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REVIEW ARTICLE

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A broad review on Shwasakuthar Rasa (herbomineral formulation)

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ABSTRACT

In Ayurveda Shwasakuthar Rasa is one of the important and widely used Rasaushadhis (herbo-mineral drug) in respiratory disorders especially in Shwasa (bronchial asthma) and Kasa (bronchitis) Roga. The Shwasakuthar Rasa contains minerals i.e., Parada (mercury), Gandhaka (sulphur), Tankana (borax) and Manahshila (arsenic sulphide) in purified form and herbs like purified Vatsanabha (aconitum ferox), Pippali (Piper longum), Maricha (Piper nigrum) and Shunthi (Zingiber officinale) as per Ayurvedic text. This review article documents the method of preparation, indications, probable mode of action and therapeutic properties of Shwasakuthar Rasa. This study concluded the antibacterial, anti-inflammatory, bronchodilator and expectorant effects of Shwasakuthar Rasa. So, it can be used as an effective medicine for respiratory disorders.

Key words: Ayurveda, Herbo-Mineral Formulation, Respiratory Disorders, Shwasakuthar Rasa.

INTRODUCTION

Ayurvedic classics have very selected and sparing references regarding the usage of Rasaushadhies (herbo-mineral formulations) in the management of Shwasa Roga (respiratory diseases). administration is pressed into usage from the medieval Rasaushadhies period (herbo-mineral formulations) getting more popular in very short time due to their faster absorption, quicker assimilation, easy to administration, easily palatable and almost swift action even in minimal doses without any

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remarkable side-effects. Acharya Charak has described properties of an ideal drug as the administered in proper dose is that which in small dose exerts great force and eliminates plentiful impurity, easy to take, light in digestion, good in taste, saturating, alleviates disease, even in faulty administration does not harm, does not cause much depression and is endowed with good smell, colour and taste. The Rasaushadhies (herbo-mineral formulations) fulfill each and every criterion of ideal drug as stated by Acharya Charak.[1] Shwasakuthar Rasa is one of the commonest herbomineral formulations which is used widely in practice. The name of Shwasakuthar Rasa is made up of two words i.e., Shwasa and Kuthar, Shwasa stands for "respiratory disorders" and Kuthar refers to "an axe". So, the name itself indicates that it cuts (eliminates) the respiratory disorders as strong as an axe. The Shwasakuthar Rasa is one of the Khalveeya Rasayan mentioned in most of the classical text as Shwasakuthar Rasa, Maha Shwasakuthar Rasa, Bruhat Shwasakuthar Rasa and Shwasari Rasa. Maricha (black pepper) is a major constituent of it. The Shwasakuthar Rasa mainly indicated in bronchial asthma, bronchitis, allergy and other respiratory disorders. Apart from

respiratory problems it also used in anorexia, indigestion, tuberculosis, unconsciousness, coma, mental disorders and heart diseases.^[2,3] This review article provides the detailed study on *Shwasakuthar Rasa* and also explained probable mode of action of it by using *Ayurvedic* and modern parameters.

AIM AND OBJECTIVES

- 1) To study the contents, method of preparation and indications of *Shwasakuthar Rasa*.
- 2) To explore the probable role of *Shwasakuthar Rasa* in the management of respiratory disorders.

MATERIALS AND METHODS

For this review study literary material i.e., Ayurvedic text *Bhaishajya Ratnavali*, authentic publications indexed in Google scholar & pub Med and modern medical literature have been reviewed.

DRUG REVIEW

Classical reference of *Shwasakuthar Rasa* is mentioned in *Shwasa Chikitsa Prakaran* of *Bhaishajya Ratnavali*.^[4] The table no. 1 and figure no. 1 are showing the ingredients of *Shwasakuthar Rasa*

Table 1: Showing the ingredients of *Shwasakuthar Rasa*.

| SN | Drug | English/Botanical Name | Quality | Parts used |
|----|-----------------------|----------------------------|---------|---------------|
| 1. | Shuddha Parada | Purified Mercury | 10g | - |
| 2. | Shuddha Gandhak | Purified Sulfur | 10g | - |
| 3. | Shuddha Vatsanabha | Purified Aconitum Ferox | 10g | Root |
| 4. | Shuddha Tankan | Purified Borax | 10g | - |
| 5. | Shuddha Manahshila | Purified Realgar | 10g | - |
| 6. | Pippali | Piper longum | 10g | Fruit |

| 7. | Shunthi | Zingiber officinale | 10g | Rhizome |
|----|---------|---------------------|-----|---------|
| 8. | Maricha | Piper nigrum | 20g | Fruit |

Figure 1: Showing the contents of Shwasakuthar Rasa



Vatsanabha



Tankana



Manahshila



Samaguna Kajjali



Pippali



Shunti



Table 2: Showing the *Rasapanchaka* of contents of *Shwasakuthar Rasa*^[5]

| Drug | Guna | Rasa | Vipaka | Virya | Dosha Karma |
|------------------------------|--|---|-----------------------|--|--|
| Shuddha Parada | Snigdha (unctuous), Sara (mobility), Guru (heaviness) | Shadrasa (all the five tastes) | Madhura (sweet) | Ushna | Tridoshgh na |
| Shuddha Gandhaka | Ushna (hot) | Madhura (sweet) | Katu (pungent) | Ushna (hot) | Kaphavat ahara (balances Vata and Kapha body humors) |
| Shuddha Vatsanabha | Ruksha (dryness), Tikshna (piercing), Laghu (light to digest), Vyavayi (first quickly spread in body then digest), Vikasi (relaxant) | Madhura (sweet) | Madhura (sweet) | Ushna(hot) | Tridoshah ara/balan ces body humors (Specially Vatakaph ahara/bal ances Vata and Kapha body humors) |
| Shuddha Tankan | Laghu (light to digest), Ruksha (dryness), Tikshna (piercing) | Katu(pung ent), Lavana (salt) | Katu (pungent) | Ushna (hot) | Kaphavat ahara (balances Vata and Kapha body humors) |
| Shuddha Manasila | Sara (mobility), Snigdh a (unctuous) | Katu (pungent), Tikta (bitter) | Katu (pungent) | Ushna (hot) | Vatakaph ahara (balances Vata and Kapha body humors) |
| Pippali (Piper longum) | Laghu (light to digest), Snigdha (unctuous), Teekshna (piercing) | Katu (pungent) | Madhura (sweet) | Anushn a Sheeta (neithe r too hot nor too cold) | Kaphavat ashamaka (balances Vata and Kapha body humors) |

| Shunti | Laghu (light to digest), Snigdha (unctuous) | Katu (pungent) | Madhura (sweet) | Ushna (hot) | Vatakaph ahara (balances Vata and Kapha body humors) |
|---------|--|-------------------|-----------------------|----------------|--|
| Maricha | Laghu (light to digest), Ruksha (dryness), Tikshna (piercing) | Katu (pungent) | Katu (pungent) | Ushna (hot) | Kaphavat ahara (balances Vata and Kapha body humors) |

Method of Preparation (According to *Bhaishajya Ratnavali Shwasa Rogadhikara*)

First of all, we prepared fine *Samaguna Kajjali* out of purified *Parada* and *Gandhaka*. Then *Kajjali* was triturated with reference amount of purified *Manahsila, Vatsanabha, Tankana* and *Trikatu* for 72 hour and obtained fine powder of *Shwasakuthar Rasa* and it was allowed for drying and stored in the form of *Vati* in dose of 125mg each.

Indications

The *Shwasakuthar Rasa* indicated in *Shwasaroga* (bronchial asthma), *Kasa* (bronchitis), *Pratishyaya* (coryza), *Aruchi* (anorexia) and *Mandaqni* (indigestion).

Method of Administration

Consume one pill (125mg) once or twice a day with *Adraka Swarasa* (ginger juice) or honey or betel leaf.

DISCUSSION

Shwaskuthar Rasa counteracts the symptoms of respiratory disorders due to the action of its ingredients which directly act on Pranavaha Srotasa. [6] Shwasakuthar Rasa is a herbomineral drug and it contains minerals i.e. Parada (mercury), Gandhaka (sulphur), Tankana (borax) and Manahshila (arsenic sulphide) in purified form and herbs like purified Vatsanabha (aconitum ferox), Pippali (p. longum), Maricha (p. nigrum) and Shunthi (Zingiber officinale) as per Ayurvedic text. [7] The table no. 2 is showing the Rasapanchaka of contents of Shwasakuthar Rasa. The table no. 3 is showing the Rasapanchaka Karmukta of

Shwasakuthar Rasa. The table no. 4 and illustration no.1 are showing the probable mode of action and schematic representation of probable Samprati Vighatan & Karmukta of Shwasakuthar Rasa respectively.

Table 3: Showing the Rasapanchaka Karmukta of Shwasakuthar Rasa

| Rasa | Katu | Agnideepak, Amapachak, Srotoavarodhahr |
|--------|------------------|--|
| | Tikta | Agnideepan, Pachan, Srotovishodhan |
| Guna | Ruksha | Kaphanashak, Amanashak |
| | Teekshna | Kapha-Chhedan, Kaphanihsaraka, Srotoshodhak |
| | Vyavayi & Vikasi | Vata-Kaphahra, Kapha- Nirharan, quick action in Vegavastha (acute phase) |
| Veerya | Ushna | Deepan, Pachan, Swedan, Srotovishodhan |
| Vipaka | Katu | Agnideepan, Malarupi- Kapha Nashak |

Table 4: Showing the Probable Mode of Action of Shwsakuthar Rasa

| Drugs | Probable mode of action through Rasapanchaka & pharmacological properties |
|-----------------------|--|
| Samaguna Kajjali | Yogavahi and quick action in small dose. |
| Shuddha Vatsanabha | It is <i>Usna Veerya</i> and <i>Katu Vipaki</i> . It possesses <i>Yogavahi, Vyavayi, Vikasi, Rasayan, Deepana, Brimhana</i> and <i>Vataghna</i> properties. It is antispasmodic in nature, hot and stimulant for mucous membrane. Inhibited the biosynthesis of polymorphonuclear leukocytes. ^[8] |
| Shuddha Tankana | It is an anti-spasmodic and removes Kapha. It is Madhura in Rasa, Laghu-Ruksha-Tikshna in Guna, Ushna Veerya and Katu Vipaki. Thus, it has Kapha-Vishleshaka (mucolytic), Hridya, Vatashamaka and Agnideepana properties. |

Shuddha It is having Katu-Tikta Rasa, Sara Guna, Ushna Manahshila Veerya and Katu Vipaka by these properties it acts as Srotoshodhani, Shoshni (Kaphashoshaka) and Kasahara. Realgar absorbs excessive secretion from the alveoli.[9] Pippali It possesses Katu Rasa, and Laghu-Tikshna Guna by which it has Deepan, Parshvashool Prashmana and Vatanulomana effects. It also possesses Madhura Vipaka and Anushnasheeta Veerya. So, it acts as Balya and Rasayan. Piper longum have traditional claims of Ayurveda for antiallergic and antispasmodic activities.[10] Shunthi It is Katu in Rasa, Snigdha in Guna, Ushna Veerya and Katu Vipaki. It is Shothhara (antiinflammatory) & Vata-Kaphahara and used as Deepan and Bhedhan. Zingiber officinale is capable of inhibiting allergic reaction and is useful for the treatment and prevention of allergic diseases.[11] It also releases sputum and favours the expectoration of sputum. Adraka Swarasa (ginger juice) is also given as Anupana. Ginger contains two important sulphur based amino acids called cysteine and methionine which can act as phytochelatins and makes arsenic in the Manashila a nontoxic element. Zingiber officinale affected the bioavailability, elimination and uptake of heavy metals in a time-dependent way in the liver.[12] Maricha It is Katu Rasa and Ushna Veerya thus it is having mainly Kapha-Nihsaraka property and additionally it has Deepan, Pachan and Bhedhak actions. Maricha is the chief ingredients in many references mainly contain an alkaloid piperine which acts as an efficient bioavailability enhancer for different nutrients and trace elements.[13] It exhibits potent antimicrobial, antipyretic, analgesic, antiasthmatic activities and better bronchodilator activity.[14]

All the drugs of Shwasakuthar Rasa have Ushna Veerya and Vata-Kaphahara properties. Vata and Kapha are the main Doshas which are involved in Shwasa Roga Samprapti and this formulation is having Kapha-Vatashamaka Karma due to its Katu Rasa, Tikshna-Vyavayi-Vikasi Guna, Katu Vipaka and Ushna Veerya.

Its most of the ingredients are mainly *Kapha-Nihsaraka* with *Laghu*, *Ruksha* and *Ushna Guna*, therefore it mainly acts on *Agnimandhya* and breaks the *Kapha Dosha Pradhan Samprapti* of *Shwasa Roga*.

Illustration 1: Showing the schematic representation of probable *Samprati Vighatan & Karmukta* of *Shwasakuthar Rasa*

Deepana-Pachana properties improve the status of Agni, subsequently prevents Ama formation and vitiation of Doshas. It also prevents further vitiation of Kapha by preventing the formation of Rasamalibhuta Kapha.

Inhibits formation of inflammatory factors

[Anti-inflammatory^[15] & Anti-microbial^[16] actions]



Katu Rasa and Laghu-Teekshna-Vyavayi-Vikasi Guna of Shwasakuthar Rasa are having Kapha-Chhedana and Kapha-Nirharna action by which it penetrates the Margavarodhit Kapha (obstructed mucus in bronchioles) and eliminates the vitiated Kapha from Uras (chest) region.

Kapha-Nirharana - Expectorant[17,18]



Ushna Veerya counteracts on Sheeta Guna of Vata & Kapha Doshas. Kapha-Vatahara & Kapha-Nirharana properties remove the obstruction of Kapha Dosha and then Vayu attains its own path i.e. Anuloma Gati.

Bronchodilator^[19,20]



Ushna Veerya and Kaphanirharana properties remove Margavarodha (obstructed mucus) and helps in Vatanulomana, leading to Prakruta Shwasa Gati (normal respiration) thus relieves in Shwasakashtata (dyspnoea), Kasa (cough), Ghurghuraka sound (wheezing) and Parshvashula (chest tightness).

CONCLUSION

The Shwasakuthar Rasa mainly possesses Katu Rasa (pungent taste), Ushna Veerya (hot potency), Katu Vipaka (pungent taste conversion after digestion) and Virechaka (purgative) properties. It also acts as antimicrobial & anti-inflammatory, bronchodilator and expectorant drug, thus it can be effective in the management of respiratory disorders.

REFERENCES

- Shastri Kashinath & Chaturvedi Gourakha Nath, edited Charak Samhita of Agnivesh, revised by Charak and Dridhbala, Part-2, Chaukhambha Sanskrit Sansthan, Varanasi Reprint 2017; Siddhisasthana 6, verse 15-16, Page no.1021.
- Shastri AD (2005) Bhaishajya Ratnavali, 19th [Edn.], Chaukhamba Surbharti Prakashan, Varanasi Page no. 466.
- 3. Shastri L (2009) Yogratnakar, Chaukhamba Surbharti Prakashan, Varanasi Page no.435.
- Shastri Kaviraj Ambikadatta, Bhaisajyaratnavali, Vidhyotini Hindi Commentry, Chaukhamba Sanskrit Sansthan, Varanasi 16th edition, Vol-1, 2002, Shwasa Chikitsa Prakaran Chp.16, verse 44-45, Page no.523.
- Sharma P.V., Dravyaguna Vigyana, Chaukhambha Bharti Academy, Vol. 2, Varanasi Reprint,2012, Pg 239,275,241,298,474 & 753.
- K.G.Modh, "Astha Samskarita Evam Samanya Shodhita Parada Se Nirmit Shwasa Kuthar Rasa Ka Tamaka Shwasa Par Tulanatmak Addhyana" 1986.
- Mishra S. 1st ed. Varanasi: Chaukhmba Surbharati Prakashan;
 2005. Bhaishjya Ratnavali.
- Kumar S et al Medicinal plants from Nepal: Evaluation as inhibitors of leukotriene biosynthesis. J Ethnopharmacol, 2000; 70: 191-5.
- Pullaiah T. Encyclopedia of World Medicinal Plants, Vol. 1, New Delhi: Regency Publications; 2006:26-28.
- 10. Banga S, Garg L, Atal C. Effects of Piplartine and Crude Extracts of Piper Longum on the Ciliary Movements. Indian J Pharm, 1964; 26:139.

Chen BH, Wu PY et al, Antiallergic potencial on RBL-2H3 cells of some phenolic constituents of Zingiber officinale (ginger) J Nat Prod., 2009; 72: 950-3.

- Wirotesangthong M, Nagaki I, Tanaka Y, Thanakijcharoenpath W, Nagai H. Inhibitory Effects Of Piper Betle On Production Of Allergic Mediators By Bone Marrow-Derived Mast Cells And Lung Epithelial Cells. Int Immunother 2008; 3: 453-7.
- 13. Reddy K R C. Effect of Shwasa Kuthara Rasa In The Treatment Of Tamaka Shwasa; Journal Of Ayurveda; Vol 2 No 1 Jan-Mar 2008. Pg 30-33.
- 14. Umesh, Amrit Singh. Role of Piperine As A Bioavailability Enhancer; IJRAPR, Oct 2011; 4:16-23.
- 15. Das Subroto Kumar et al, Anti-Microbial Study Of Shwasakuthar Rasa: In Vitro Study, IJAM, 2012, 3(2), Pg 76-81.
- 16. Bhagyalakshmi B R et al, Critical Review of Shwasakuthara Rasa-A Herbomineral Formulation, IJAM, 2015 6 (3), Pg 206-211.
- Suekawa M., Ishige A., Yuasa K., Et Al. Pharmacological Studies
 On Ginger. I. Pharmacological Actions of Pungent
 Constituents, (6)-Gingerol And (6)-Shogaol. J.
 Pharmacobiodyn. 1984; 7: 836-848.
- 18. Ram A., Mabalirajan U., Das M., Bhattacharya I. Glycyrrhizin Alleviates Experimental Allergic Asthma In Mice. Int. Immunopharmacol. 2006; 6: 1468-1477.
- Chougale Avinash Effect of Concentration And Pharmaceutical Method On The Pharmacological Activity Of Shvasakuthar Rasa With Special Reference To Marich. Dept Of RS & BK B V College Of Ayurveda Bharti Vidya Peth Deemed University, Pune 2007.
- Verma A, Mishra M, Ninama R Et.Al. Therapeutic Role Of Shwasa Kuthar Rasa In The Management Of Tamaka Shwasa (Bronchial Asthma): A Single Group Randomized Clinical Trial. Int J Health Sci Res. 2021; 11(12): 91-95.DOI: https://doi.org/10.52403/ijhsr.20211214

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