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Review Article

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UNDERSTANDING BRONCHIAL ASTHMA IN TERMS OF AYURVEDA

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ABSTRACT

Respiratory diseases contribute significantly to global morbidity and mortality, with asthma being a prevalent chronic non-communicable condition affecting a vast population worldwide. Ayurveda, an ancient Indian medical system, categorizes respiratory ailments into distinct types, including Tamaka Shwasa, characterized as an independent disease entity with its unique etiology, pathophysiology, and management strategies. Comparable to bronchial asthma, Tamaka Shwasa perturbs the Pranavah Srotasa (Respiratory system), particularly involving vitiation of Prana Vayu and resulting in symptoms such as dyspnea, cough, wheezing, and chest tightness. This review aims to elucidate bronchial asthma from an Ayurvedic perspective, exploring its causative factors, pathogenesis, and treatment modalities.

KEYWORDS: Bronchial asthma, Tamaka Shwasa, yoga modalities.

INTRODUCTION

Respiratory diseases impose a significant global health burden, contributing prominently to morbidity and premature mortality.^[1] Among these, asthma stands out as one of the most prevalent chronic non-communicable diseases, affecting a substantial portion of the global population with widespread distribution.^[2] In Ayurveda, an ancient Indian system of medicine, respiratory disorders are classified under the umbrella term "Shwasa Roga," with Tamaka Shwasa identified as a distinct subtype. Characterized as a "Swatantra" Vyadhi,

Tamaka Shwasa is recognized for its autonomous disease nature, encompassing its own unique etiological factors, pathophysiological mechanisms, and treatment approaches.^[3]

Bronchial asthma closely correlates with Tamaka Shwasa in Ayurvedic understanding, where both conditions disrupt the Pranavah Srotasa, the respiratory system, primarily affecting Prana Vayu's normal physiological functions. This derangement often leads to cough obstruction and a reversed movement of Prana Vayu (Pratilom Gati), typifying the clinical presentation with symptoms such as breathlessness, wheezing, and chest constriction. [4,5] These paroxysmal episodes can persist for extended periods, severely impacting the quality of life and sleep patterns of affected individuals.

Globally, asthma affects both sexes equally in adulthood, while in childhood, males are more commonly affected, presenting a male-to-female ratio of 2:1. [6] The rising incidence of asthma in India parallels global trends, with increasing prevalence observed particularly among children and the elderly. [7,8] Factors contributing to asthma's prevalence encompass a spectrum of indigenous and exogenous influences, including genetic predispositions, environmental triggers, medications, infections, smoking, and psychosocial stressors. [9]

Despite significant advancements in modern medicine, including the development of advanced antibiotics, corticosteroids, and bronchodilators, challenges persist in managing asthma effectively. Patients with compromised immune systems due to recurrent infections, malnutrition, drug toxicity, chronic disease persistence, and psychological stress are particularly susceptible to exacerbations, further compromising their quality of life. [10] In the Indian context, asthma represents a critical public health concern and ranks among the leading causes of morbidity and mortality.

This review aims to provide insights into bronchial asthma through the lens of Ayurveda, elucidating its pathogenesis and exploring therapeutic strategies. By integrating Ayurvedic principles with conventional medicine, holistic approaches to asthma management can potentially enhance treatment outcomes and patient well-being.

AIM AND OBJECTIVES

- 1. To understand bronchial asthma in terms of Ayurveda.
- 2. To review the causative factors, pathogenesis, and treatment modalities of Tamaka Shwasa.

Ayurvedic disease review

Tamaka shwasa

Tamaka Shwasa is an Ayurvedic term for a condition similar to bronchial asthma. The name "Tamaka" is derived from the nature of the disease, where attacks often precipitate during the night, causing severe dyspnea (Difficulty in breathing) that makes the patient feel as if they are entering into darkness.

Types of tamaka shwasa

Charaka, an ancient Ayurvedic scholar, mentioned two allied conditions of Tamaka Shwasa, which are further complications of the primary disease. These conditions are known as Pratamaka and Santamaka. Sushruta and Vagbhata, other prominent Ayurvedic scholars, mentioned only Pratamaka, which includes clinical manifestations of Santamaka.

Pratamaka shwasa

Pratamaka Shwasa occurs when a patient suffering from Tamaka Shwasa experiences fever and fainting. This condition indicates the involvement of Pitta Dosha. Pratamaka Shwasa is aggravated by factors such as Udavarta (Reverse movement of Vata), dust, indigestion, humidity (Kleda), suppression of natural urges, Tamoguna (a quality that induces inertia or darkness), and darkness. However, the condition is alleviated by cooling regimens. Interestingly, while cooling regimens can be a causative factor for Tamaka Shwasa, they provide relief in Pratamaka Shwasa due to the involvement of Pitta Dosha.

Santamaka shwasa

Santamaka Shwasa occurs when a patient of Pratamaka Shwasa feels submerged in darkness. While Chakrapani, another Ayurvedic scholar, considered Pratamaka and Santamaka as synonyms, Charaka referred to them as distinct conditions representing different stages or intensities of Tamaka Shwasa.

Principle of treatment (Chikitsa sutra) for Tamaka shwasa (Bronchial asthma)

Treatment approach in ayurveda

The classical texts of Ayurveda suggest a multi-faceted approach to treating Tamaka Shwasa, emphasizing the importance of addressing causative factors, detoxifying the body, and strengthening the patient's overall health.

1. Nidana parivarjan (Avoidance of causative factors)

In treating Tamaka Shwasa, it is essential to strictly avoid all precipitating or predisposing factors. Failure to avoid these factors can aggravate the Doshas involved in the pathogenesis, worsening the prognosis.

2. Samsodhana (Detoxification therapy)

Charaka emphasized that patients with a strong build and dominance of Kapha and Vata should undergo Samsodhana therapy, which includes procedures like Vamana (emesis) and Virechana (Purgation) as necessary.

Steps in samsodhana karma

a. Snehana (Oleation)

Gentle massage of the chest with oil mixed with salt (Taila and Lavana) to loosen tenacious sputum in the channels.

b. Swedana (Sudation)

Perform Swedana using methods like Nadi, Prastara, and Sankara to dissolve Kapha in the body Srotas, soften the channels, and restore normal Vata movement.

c. Vamana (Emesis)

To eliminate deranged Kapha, Vamana should be administered after proper Swedana. Suitable drugs like Madanaphala and a mixture of Pippali, Saindhava, and Madhu can be used. This expels vitiated Kapha, purifies the body channels (Srotas), and normalizes Vata movement.

d. Dhumapana (Inhalation therapy)

After Vamana, to eliminate residual pathogenic substances (Doshas in Linavastha), Dhumapana (Inhalation therapy) should be performed.

e. Virechana (Purgation)

Defined by Charaka as the elimination of waste products (Doshas, Mala) through the lower channels (anus). Virechana drugs should have properties like Vyavayi, Vikasi, Suksma, Ushna, and Tikshna.

3. Samsamana (Pacifying therapy)

For patients not eligible for Samsodhana Karma (e.g., children, elderly, or weak patients), Samsamana therapy should be adopted. This includes:

- Deepana (Digestive stimulants)
- Pacana (Digestive aids)
- Kapha-Vata pacifying drugs
- Regimens and Drugs that purify Pranavaha Srotas (Respiratory channels)

4. Brimhana and Rasayana chikitsa (Nourishing and Rejuvenation therapy)

Recurrent attacks of Tamaka Shwasa can debilitate the patient due to Dhatu depletion (Dhatukshaya). This condition can worsen the pathogenesis and hinder the application of vigorous treatments during an attack. Therefore, it is crucial to maintain the patient's physical strength through Brimhana treatment. Additionally, due to the chronic nature of the illness, Rasayana Chikitsa (rejuvenation therapy) is beneficial in preventing subsequent attacks and promoting overall health.

Sequential treatment administration

During an attack

- Lavana Taila Abhyanga (Oil massage with salt)
- Swedana
- Snigdha diet (Unctuous diet) to control Rukshana (Dryness) without aggravating Kapha
- Sadya Vaman (Emergency emesis)
- Dhumapana followed by Shaman Chikitsa (Pacifying treatment)

Between attacks

Virechana followed by Vyadhihara Rasayana (Disease-curing rejuvenation) and Brimhana Chikitsa (Nourishing treatment)

These procedures effectively alleviate symptoms and prevent subsequent attacks of Tamaka Shwasa. Formulations that control Vata and Kapha while boosting tissue and organ strength, controlling remodeling, and enhancing immunity against risk factors are selected to treat Tamaka Shwasa.

Yogic management of bronchial asthma

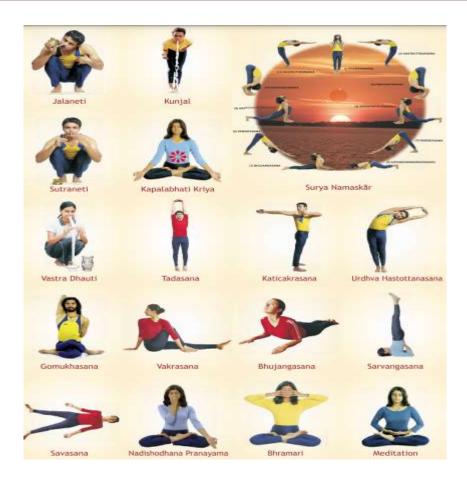
A) Dietary management

- The diet plays an important role in the management of asthma.
- There are foods, which are allergic to asthma patient and such foods should be avoided.
 These foods include cold foods, ice creams, chocolates, other stimulants, fruits like banana, milk & milk products etc.
- Foods which add to the mucous production should be specifically avoided.
- Try to take warm water/ drinks
- Avoid ghee, butter, oily, spicy and other Kapha aggravating diet.
- When you have asthma attack, avoid taking food after sunset.

B) Yogic management

The role of Yoga in the management of Bronchial asthma is well documented now. Aim of the treatment in Asthma should be to prevent the broncho-constriction and to tackle the triggering factors.

- Shatkriyas: Jalaneti, Sutraneti, Kapalabhati, Kunjal, Vastra dhouti
- Om chanting and Prayer
- Suryanamaskara
- Selected practices of sukshma vyayama: Uccarana sthala tatha Visuddha chakra shuddi, Buddhi tatha dhriti shakti vikasaka, Vaksha sthala shakti vikasaka 1 and 2
- Yogasanas: Tadāsana, Katichakrasana, Urdhwa hastottanasana, Gomukhasana, Ushtrasana, Vakrasana, Bhujangasana, Sarvangasana, Sarala Matsyasana, Shavasana
- **Pranayama:** Full yogic breathing, Nadishodhana Pranayama, Suryanadi Pranayama, Bhramari, Bhastrika
- **Special practice:** Yoga Nidra/ Antarmouna
- **Dhyana (Meditation):** Om Chanting, Om Meditation



DISCUSSION

Shwasa, including Tamaka Shwasa, is considered a Kapha dominant disease in Ayurveda. Tamaka Shwasa is characterized by its "Swatantra" (Independent) nature, distinguishing it from other types of Shwasa, which may occur as symptoms of other conditions or in terminal stages (e.g., Maha, Urdhva, and Chinna Shwasa). Tamaka Shwasa's symptoms and pathogenesis align closely with bronchial asthma as described in modern medicine.

Types and pathogenesis of tamaka shwasa

Types of shwasa

- 1. **Kshudra shwasa:** A mild condition that often does not require medication.
- 2. Maha, Urdhva and Chinna shwasa: Severe conditions typically seen in terminal stages.
- **3. Tamaka shwasa:** Has independent (Swatantra) nature and is similar to bronchial asthma.

Allied conditions of tamaka shwasa

 Pratamaka shwasa: Involves Pitta Dosha and is aggravated by factors like Udavarta, dust, indigestion, humidity, suppression of natural urges, Tamoguna, and darkness. It is alleviated by cooling regimens. Santamaka shwasa: A severe condition where the patient feels submerged in darkness. While Chakrapani considers Pratamaka and Santamaka as synonyms, Charaka describes them as distinct ailments based on the intensity of the attack.

Nidana (Causative factors)

- Vata and Kapha prakopaka nidana: Factors that aggravate Vata and Kapha Doshas as listed by Charaka.
- Modern risk factors: Classified into predisposing factors and factors causing acute exacerbation of asthma.

Pathogenesis

- Charaka's view: Tamaka Shwasa originates from Pittasthana.
- **Vagbhata's view:** Originates from Aamashaya.
- Chakrapani's interpretation: Pittasthana is related to the upper part of Aamashaya, though this remains controversial.

In the pathogenesis, vitiated Kapha and Pratiloma Vayu play crucial roles, leading to inflammation (Shotha) and obstruction (Srotorodha) in the airways due to Saama Vayu.

Classification based on samprapti (Pathogenesis)

- Vata pradhana (Chronic)
- Kapha pradhana (Acute)

Principles of management (Cikitsa sutra)

Nidanaparivarjana (Avoidance of causative factors)

Avoidance of precipitating and predisposing factors is crucial to prevent Dosha aggravation and worsening prognosis.

Shodhana (Detoxification therapy)

- Vamana (Emesis)
- **Virechana (Purgation)**
- **Local Snehana and Swedana:** Use of Salavana Taila for massage and heat therapies.
- Avoidance of sneha basti: Contraindicated by Sushruta.

Shamana (Pacifying therapy)

- Drugs with Kaphahara (Kapha-reducing), Vataghna (Vata-reducing), Ushna (heating), and Vatanulomana (Normalizing Vata) properties.
- Importance of Brihana (Nourishing) therapy as emphasized by Charaka, which is similar to Rasayana (Rejuvenation) therapy.

Contemporary management

Use of bronchodilators, corticosteroids, and anticholinergics aligns with the modern treatment of bronchial asthma.

CONCLUSION

This conceptual study bridges historical Ayurvedic insights with modern understanding of bronchial asthma. It highlights the need for a preventive and therapeutic approach, emphasizing the potential of Ayurveda's safe and effective modalities for managing bronchial asthma.

Ayurveda offers a comprehensive understanding of Tamaka Shwasa, including its types, pathogenesis, and treatment approaches, which align closely with modern medical descriptions of bronchial asthma. The integration of Ayurvedic principles with contemporary treatment modalities may provide a holistic and effective approach to managing this common respiratory condition.

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