

**MEDICINAL CONSIDERATIONS, THERAPEUTIC UTILITY AND SAFETY CONCERN
OF RASASHASTRA: A REVIEW****Dr. Vandana N. Hirudkar***

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ABSTRACT

The classical text of Indian medicinal system mentioned concept of Rasashastra as one of the significant aspect of Ayurveda. The Rasashastra involves uses of different ayurveda formulations for the management of various diseases and these formulations mainly prepared using classical procedures of Marana, Putta and Sodhana, etc. The Rasashastra deals with preparations and uses of Rasa Dravyas or mercurial (Rasa) formulations. Rasashastra utilizes metal, mineral or herbomineral based formulations. The drugs prepared from the principles and theories of Rasashastra offers many health effects including rejuvenating, anti-stress, anti-depressant, anti-oxidant, aphrodisiac, analgesic, hepato-protective and anti-ulcers effects, etc. Present article deals with general considerations, therapeutic utility and precautions related to the Rasashastra.

KEYWORDS: Ayurveda, Herbo-mineral, Mercurial, Rasashastra.**INTRODUCTION**

The classical knowledge witnessed existence of *Rasa Shastra* from *Buddha* period which mainly involves uses of minerals, metals, gems and herbo-mineral formulations. *Mardana*, *Murchana*, *Niyamana*, *Rodhana*, *Jarana* and *Samkramana*, *Murchana* are some procedure which utilizes for the preparation of *Rasa Dravyas*, these procedures imparts disease alleviating properties in *Rasa Dravyas*. The theories of *Rasa Shastra* helps to convert *Rasa Dravyas* from non-compatible to compatible so can be administered for therapeutic purposes. The concepts of *Rasa Shastra* transformed *Nirindriya* compounds into

Saindriya compounds through purification and assimilation.

The modern science also described concept of alchemy in which mercurial or *Rasa* drugs prepared from the process of purification, particle size reduction, detoxification and incineration. The process of purification and size reduction enhances therapeutic properties, remove toxicity, enhances absorption and provide palatability. *Rasa Shastra* utilizes several categories of *Rasa Dravyas*, some of them depicted in Figure 1.

**Figure 1: Rasa used in Rasa Shastra**

Parada is considered as major element of *Rasa Shastra* which increases potency of drugs. The *Rasa Shastra* elaborated several theories to purify *Parada* and other elements. Grinding, mixing, heating, sublimation and incineration, etc. helps to improve therapeutic properties of *Rasa*. The above mentioned procedures improve compatibility of *Rasa Dravyas* and convert non-edible form into edible form. The *Shodana* procedure reduces toxicity of harmful metals. The purification and assimilation achieved through *Samskaras* while reduction in size increases digestion and absorption of drugs.

Related formulations

Khalvi Rasa, *Kupipakva Rasa* and *Parpati Rasa* are some formulations based on principles of *Rasa Shastra*. Most of the formulations prepared using mercury and sulphur along with other materials. The homogeneous black coloured mixture of mercury and sulphur termed as *Kajjali*. The *Parpati* prepared from *Kajjali* by converting it into liquefied thin sheet. Similarly when mixture of mercury with sulphur heated under controlled temperature and treated in glass flask then *Kupipakwa Rasa* formed.

These drugs possess following ayurveda properties:

- ❖ *Madhura* and *Kasaya Rasa*
- ❖ *Laghu Guna*
- ❖ *Sita Virya*
- ❖ *Madhura Vipak*

Therapeutic properties

- ✚ *Brimhana*, *Varnya*, *Visanga*, *Medhya* and *Dipana* effect.
- ✚ *Vrisya* and *Vayasthapana* action.
- ✚ *Balya* & *Rucya* action.
- ✚ *Vatapitta Hara* effect.
- ✚ *Rasayana* & *Krimighna* effects.

Mode of action & general health benefits

Immunomodulation & anti-oxidant properties boost immunity. Anxiolytic effect helps to suppress anxiety and stress. Hepato-protective and digestive properties of such formulations help to reduce gastric-ulcer and anorexia. These drugs control metabolic activities and regulate glucose level thus helps in diabetes. Anti-inflammatory and analgesic effects reduce pain, swelling and burning sensations associated with inflammatory diseases. Rejuvenating and aphrodisiac effects provide physical and sexual strength thus cures infertility. Detoxifying effects help to clean kidneys and clear body channels. Anti-allergic action of *Rasa* drugs helps in skin ailments. The antimicrobial properties of *Rasa* drugs help in infectious diseases and treat common fever.

Therapeutic Role In Specific Diseases

1. Chronic Coughing

The hot potency of such drugs reduces cold & wheezing, these drug liquefy sputum and removes from respiratory tract.

2. Heart Problems

The formulations prepared from basic concepts of *Rasa Shastra* helps in heart diseases by maintain blood flow and strengthening muscles of heart.

3. Sexual Diseases

The revitalizing and aphrodisiac effects provide relief in sexual disorders, correct erectile dysfunction and treat infertility.

4. Constipation and Anorexia

Deepan and *Pachana* properties of metal and mineral based formulations improve functioning of liver and enhance appetite thus reduce constipation.

5. Skin disease

The *Rasa* drugs helps in psoriasis, dermatitis and acne. These formulations not only cure skin ailments but also enhance glow and appearance of skin texture.

6. Anti-aging effects

These drugs imparts anti-aging effects, control wrinkles, reduces degenerative process, balances anabolic and catabolic metabolism and detoxify whole body thus helps to reduce symptoms of early ageing.

Precautions related to *Rasa* drugs

- ✓ Proper diagnosis of patient is prerequisite before prescribing medicine to select appropriate medicine.
- ✓ Metallic preparations can become toxic if not prepared properly.
- ✓ All steps during manufacturing must be followed to avoid any quality degradation.
- ✓ Manufacturing must be carried out by expert person
- ✓ Raw material must be used without any adulteration
- ✓ Patient must consume such drugs under supervision of expert physician
- ✓ Overdosing and use of self medication must be avoided
- ✓ Any adverse reactions and patient hypersensitivity must take in consideration.

CONCLUSION

Rasashastra is vital aspect of Ayurveda which gives several theories for health management and treating diseases. *Rasashastra* described preparations, uses and precaution of mineral and metal based drugs especially mercurial/*Rasa* formulations. *Sodhana* and *Putta*, etc. are some procedures used in *Rasa Shastra* to prepare palatable, compatible, edible and non-toxic formulations which provides analgesic, nootropic, hepato-protective, hypoglycemic, rejuvenating, aphrodisiac and anti-oxidant effects.

REFERENCES

1. Murthy. *Rasashastra the mercurial system*. 3rd ed. Varanasi: chowkhamba Sanskrit series office, 2013.
2. Acharya YT, editor. *Agnivesha, Charaka, Dradhala, Charaka Samhita, Viman Sthan, Rasa*

- Viman Adhyaya 1/21. Reprint. Varanasi: Chaukhamba Surbharti, 2011; 235.
3. Caraka Samhita with Aayurved Dipika commentary by Cakrapaani edited by Vaidya Jadavaji Trikamji Acharya. Sutra Sthana 26/12. Choukhmba Sanskrita Sansthan, Varanasi (India), 1984.
 4. Caraka Samhita with Aayurved Dipika commentary by Cakrapaani edited by Vaidya Jadavaji Trikamji Acharya. Cikitsaa Sthana 1/3/15-23. Choukhmba Sanskrita Sansthan, Varanasi (India), 1984c.
 5. Kasyapa M, Jivaka V, Vatsya, Samhita K, Sthan S, Adhyaya A. Sthana Sthana, Yonivyapad chikitsitiyam adhyaya. In: Tiwari PV, editor. Kashyap Samhita. 1st ed., 18/25. Varanasi: Chaukhamba Vishvabharti, 1997.
 6. Gulraj Sharma Commentary on Maadhava Upaadhyaya, 'Ayurved Prakash' Chowkhambha Bharti Academy Varanasi 221001 (India), 1987; 2.
 7. Tripathi I, editor. Vagbhatta, Rasaratna Samuchchaya, Adhyaya 28/1. 3rd ed. Varanasi: Chaukhambha Sanskrit Bhavana, 2006; 371.
 8. Shastri K N Sadanand Sharma's Rasatarangini, Motilal Banarasidas Publications, New Delhi, 2000; 15: 228.
 9. Mishra LC, Adra T, Batchu SV, Bhatt HA. Scientific basis for ayurvedic therapies. LLC Boca Raton, Florida: CRC Press, 2004; 84-99.
 10. Sarkar PK, Chaudhary AK. Ayurvedic Bhasma: The most ancient application of nanomedicine. J Sci Ind Res., 2010; 69: 901-5.