ABSTRACT

Aim: To study Rasayan effect in pranvahasrotasa of Vasavleha on bronchial asthma (shwasvyadhi) in children. Materials and methods- In this study 60 patients of age group 6to12yrs irrespective of sex of uttam and madhyam sharirbal in avegavastha of shwas having complaints of previous attacks of dyspnea, cough, wheezing, increased respiratory rate are treated with Vasavleha 10ml for 5 to 9 year age group and 15 ml for 6 to 9 year age group 8 hrly for 60 days in experimental group and in control group patients were given prescribed Aaharvihari and pathyapathyachikitsa. Patients are observed by 1. Events of dyspnea (shawskashtata) 2.Increased shawsveg 3.wheezing 4.cough 5.vital capacity of lungs by spirometry.

Result- Vasavleha reduces dyspnea, increased shwasveg wheezing and cough significantly and increases vital capacity in children given in doses of 10 to15ml 8hrly for 30 to 60 days. Conclusion -This research work concludes that Vasavleha acts as an excellent remedy as Apunurodbhav chikitsa of asthma as Vasavleha acts as mucolyte, expectorant, bronchodilator anti-allergic in asthma. It rejuvenates Pranvahasrotasa by rasayan effect.

Keywords: Rasayana effect, Vasavleha, Pranvahasrotasa, Shwasvyadhi.

INTRODUCTION

Asthma is one of the common chronic debilitating diseases in world. It is estimated that around 300 million people currently have Asthma. Worldwide aprr.80% of asthmatics report onset before of 6yr of age.(10 to15% in 5to 11yrs age). Asthma is chr. Inflammatory condition of lung airways results in episodic airflow obstruction, airway inflammation and airway hyperreactivity. Risk factors are presence of allergies, frequent RTI, LBW, exposure to smoke,dust and heredity etc. Some suspect that it is disorder of immune system;when body fails to make enough protective antibodies. the rate of asthma increases as communities adopt western lifestyle and increased pollution.

Asthma is a kaphavata predominant disorder, its incidence should be witnessed more either during Balyavastha, which is the normal time of kaphadominance. There is no cure for Asthma as per the conventional medical science. The management line is mainly based on short actingB2-agonist, theophylline, oral and inhaled glucocorticosteroids etc.;all of which cause significant sideeffects in long run. The WHO and international Asthma Council highlights that whenever there is use of traditional medicine in asthama care the conventional therapy should not be stopped because lack of evidence of safety and efficacy of these therapy. This highlights the need for clinical researches in
suitable design to evaluate the safety and efficacy of our therapy for asthma.  

In case of paediatrics Avaleha is one of the most popular kalpana for easy administration, palatability and long shelf life. It has been widely used as Rejuvenator (Rasayan) by Aacharya.\textsuperscript{1,10} Vasavleha either prepared from swarasa or kwatha have shown consistent results for most of the symptoms.\textsuperscript{11} Here Honey gives a soothing effect whereas Ghrita pacifies vata and pitta. Another reason for this is also supported by Acharya Charaka where he states that Brihana chikista is excellent for treating the Shwasvyadhi. This may be fulfilled by Avaleha as it contains Guda, Ghrita and Honey.\textsuperscript{1} 

**MATERIALS AND METHODS—**

**ABOUT THE MEDICINE—**

**VASA—** Ras-Tikatakashay Vipak-katu, Virya-Sheet\textsuperscript{7,7}  

*Vasa* is excellent remedy of respiratory disorders and probably this might become the drug of the millenium as these disorders are on upswing. *Vasa* apart from having volatile oils, contains a substance akin to bromhexine chloride that act as an expectorant. Vasa contains alkaloids vasicine (bronchodilator, expectorant), leaves and roots contains other alkaloids vasicine and vasicinolone and vasinol etc.\textsuperscript{8,9}  

*Vasa* makes sticky phlegm dissolved and aids in it easy exit. This gives utmost relief in productive bouts of cough. It reduces inflammation and spasm of bronchial tree. It also soothes the throat hence relieves pharyngitis, laryngitis, chr. Cough. When taken for longer period of time; it builds up the whole respiratory system including lungs as Rejuvenator (Rasayan).\textsuperscript{5}  

**Sarkara—** (misri/sugar)— It fight off symptoms of stress and anxiety. It also improves digestion and used in weakened immune system and chronic fatigue. It is Tridoshaghnha.  

**Pippali**—It contains essential oils alkaloids, resins, waxy alkaloids, terpenoids, piperine, pipartine, pipisterol, sesamine, steroids, glycosides.\textsuperscript{8,9} It has *katu ras, ushna virya* and *vathashleshmahr* property.  

**Madhu—** (honey)—It has properties like lekhana, sandhan, shodhana, ropana and it is hygroscopic in nature having 3.2 to 4.5 ph. It is having ability to promote phagocytosis, detoxification and proteolytic action. It prevents colonization and bacterial growth in tissues.\textsuperscript{7,8,9}  

**Goghrita**—It is madhur ,mridu, sheeta. It is vata pittashamak not shleshmavardhak. It is Deepak and balya.  

**Asthama—** (Shawasvyadhi)—The word *Asthama* means struggling for breath. It is a diffuse obstructive disease of airway; the elements causing airway obstruction are—  

- Spasm of smooth muscle of bronchii and bronchioles.  
- Oedema and irritation of mucous membrane of bronchii and bronchioles.  
- Secretions in bronchioles that are viscid and mucoid and plug the lumen of bronchi and bronchioles.  

The above factors together with the normal contraction of the air passage during expiration may secure to explain expiratory wheeze. This obstructs bronchi effectively and prevents sputum from being expectorate.  

As attack progresses the closure of lumen of bronchii may progress Patient dies always in status asthmaticus due to almost complete occlusion of airway.  

**Aim and objective** - To study Rasayan effect in pranvahasrotasa of Vasavleha on bronchial asthma (shwasvyadhi) in children.  

**Study design** -
In this study 60 patients of age group 6 to 12 yr irrespective of sex of uttam or madhyam sharirbal in avegavastha of shwas having previous attacks of asthama were treated under:

1. **Experimental group** --- Patients were treated by Vasavleha 5gm to 6 to9 yr age and 10gms to 9 to12yr t.i.d. On empty stomach

2. **Control group** --- Patients were observed only by giving prescribed Aahar vihar.

**Selection criteria** --- Patients having c/o previous attacks of dyspnea, cough,wheezing , increased respiratory rate.

**Rejection criteria** --- Patents below 6yrs patients with serious medical emergen-cies,serious infections,patients having surgery indicated pathology.

**Observation** --- Patients were observed by following symptoms with following gradation and spirometry.

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*Pathya Apathya in Shwas—Aahar-Supachya*(easy to digest),*laghu*(light diet), *sathisali, raktasali, godhuma, chagdug-ha, honey,sura*, meat of chicken ,parrot, rabbit.*Vegetable like Rason Patol*. Fruits like *grapes, pushkar*, add *trikatu* in meal. Vihar — To stay in warm room, wear warm clothes, not to suppress natural urges.
*Abpathya — Abhishyandi and vidahi vish-tambhi aahar* like curd, milk .milk products, banana, and pickles. *Guru aahar* like nonveg, egg, fish, sweets. Idli, dosa. *Ruksha aahar* like snacks, fast foods etc., All allergens like dust, smoke, and eatables causing paroxysms of dyspnea should be strictly avoided.
Vihar --- Avoid contacts with allergens, cold climate, excess exercise, situations causing mental excitation or irritation. Avoid suppression of natural urges.\(^\text{12}\)
Follow up of patients are recorded on 7th, 15th, 30th, 60th day by parameters as lakshana shwaskastata (dyspnea), increased RR (shwasveg), cough, wheezing and vital capacity in spirometry.

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<tr>
<th>Mean difference in vital capacity</th>
<th>S.D</th>
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<td>133.33</td>
<td>50.74</td>
<td>9.264</td>
<td>14.39</td>
<td>2.15</td>
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At p<0.05 is highly significant.

**STASTICAL ANALYSIS---CALCULATIONS IN EXPERIMENTAL GROUP**

**Table No: 2**

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<th>Mean difference in vital capacity</th>
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<td>23.33</td>
<td>28.56</td>
<td>5.214</td>
<td>4.47</td>
<td>2.78</td>
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P< 0.05 is significant.

**CALCULATIONS IN CONTROL GROUP. Table No: 3**

### DISCUSSION

Aacharya Kashyapa has given importance to Leh Kalpana in Leha Adhyaya separate chapter in Sutrasthan. Most of the avelahe contains madhur dravya, ghruta and prakshepa dravya. Here Madhur is of great importance as it reduces tikta katu kashaya taste of drug, ultimately making it more palatable and it also nourishes all Dhatus along with Oja. Taste is of great importance for our children patients.13 Avaleha has long shelf life also. Licking of avaleha generally on upper part of tongue enhances salivation due to its sweetness. Excessive salivation causes trigging of the mixture over the nasopharynx and larynx which ultimately produces a soothing effect in the throat, relieving irritation. Secondly, theses solution exposes the drug material to the mucosa, which may produce the local effect of the drug. Vasavaleha contains Guda, Ghrita and Honey. Here honey gives soothing effect Ghrita pacifies Vata and Pitta. Another reason for this is also supported by Acharya Charak as he stated that Brihana chikitsa is excellent for Shwasa.1,6 Vasa apart from having volatile oils, contains a substance akin to bromhexine chloride that is very effective as expectorant. Vasa contains alkaloids vasicine (bronchodilator, expectorant), leaves
and roots contains other alkaloids vasiccione and vasicinolone and vasinol etc. Vasa makes sticky phlegm dissolved and aids in it easy exit. This gives utmost relief in productive bouts of cough. It reduces inflammation and spasm of bronchial tree. It also soothes the throat hence relieves pharyngitis, laryngitis, chr. Cough. When taken for longer period of time ;it builds up the whole respiratory system including lungs as Rejuvenator(Rasayan).

CONCLUSION

The number of disability adjusted life years (DALYs) lost due to asthma worldwide has been estimated to be currently about 15 million per year worldwide, asthma accounts for around 1% of all DALYs lost, which reflects the high prevalence and severity to asthma. The number of DALYs lost due to asthma is similar to that of Diabetes, Cirrhosis of liver or Schizophrenia the burden of asthma in many countries is of sufficient magnitude to warrant its recognition as a priority disorder in government health strategies. Particular resources need to be provided to improve the care of disadvantage groups with high morbidity including certain racial groups and those who are poorly educated, live in large city or are poor. Resources also need to be provided to address preventable factor such as air pollution, wrong eating habits that triggers asthma. It is estimated that asthma accounts for 1 in 250 deaths are preventable due to suboptimal long term medical care and delay in obtaining help during the final attack.

In Shwasvyadhi, Pathyapathya chikitsa decreases severity of various symptoms but not significantly. Vasavleha reduces dyspnea, increased shwasveg, wheezing and cough significantly and increases vital capacity in children given in doses of 5 to 10 gm t. i.d. for 30 to60 days. Vasavleha does not create any side effect. This research work concludes that Vasavleha acts as an excellent remedy as “Apunurodbhav chikitsa” of Asthma as vasavleha act as mucolyte, expectorant, bronchodilator, antiallergic in asthma and Rejuvenates Pranvahasrotasata by Rasayan effect.

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CORRESPONDING AUTHOR

Dr. Sonali Pandurang Dhumale
Reader, Kaumarbhrityatantra
Email: drsonalimandekar@gmail.com