



MANAGEMENT OF BRONCHIAL ASTHMA WITH KARNA VEDHANA THERAPY: A NEW AYURVEDIC APPROACH

Ayurveda

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ABSTRACT

Background: Optimal management of Asthma in society is bounded by modern medications and tools with their adverse consequences. Need of conventional alternative form of therapies would help out effectively. The purpose of this old therapy with new approach is to establish faith of people in traditional alternative *Karna vedhana* therapy with scientific validation for better management of Asthma.

Discussion: Asthma is chronic inflammatory condition involving airways characterized by shortness of breathlessness, cough, tightness in chest, etc. Environmental factors, sedentary lifestyle are major culprits on which no binding limits would be set. *Karna vedhana* therapy is fruitful alternative for management of Asthma. Piercing at particular point of concha in external ear has its connection with Vagus nerve which also supplies to bronchial trees.

Conclusion: Good quality Asthma care can be achieved in limited sources with complementary and conventional *Karna vedhana*. Therapy without worsening the condition.

KEYWORDS

Alternative, *Daiv krit chhidra*

INTRODUCTION

Now a day, with increasing pollution in the atmosphere, we see large population that is suffering from lung diseases day by day. Each day our lungs are directly exposed to more than 7000 liters of air which contains varying amount of different bacteria and viruses along with small dust particles. It account for up to a third of deaths in most countries and a major proportion of visits to doctors and time away from work and school. Bronchial asthma is one of the most prevalent lung diseases which have become global headache due to its continuous increasing number of sufferers.

Bronchial Asthma is defined as a chronic inflammatory disorder of the airways which manifests itself as recurrent episodes of wheezing, breathlessness, chest tightness and cough due to hyper-responsive bronchi and airflow obstruction, generally reversible spontaneously or with treatment [1]. It is a common respiratory disorder with prevalence ranging from 1-18% in different populations. The prevalence of asthma in India is about 2% with a burden of about 17 million asthmatic patients. Thus Asthma imposes a huge burden on the society of India due to loss of output by the individuals due to suffering. Incidences of different Types of Asthma are emerging day to day[2] :- Adult-Onset Asthma, Allergic Asthma, Asthma-COPD Overlap, Exercise-Induced Bronchoconstriction (EIB), Nonallergic Asthma, Occupational Asthma are some the examples.

The Global Initiative for Asthma (GINA) have mentioned the following categories of medications for the management asthma: short-acting beta agonists (SABA), inhaled corticosteroids (ICS), long-acting beta agonists (LABA), leukotriene receptor antagonists (LTRA), systemic corticosteroids (SCS) and IgE Immunomodulators (Anti-IgE)[3].

A serious adverse effect of corticosteroid therapy is adrenal suppression [4] Along with it some other comorbidities are associated with the use of above management specially corticosteroids like obesity, osteoporosis, dyspeptic disorder, glaucoma, hypertension, Hypercholesterolaemia, sleep disorders[5]

Ayurvedic View on Bronchial Asthma

Breathing disorders are named as *Shwas Rogas* in Ayurvedic medical science and are categorized under life threatening medical emergency depend on its type.

Types of *Shwas Roga* mentioned in classical texts [6]:i) *Maha Shwas* ii) *Urdhva Shwas* iii) *Chhinna Shwas* iv) *Tamak Shwas* v) *Kshudra Shwas* *Tamak Shwas* is merely considered as Bronchial Asthma as

symptoms are same in this type as mentioned above. *Tamak* is *Yapya Vyadhi* in point of prognosis means a disorder in which medicine is to be taken for whole life to prevent exacerbation of the disease and to prevent episodic symptoms. Conservative management with modern medicine is effective but has some adverse effects due to long term effects. Management with *Ayurvedic* medication is also effective without significant side effects but most of the patients neglect of give off medication due some reasons like cost affordability, unpleasant taste of medicines or negligence after getting improvement, etc. Majority of urban population having Asthma are aware about their condition and even follow the instructions but they don't want to take *Ayurvedic* medications for whole life and usually ask for the better alternative. *Karna Vedhana* is one of the better options for those who have initial phase of Asthma with mild symptoms.

KARNAVEDHANA

Karna Vedhana therapy is minor surgical procedure described by *Acharya Sushruta* (Father of Surgery) for children. It is done for two purposes [7]: Ornaments and for *Raksha Karma*. i.e. Protection from *Vrididhi Roga* probably congenital inguinal Hernia. But since recent times; it is being done in the management of Bronchial Asthma (*Tamak Shwas*) in the field of *Ayurvedic* Medical Science. It's also famous in acupuncture therapy in China for the same purpose.

Ear as site for *Karna Vedhana*

An ear is an organ for hearing and postural balancing during motion and consists of 3 parts i) External ear ii) Middle ear iii) Internal ear

External ear has different parts: i) Outer cartilaginous part i.e. Auricle or ear pinna and ii) Auditory canal

Auricle has different regions. Curving out rim called Helix, inner to it and curved rim called Antihelix. The protruded and region which partially obscures auditory canal is Tragus and as does facing it on opposite side is Antitragus. Before of the auditory canal the hollow region is Concha. A bright, colourless, avascular, small spot is seen at the concha in the flash of torch also said as *Daiv Krit Chhidra*. This spot is an exact place for *Karna Vedhana*.

PROCEDURE

Karna Vedhana procedure is done at the external ear (particularly at concha) by pointed silver needle. Left ear is generally preferred for the procedure as it is more convenient for right handed physician and vice versa. Patient is to be prepared mentally for the procedure by convincing him for *Karna Vedhana*. Written consent form is to be undersigned by him thereafter.

Instruments required:

Sterile Hand gloves, sterile kidney tray with betadine gauze pieces, spirit gauze pieces, Sterile round body straight Silver needle, flash torch, etc. The Silver needle is designed as pointed at one end and with a small loop on the other end so that the pointed end can be entered into loop and can be fixed easily.

Stepwise procedure is as follow:

1. Part preparation is done by cleaning the whole external ear skin i.e. its anterior and posterior surfaces by rectified spirit swab twice or thrice to make sure that no dust or skin secretions are present especially on the concha
2. Then the concha is illuminated by a flash torch kept on its posterior side while the Physician stands facing its anterior side to visualize a bright, colourless, avascular, small spot in the concha which is also said as *Daiv Krit Chhidra*.
3. A simple round body straight Silver needle is then pierced briskly through this spot and is kept in place to be used as a ring.
4. The procedure is done with very fine hand and should be exactly at the *Daiv Krit Chhidra* so that no single drop of blood is to be oozed out.
5. The pierced point i.e. *Daiv Krit Chhidra* is then covered by sterilized cotton anteriorly and posteriorly to save from dust and injury.

Postoperative Instructions:

The patient is advised to apply warm mustard oil with turmeric powder at the point of piercing. Silver ring is moved a little bit once a day upto 8-10 days. Thereafter the silver ring can be removed and a silver or gold nose pin can be placed at the same point. The nose pin is to be kept for whole a life.

Follow up:

Patients are advised to report after one week or whenever they had any complaint, if necessary. In case the Asthmatic Attack recurred after *Karna Vedhana*, they were advised to take whatever treatment was necessary to relieve them.

Pathya and Apathya

The diet should be fresh, warm, light nutritious and well balanced.

Avoid Fried and fatty food, heavy diet, over eating, smoking, alcohol drinking, paan masala, eggs, meat, milk, curd, beans, urad pulse, cold drinks, ice cream and rice for at least 45 days.

The patient is advised to avoid facing dust, smoke and cold winds. Protect pierced ear from getting wet by water.

DISCUSSION

Acharya Sushruta had advocated *Karna Vedhana* for the prevention and management of *Vridhi roga* (Inguinal Hernia) which is one of the successful measures for its management. Reason for its effectiveness might be it is controlling the increased abdominal pressure and trying to bring it to its normal range and so that is same in case of *Tamak Shwas* also as causative factor of *Tamak Shwas* is *Prana-Apana Vayu*[8]. *Pran Vayu* and *Apana Vayu* are related to one another and make a balance between each other for a healthy life. So there is need of managing equilibrium between *Prana* and *Apana Vayu* by maintaining intra abdominal pressure to get relief in *Tamak Shwas*. Our ancient knowledge pulls our attention to think on scientific aspects also to find relation between ear and asthma.

Trachea and the bronchi are innervated by anterior and posterior pulmonary plexus (autonomic plexus formed by pulmonary branch of Vagus nerve, recurrent laryngeal nerve and sympathetic trunk)[9]. Bronchi receive nerves from the parasympathetic nervous system including efferent cholinergic fibres and non-myelinated sensory nerves (C fibres).

They also receive Non-cholinergic Non-adrenergic (NANC) inhibitory fibres, which travel with the cholinergic fibres of vagus and provide the only direct neuronal bronchodilator pathway[10].

Concha and most of the area around external auditory meatus is supplied by Auricular branch of the Vagus nerve governing the sensory part at that region. Moreover this relation of Vagus nerve that its part is supplying to Trachea, Bronchi and external ear. Stimulation of the Auricular branch by *Karna Vedhana* indirectly stimulates cholinergic

fibres resulting in dilatation of Trachea and th Broncheal tree. Hence this mechanism is helpful in chronic Asthmatic patients due to its prolonged bronchodilatory effect.

CONCLUSION

Concerns related to adverse effect highlight the need of complementary and alternative therapies in adolescents as well as poor economic class with further research on traditional asthma medication. Effective complementary and alternative practices might be used for the management of mild to moderate Asthma as conventional therapies. Also there is need of gold standard for good quality and evidence based model so as to strengthen conventional beliefs of non medicinal *Karna Vedhana* therapy without disturbing international asthma guidelines.

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