

Childhood Asthma a Burning Public Health Issue -An Ayurveda Oppurtunities and Awareness

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Abstract—Bronchial asthma belongs to a heterogeneous group of conditions that have different outcomes over the course of childhood. It is one of the leading public health issues in developed as well as developing countries and prevalence is alarmingly increased since 1970s; in current scenario a rough estimate is of between 10% - 15% in 5-11 year old children. It has multi factorial causation as geographical location, environmental, behavioral, and racial and life style, along with allergic conditions. Despite the development of research strategies and protocol based management disease is not curable. Ayurveda consider it as the *Tamaka Shwasa* with the scientific line of treatment from curative and preventive aspect. Use of Ayurveda remedies and protocols in childhood asthma to arrest the different condition and detrimental outcome of childhood asthma is found to be more effective in today's practices and it getting proves on the parameters of evidence based medicine too. Hence there is a plentiful scope for Ayurveda research in childhood asthma and its requirement of health world and society. This article is an attempt to increase the community awareness of the childhood asthma, its future outcome and its prevention with Indian system of medicine.

Keywords: - Ayurveda, Childhood asthma, Public health, *Tamaka Shwasa*.

1. INTRODUCTION

Bronchial Asthma at present era has become so common that a child is found to be suffered at every door step. There is increasing recognition of the importance of early environmental exposures in the development of childhood asthma. The incidence is highly alarming in developing countries, since 1970s; in current scenario a rough estimate is of between 10% - 15% in 5-11 year old childrenⁱ. Although explanations for relatively rapid changes in prevalence are unknown, environmental factors independently or jointly with genetic factors may be responsibleⁱⁱ. Being the leading cause, it is cause for hospitalization of children in emergency and also school absenteesⁱⁱⁱ. Asthma is a common long term inflammatory condition of airways of the lungs. Asthma attacks all age groups but often starts in childhood. Asthma causes recurrent episodes of wheezing, breathlessness, chest tightness and coughing particularly at night or early morning which vary in severity and frequency from person to person. Ayurveda consider it as the *Tamaka Shwasa* and considered one among 5 varieties of *Shwasa Roga* as explained by ancient

Acharya of Ayurveda. The word *Tamaka* is derived from the root 'TAMU' which means; to choke; to suffocate; darkness^{iv}. "*Tamyati Anena Iti Tamaka*, as per this Sanskrit derivation, the word *Tamaka* represents a diseased condition, which presents with darkness in front of the eyes or tiredness. *Tamaka* means to cause darkness or tiredness. Ayurveda totally believes in three humors of body i.e *Tridosha* – *Vata*, *Pitta* and *Kapha*. These are responsible for any physiological or pathological change in body. *Tamaka Shwasa* is a disease occurred in *Pranavaha Srotasa*; the one which holds the *Prana* i.e, life. Normally *Prana Vayu* governs the process of breathing. Acharya Sushruta describes that normal *Prana Vayu* gets vitiated and its movement is obstructed by *Kapha Dosh*. This leads to increased and labored breathing, results in *Shwasa Roga*^v.

2. AIMS & OBJECTIVES:-

- 1) To promote Ayurvedic principles in understanding and managing *Tamaka Shwasa* in present era.
- 2) To increase the awareness about Asthma and assessing its public related issues from Ayurveda perspective.

3. MATERIALS & METHODS:-

This review was done by compiling the classical Ayurveda literature, Ayurveda Pediatric books, modern pediatric books, magazines, research journals, thesis and dissertations Pub med, different databases, WHO guidelines for non communicable diseases, AIIMS guidelines, CCRAS database, CCIM norms for diseases etc.

4. DISCUSSION:-

Tamaka Shwasa & Asthma- Concepts & Correlations:- *Tamaka Shwasa* shows close resemblance with Bronchial Asthma on the basis of clinical manifestations. Due to exhausting and prolonged conventional treatment majority of asthmatic patients opt Ayurveda treatment for better results and maximum (especially those who take treatment at early stage) get significant relief. The management line is merely

based on short-acting β_2 -agonist, theophylline, oral and inhaled gluco-corticosteroides etc all of which cause a significant side effects in long run^{vi}. Managing Bronchial Asthma on Ayurvedic line of treatment is totally based on the balancing the humours and increased in the Dhatu Bala of the patients in order to increased the longevity.

Etiology: - Ayurveda considers *Aahara* (food habits) and *Vihara* (living habits) as primary cause to occur a imbalance between the *Dosha* and such a imbalanced *Dosha* gives rise to diseases. The etiology for *Tamaka Shwasa* are intake of *Vidahi Aahara* (irritant foods) like tobacco, smoke, mosquito coil smoke, sprays^{vii}, *Guru* (heavy to digest), *Vishthambi* (slow digestible diet), *Rukshaanna* (dry food stuffs), *Kshaya* (emaciation), excessive intake of *Nishpava* (beans), *Masha* (black gram), sesame oil, meat of aquatic animal, unboiled milk, and *Vihara* like dust mites, pollen, fungi, pets- saliva, exercise, residing in cold place, day sleep, long walks etc.

Clinical feature of Tamaka Shwasa:- ^{viii}

- a) *Tivra Shwasa Vega* (decrease in total time of one breathing)
- b) *Prana Prapedaka Shwasa* (Painful respiration)
- c) *Muhurmuhu Shwasa* (increased frequency of respiration)
- d) *Ruddha Shwasa* (obstruction during respiration)
- e) *Ghurghurakam* (breath with sound)
- f) *Shleshma Vimokshante Muhurtam Labhate Shukham* (feels better after expectoration)
- g) *Kaasate Sannirudhyate* (gap in breathing during cough)
- h) *Lalate sweda* (sweating on fore head)
- i) *Vishushkasyata* (dryness of mouth)
- j) *Peenasa* (coryza)
- k) *Kasa* (cough)
- l) *Parshwa Pida* (pain in flanks)

Principles of Ayurveda management of Tamaka Shwasa:-

Management of *Tamaka Shwasa* is classified as *Vegakalina* (during Asthmatic attacks) & *Avegakalina* (during absence of attacks). This is based on removing the blockage due to obstruction of *Kapha* (moist) and reliving spasmodic constriction in the bronchial lumen to maintain easy flow of air through airways.

Treatment:-

The basic treatment plan in *Vegakalina Avastha* of *Shwasa Chikitsa* is:^{ix}

- *Snehana* (massage with oil)

- *Swedana* (fomentation)
- *Vamana & Virechana* (emesis & purgation- purificatory measures)
- *Dhumapana* (fumigation and medicated smoke inhalation)

The massage is basically done either with medicated oil or with sesame oil mixed with rock salt and is applied over chest region. Then steam inhalation called as *Nadi Sweda*, or hot fomentation called as *Prastara Sweda* is applied. These therapies are done to mobilize the obstructed Kapha Dosha and get dissolved it with the heat generated due to fomentation. Acharya Charaka^x, has said that after massage and fomentation the purification should be performed by doing emesis – with salt water, sugarcane juice, decoction of *Yastimadhu* (*Glycyrrhiza glabra*)^{xi} & purgation with *Trvrita* etc herbs. Fumigation is done with medicines like *Haridra* (*Curcuma longa*), *Eranda* (*Ricinus communis*), *Pippali* (*Piper longum*), *Devdaru* (*Cedrus deodara*), *Hartala* (orpiment), *Guggulu* (*Commiphora mukul*), *Agaru* (*Aquilaria agallocha*), *Jatamamsi* (*Nardostachys jatamansi*)^{xii} etc. *Dhumapana* is the measure having prominent local action on the bronchial tree to remove mucous and secretions from the airways. In addition it is also useful to dilation of the bronchial airways.

These all measures help in dissolving intracellular toxins and expel them into exterior of cell from where they are thrown outside the body.

Shwasa Chikitsa in *Avegakalina Avastha*:

- *Shamana Aushadha* and *Aahara Sevana* (pacifying measures)^{xiii} like-
 - 1) *Yusha* (soup) – *Rasnadi Yusha*, *matulungadi yusha*
 - 2) *Yavagu* (rice gruel) – *Hingavadi Yavagu*, *Dashamooladi Yavagu*
 - 3) *Choorna* (Herbal powders) – *Sauvarchaladi Choorna*, *Muktadi Choorna* administered with the honey
 - 4) *Ghrita* (Medicated ghee) – *Sauvarchaladi Ghrita*, *Manashilaadi Ghrita*
 - 5) *Leha* (Licking therapeutic medication) – *Haridradi Leha*,

6) *Rasayana Chikitsa* (Rejuvenating modalities) –
Vardhaman pippali, Chyavanprashsa Avaleham.

Use of *Rasayana* drugs increases the strength of *Pranavaha Srotasa* i.e. it improves the breathing process; it alleviates cough, relieves the asthmatic attacks and bronchospasm of seasonal and non seasonal origin, and also maintain adequate hydration of respiratory system^{xiv}.

Many herbo-mineral compounds are also being used in management of *Tamaka Shwasa* viz. -

- *Mahalaxmivilasa Rasa*- controls asthmatic attacks.^{xv}
- *Shwasa Kasa Chintamani Rasa*- in childhood asthma^{xvi}
- *Abhakra Bhasma* – in asthma and low immunity^{xvii}
- *Godanti Bhasma* – in cough and dyspnea^{xviii} etc.

5. CONCLUSION:-

Ayurveda boost the host defense mechanism by employing *Panchakarma, Rasayana* etc. *Snehana – Svedana* procedures helps to mobilize the obstructed respiratory track with secretions. *Vamana* helps in liquefaction of thick sticky bronchial secretion and so gets easily expectorated where as *Virechana* helps in alleviating aggravated factors like allergens, toxins. So these are very effective in management of asthma. All pacifying medications act as expectorant and soothing in nature. It is because they are of *Ushna Virya* and so has penetrating property. Therefore, Ayurveda line of treatment is looks to be very promising in all different *Avastha* of the *Tamaka Shwasa*. Hence it is very clear that Ayurveda always played an important role in meeting the global health care needs. Considering the holistic approach and potency of Ayurveda line of treatment, it is the requirement of time to mainstreaming the Ayurveda treatment protocols on global platform.

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