Clinical Efficacy of *Kamsaharitaki Avaleha* in the management of *Tamaka Shwasa* (Bronchial Asthma)

Dilip Prajapati
MD Scholar

Department of Rasa Shastra and Bhaishajya Kalpana including Drug Research Institute for Post Graduate Teaching & Research in Ayurveda
Gujarat Ayurved University, Jamnagar.
Why This Topic?

Don't let Asthma take your Breath Away

There are close to 300 million people suffering from asthma across the globe.

It is estimated that by the year 2025 an additional 100 million people will be asthmatic world over.

India has an estimated 15-20 million asthmatics.

In India, rough estimates indicate a prevalence of between 10% & 15% in 5-11 year old children.

According to the World Health Organization (WHO), about 60,000 die of asthma in India every year.

India Has 10% of World's Asthma Patients: Survey
Due to this alarming increase in the prevalence of Bronchial asthma, effective management of asthma claimed by almost all the traditional health care delivery system. Ayurveda has a strong scientific background, which was translated into recommendations for clinical management of this condition.
Aims & Objectives

To evaluate Clinical efficacy of *Kamsaharitaki Avaleha* in the Management of *Tamaka Swasa* (Bronchial Asthma).
Material and Method

- 30 Patients fulfilling the criteria of *Tamaka Swasa* (Bronchial Asthma) from OPD & IPD of RS&BK Dept IPGT & RA hospital, Jamnagar were selected randomly irrespective of Age, cast, sex, religion etc.

- Physical examination was done on the basis of a special pro-forma including signs and symptoms of the disease.
Clinical study was started after obtained Institutional Ethics Committee clearance (PGT/7/-A/Ethics/2013-2014/1767, Dated 10/09/2013.)

The study was registered at Clinical Trial Registry of India, ICMR, New Delhi, vide: CTRI/2013/11/004167.
## Ingredients of *Kamsaharitakiavaleha* *

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Botanical Name / English name</th>
<th>Parts used</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Dashamoola Kwatha</em></td>
<td>-</td>
<td>Root</td>
<td>1 <em>Kamsa</em> = 3.072 Liter</td>
</tr>
<tr>
<td><em>Haritaki</em></td>
<td><em>Terminalia chebula Retz</em></td>
<td>Fruit</td>
<td>100 in No.</td>
</tr>
<tr>
<td><em>Guda</em></td>
<td>Jaggery</td>
<td>-</td>
<td>100 <em>Pala</em> = 4800g</td>
</tr>
<tr>
<td><em>Trikatu</em></td>
<td>-</td>
<td>-</td>
<td>Each 48g</td>
</tr>
<tr>
<td><em>Trijata</em></td>
<td>-</td>
<td>-</td>
<td>Each 48g</td>
</tr>
<tr>
<td><em>Yavakshara</em></td>
<td><em>Hordeum vulgare</em></td>
<td>Water soluble ash of plant</td>
<td>12g</td>
</tr>
<tr>
<td><em>Madhu</em></td>
<td>Honey</td>
<td>-</td>
<td>384g</td>
</tr>
</tbody>
</table>

* Ch.chi. 11
What Is Tamaka Shwasa?

- **Tamaka Shwasa** - *The Shwasa* in which attacks of breathlessness **exaggerate at Tamakala** i.e. night and patient feels darkness in front of eyes during attack.

- According to Acharya Susruta, the vital *vayu* known as *Prana-vayu* foregoing its normal functions rises upword in unison with disturbed *Kapha* of the body and produced that gasping and laboured breathing which is called *Shwasa*.

- *Tamaka Shwasa* can be correlated with Bronchial Asthma in modern science.
### Inclusion Criteria

1. Age 16 years - 60 years.

2. Mild persistent cases of Bronchial Asthma with daytime symptoms 3-6/week and nocturnal symptoms with 3-4/month

3. Moderate persistence cases with daytime symptoms daily and nocturnal symptoms with one or more than one week but not more than 2 weeks.

### Exclusion Criteria

1. Age > 60 years and < 16 years.

2. Dyspnea resulting from other diseases like cardiac origin, anemia, tuberculosis, malignancy and other chronic debilitating diseases.

3. Patients having classical symptoms of *Maha, Urdoha, Chhinna and Kshudra Shwasa*.

4. HIV positive cases.

5. Pregnant/lactating mother.

6. Patients who need Salbutamol inhaler daily
Posology

- **Trial Drug**: *Kamsaharitaki Avaleha*
- **Dose**: 12 gm Twice a Day
- **Anupana**: *Usna Jala* (Luke warm Water)
- **Duration**: 28 days
- **Follow up**: 14 days.
Criteria for Assessment

- **Subjective criteria**: Improvement in signs and symptoms before and after treatment was assessed by scoring pattern.

- **Objective criteria**: RR, BHT, PEFR, AEC etc. were observed before and after treatment.

- **Student “t – test”** was applied to evaluate clinical significance of the therapy.
Investigations

Routine
- Hematological
  - TLC, DLC, Hb., ESR, AEC
- Biochemical
  - F.B.S., S.G.O.T, S.G.P.T. Alkaline Phosphates, etc.
- urine examination

Specific
- PEFR (Peak Expiratory Flow Rate)
- BHT (Breath Holding Time)
- Chest X-ray (if required)
Administration of *Bheshaja, Pana* and *Anna* which are having the properties like *Vatakaphahara, Ushna Guna* and *Anulomaka Karma*. 
Effect of Therapy on Cardinal Symptoms

- Breathlessness: [VALUE]
- Paroxysms of Breathlessness: [VALUE]
- Wheezing/Adventitious Sound: [VALUE]
- Cough: 75.75% (n=28)
- Immediate Relief After Expectoration: 76.08%
- Chest Tightness: [VALUE]
Conti...

(n=28)

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal Symptom</td>
<td>66.08%</td>
</tr>
<tr>
<td>Breathlessness (Night)</td>
<td>85.71%</td>
</tr>
<tr>
<td>Wheezing (Night)</td>
<td>80.74%</td>
</tr>
<tr>
<td>Awaking in Night</td>
<td>81.60%</td>
</tr>
<tr>
<td>Tachypnoea</td>
<td>80.00%</td>
</tr>
</tbody>
</table>
Effect of Therapy On Cardinal Symptoms as Per ACQ

- Need of short acting bronchodilator [VALUE]%
  - Wheezing 76.76%
  - Shortness of breathing 68.96%
  - Limitation of activities 77.52%
- Awaking in morning due to Asthma 80.21%
- Awaking in night due to Asthma 75%

(n=28)
Effect of Therapy On Objective Parameters

- RR: -77.90%
- BHT: 23.22%
- PEFR: 67.83%
- AEC: -8.33%
In the treatment of Shwasa, Acharyas gives more importance to *Shamana and Brimhana* therapies.

Here *Kamsaharitaki Avaleha* may act as *Brimhana* and does the *Shamana*.

The formulation acts by rectifying *pratiloma gati of vayu by Ushna Virya*, *Madhura rasa*, *Anulomana* property and *Srotho-Shodhana* by its *Katu, Tikta, Kashaya Rasas, Ushna Virya* and *Katu Vipaka*, thus it helps in breaking the *Samprapti*.

As *Tamaka Shwasa* originate from the site of *Pitta* and treatment for *Pitta Sthan Udbhav Vikar is Rechana*, *Haritaki* does the same by its *Anulomak* property.
- **Yavakshara** has *Laghu, Snigdha, Sukshama* property and eliminate the *Kapha.*

- Formulations are having qualities like *Madhura rasa,* which in turn increases the *bala* (strength) which is usually decreased in *Shwasa rogi,* thus it helps in improving the condition of the patient.

- In this compound formulation **Dashamoola** acts as the activator, **Haritaki** acts as the potentiator, **Trikatu** acts as bioavailability enhancers, **Trijata** gives a soothing effect and the high percentage of sweetening agents being the base of the formulation, resists microbial decomposition which there by increases the shelf life of the product.

*Bhavaprakash nighantu haritakyadi varg 252-253*
Modern medicine was allowed S.O.S. in patients who felt acute breathlessness in pretreatment & treatment period by referring them to a modern doctor.
Conclusion

- *Kamsaharitaki Avaleha* showed significant effect on almost all the cardinal symptoms of *Tamaka Shwasa* and objective parameters like RR, BHT, PEFR, AEC etc.

- Based on these observations it can be concluded that *Kamsaharitaki Avaleha* is effectively used in the management of *Tamaka Shwasa* as a promising therapy, complementary to modern medicine.
THANK YOU