virechan<sup>[3]</sup>

Virechan Drug	Virechan with Ikshabhedi Rasa.
Virechanopaga Drug	Draksha Hima
Total Vega	33
Type of Shuddhi	Pravar

# C. Pachat Karma- 7 Days Sansarjan krama i.e., Paya, Vailapi, Yusha and Manshrasa.

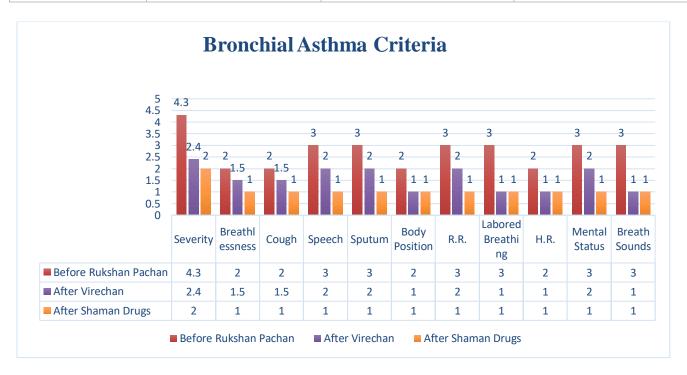
# Table: Showing material used in the study

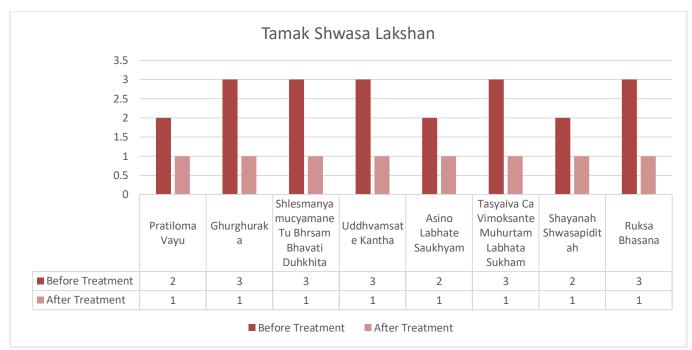
Shaman Aushadi	Dose	Kala	Anupana	Duration
Rukshan-Pachan Kwath	40 ml	Apana (Before Meal)		Five days
Gandarva Hartaki Churna	5 gm	Vyanudane (After Meal)	Koshnajala	Five days
Kapikachu Bheeja Churna	5 mg	Rasyana Kala	Honey and Goghrita	30 days

### FOLLOW-UP AND OUTCOMES

# **Bronchial Asthma Criteria**<sup>[4]</sup>

Bronchial Asthma	Before Rukshan Pachan	After Virechan	After Shaman Drug	
Criteria				
PEFR	180 lit./min.	200 lit./min.	240 lit./min.	
SMI	2 second	3 second	4 second	
Inspiration Time	7 second	3.5 second	3.2 second	
<b>Expiration Time</b>	2.5 second	2 second	2.41 second	
R.R.	22/min.	19/min.	18/min.	
<b>Breath Holding Time</b>	5 second	7 second	9.26 second	
<b>Expansion of Chest</b>	78 cm	80 cm	82 cm	
Heart Rate	76/min.	80/min.	74/min.	
Breath sounds	Severe - loud inspiration and	Mild - moderate wheezing at	Mild - moderate wheezing at	
	expiratory wheezes	mid-to-end expiration.	mid-to-end expiration.	
Cough	Continuous day morning and	Continuous cough during the day	Morning bouts or after exer-	
	night cough - disturbs activity	and morning - disturbing work	cise - do not disturb work	
Sputum	15 to 25 ml/day	2.5 ml to 1.5 ml/day	Less than 2.5 ml/day	
Speech	Moderate - phrases	Mild - sentences	Mild - sentences	
Breathlessness	Moderate - with talking	Mild - breathlessness with activi-	Mild - breathlessness with ac-	
		ty	tivity	





### **DISCUSSION**

Asthma is a complex inflammatory disease that causes airway narrowing and is associated with changes in the levels of eosinophils, mast cells, lymphocytes, cytokines and other inflammatory cell products. It is well known that patients with asthma have high levels of specific IgE that bind to receptors of mast cells and other inflammatory cells. Interaction between IgE antibody and antigen results in the activation of a series of inflammatory cellular reactions, including the release of mediators such as histamines, prostaglandins and leukotrienes, which subsequently lead to contraction of airway smooth muscle and bronchoconstriction [5]-[7].

Firstly, give *Deepan Pachan Chikitisa* for an initial seven days. Because the patient has *Mandagani* (suboptimum digestive power) and *Sama* state, oral

Ayurveda medicine was given before Panchakarma to digest the *Ama* (~undigested food that vitiated the Doshas). *Rukshan Pachan Kwatha*<sup>[8]</sup> contains *Triphala, Guduchi, Musta*, and *Vidanga* and has Deepan and Pachan properties. *Gandharva Haritaki* is *Anulomaka* and hence helps in *Sampraptibhanga*.<sup>[9]</sup>

### Snehapan

Vasa, Yastimadhu, Kantakari, Pippali, Gambhari, Shati, Tulsi Beeja, and Ela Siddha Ghrit are used for Shodhan Snehapan.

Dosha is present throughout the body. By its Sukshma Guna and Kledana karma, Sneha brings the Dosha to Koshtha from Shakhas. Sneha's Kledana (moistness or wetness) karma acts as a solvent for the morbid Doshas, eliminating the fat-soluble impurities in the body.

S.no.	Content	Latin Name	Karma
1.	Vasa	Justicia adhatoda	Shwasa-Kasa har, Rakatapitta shamak
2.	Yastimadhu	Glycyrrhiza glabra	Swara Vardhaka, Vata-pitta Nashak
3.	Kantakari	Solanum virginianum	Shwasa-Kasa har, Kapha Nashak
4.	Pippali	Piper longum	Shwasa-Kasa har, Kapha Nashak
5.	Gambhari	Gmelina arborea	Rasayan
6.	Shati	Hedychium spicatum	Shwasa-Kasa har, Kapha Nashak
7.	Tulsi Beeja	Ocimum sanctum	Shwasa-Kasa har, Kapha Nashak
8.	Ela	Elettaria cardamomum	Shwasa-Kasa har, Kapha Nashak

#### Virechana

In Tamaka Svasa, Charaka counselled Samshodhana and focused more on Virechana Karma to balance the unbalanced Doshas (Vata and Kapha). Furthermore, for an asthmatic patient, substances that reduce Vata and Kapha (Kapha-Vataghnam), Ushna Virya (hot in potency), and produce a downward movement of Vata (Vatanulomanam) are beneficial as medicines (Bhesaja), Pana (drinks), and Anna (meal). [10]

Ikshabhedi Rasa was used for Virechana as. Generally, Ruksha Virechana Yoga is Tikshan in nature. It is a Sukha Virechaka drug and acts as Pitta Shamaka and Vatanulomaka. Virechana Dravya acts either by a bulk effect or by irritant or stimulant action on the intestinal wall, excites Auerbach's plexus, and causes increased peristalsis. The mucosa of the intestinal tract becomes extensively irritated, and its secretion rate is greatly enhanced. In addition, the mobility of the intestinal wall usually increases many folds. As a result, large quantities of fluid are made available for washing these irritating agents, and at the same time, strong propulsive movements propel this fluid forward.

# Concept of Virechana in Tamak Shwasa

- 1. The site of origin of shwas rog is "Pitta Sthana Samudhbhava." And this pitta sthana is described by Chakrapani as Adho Amashya. This is the region between the hridaya and nabhi. The primary pathology of shwasa roga occurs here, and the predominant dosha pitta is present here. And to purify the site of origin, virechana is advocated [11]
- 2. The patient of tamaka shwasa is often weak and in the chronic stage, hridya as the mula of pranavaha shrotas<sup>[12]</sup> is also involved. In this condition, vamana is a very difficult and complicated procedure & the virechana is quickly done without threatening the life of the patient.
- 3. Accumulation of Mala and Vayu in Udara leads to Apana vayu vitiation, which is followed by vitiation of Prana Vayu, leading to Shvasa. In patients of Tamaka Shvasa, an Apana vaya vitiation-like condition is often seen. Anuloman[13] (

- Type of Virechana) is expected to relieve this condition; thus, therapy is more helpful in treating Shvasa.
- 4. If Tamakashvasa presents due to Saama Vayu, it leads to inflammation. In modern view, Asthma is considered a chronic inflammatory condition of the airways. In the sign of Virechana, Shotha[14] is one of the diseases, as Shotha results from obstruction in the natural path of Vayu. Virechana overcomes this obstruction and reduces the inflammatory condition.
- 5. Udakavaha Srotasa is involved in the pathogenesis of Shvasa<sup>[15]</sup>. In a deranged state, it results in excessive Kleda formation. Kleda has Apa Mahabhuta dominancy, particularly in Kaphapradhana samprapti. The vitiated status of Kleda is observed. Excessive secretions in the lungs are present at this stage. The word Virechana is formed from "rech" Dhatu meant for secretion. Virechana removes this Kleda. Thus, it reduces the severity of Shvasa.
- 6. Shvasa Vyadhi is mentioned as Aamashaya samutha<sup>[16]</sup>, where the derangement of Agni leads to Agnimandya. In this case, Virechana will be helpful by maintaining the proper status of Agni, which is the root cause of almost many diseases.
- 7. Embryological development of Phupphusa occurs from Shonitaphena<sup>[17]</sup> i.e. main source is Shonita. In the case of Shvasa, Vyaktisthana is Urah, where Phupphusa is situated. Hence, Khavaigunya mainly occurs here; hence, Virechana, the best treatment for the purification of Rakta, may be useful for clearing the Khavaigunya in Phupphusa.
- 8. Pratilom gati of vaya in pranavaha channel result in tamak swasa<sup>[18]</sup>. In this case, Anuloman is best by Virechana.

## Kapikachu Bheeja Churna (Mucuna pruriens)

The L-DOPA isolated from the methanol extract of the seed possesses antihistaminic activity by inhibiting clonidine-induced catalepsy and mast cell degranulation in mice at doses 50, 100 and 200 mg/kg<sup>[19]</sup>. As a result, it shows anti-inflammatory and

antihistaminic properties, so it acts as an anti-asthmatic drug in patients. [20]

### CONCLUSION

Breathing becomes difficult due to inflammation of the narrow and enlarged air channel caused by bronchial asthma. According to Ayurveda, Virechana is the optimum course of treatment for Tamaka swasa. In the case in point above, the patient feels better and experiences significant symptom relief after receiving Virechana.

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