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Review Article

General Principles, Approaches and Therapeutic Utility of *Rasashastra*: An Ayurveda Review

Dr. Vandana N. Hirudkar^{1*}, Dr. Rakesh M. Ganvir²¹Associate Professor & HOD, Rasashastra & B. Kalpana, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.²Assistant Professor, Rasashastra & B. Kalpana, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.

ABSTRACT

Ayurveda mentioned different branches for the management of normal health status and *Rasashastra* is one of the aspect of Ayurveda mainly deals with use of mineral, metal and *Rasayana* drugs. The branch *Rasashastra* involves procedures such as; *Sodhana*, *Marana* and *Putta*, etc. Initially during development phase this branch mainly dealt with *Rasa* (mercury) and *Rasa Dravyas* hence termed as "*Rasashastra*". The concept of *Rasashastra* offers enormous advantages towards the maintenance of normal physical and mental status. The drugs used in *Rasashastra* provide relief from many health ailments therefore this stream has occupied a unique place amongst the different therapeutic modalities of Ayurveda. Considering these all aspect present article explored general principles, approaches and importance of *Rasashastra*.

Keywords: *Ayurveda*, *Rasashastra*, *Rasayana*, *Bhasma*.

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*Address for Correspondence:

Dr. Vandana N. Hirudkar, Associate Professor & HOD, Rasashastra & B. Kalpana, Shri K. R. Pandav Ayurved College & Hospital, Nagpur, India.

Introduction

The general principles believe that when *Rasa Dravyas* subjected to *Murchana* then they become capable to alleviate diseases. The historical development of *Rasa Shastra* existed from *Buddha* period around more than 2500 years ago. *Rasa shastra* initially described as branch that involves use of metals, minerals and gems along with herbs to produce specific formulations that helps in the treatment of many diseases conditions. There are some procedures that need to be following strictly for preparing and administering *Rasa Dravyas* inside the body. *Svedana*, *Mardana*, *Murchana*, *Rodhana*, *Niyamana*, *Jarana*, *Samkramana* and *Vedha* are some procedures require considering before administrating *Rasa Dravyas* inside the body. The basic principles of *Rasa Shastra* involve conversion of metals/minerals from non-compatible to compatible form by mixing with herbs and various procedures of purification and assimilation, in this way *Nirindriya* materials (without sense) converted into *Saindriya* (with senses). The application perspective of *Rasa Shastra* comprises two aspects; *Alchemy* and *Rasayana* as depicted in **Figure 1**.

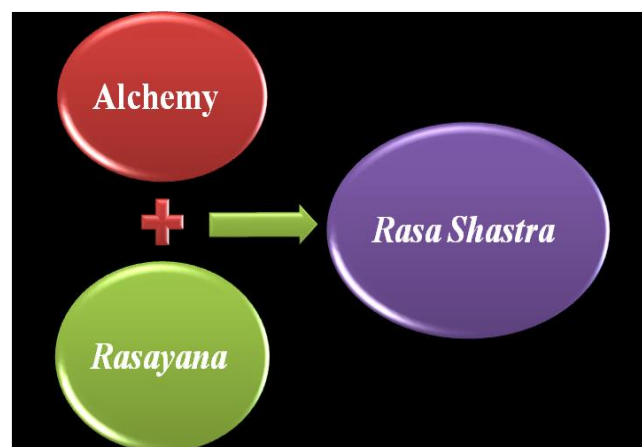


Figure 1: Technical component of *Rasa Shastra*.

Conceptual development and general considerations

Generally *Rasa*, *Dhaatu*, *Ratna* and *Visha* are considered types of drugs that can be used under the heading of *Rasa Shastra*. Here the term '*Rasa*' means liquid relate with adaptogenic effect, *Dhaatus* resembles entity that provide strength, *Ratna* means precious materials posses gem like quality while poisonous material comes under category of *Visha*. The *Parada* is used as foremost principle material used in *Rasa Shastra* which is liquid metal and believed to increases strength of medicines by tenfold. The excellent combination of *Parada* with sulphur referred as union of Lord Shiva as mercury and *Parvati* as sulphur. It is stated that any metal and mineral should be purified first through *Shodhana* and then converted into final formulations. The procedures involve in *Rasa shastra* such as; purification, sublimation, heating, incineration, grinding, mixing and churning, etc. enhances therapeutic and pharmaceutical properties of minerals and metals. The mineral and metal based preparations used in Ayurveda formulary included *Guggulu*, *Churna*, *Gutika*, *Asava*, *Arishta*, *Vat* and *Anjana* etc.

The different types of *Rasa Dravyas* used in *Rasa Shastra* are as follows:

Maha Rasa:	mica and iron pyrite, etc.
Uparasa:	orpiment, etc.
Sadharana Rasa:	arsenic and lead oxide, etc.
Dhatu:	iron and copper, etc.
Ratna:	diamond and sapphires, etc.
Uparatna:	sunstone and tourmaline, etc.
Visha:	<i>Sarpa visha</i> and <i>Vatsanabha</i> , etc.
Upavisha:	<i>Datura</i> and <i>Kuchala</i> , etc.

General concept related to processing of *Rasa Dravyas*

The ultimate aim of processing *Rasa Dravyas* is to make them compatible to human body in all aspect. The mineral or metals commonly treated with natural substances obtained from plant or animal. The processing of *Rasa Dravyas* enhances their compatibility and assimilates easily. The non-edibility and hard consistency of raw forms of *Rasa Dravyas* changed into soft and edible form after their processing. The process involves in formulation of such types of medicine also reduces toxicity of minerals and metals. The metals and minerals used in *Rasa Shastra* subjected to *Shodana* procedure to convert them into medicine. The *Samskaras* used for complete purification and assimilation. Some materials used in the form of *Bhasma/Pishti* made by *Marana* procedure. These processes convert materials into fine particles so to increases their digestion, assimilation and absorption.

Rasa Dravyas on the basis of formulation

The *Rasa* formulations can be differentiated on the basis of their formulation approaches such as; *Khalvi Rasa*, *Parpati Rasa* and *Kupipakva Rasa*. When mercury and sulphur or other ingredients are ground together to a powdered drug then formulation state can be termed as

Mercury and sulphur grounded to a homogeneous black coloured powder then this formulation termed as *Kajjali*.

The powdered *Kajjali* when subjected to specific procedure then it turned to liquefied form which can be spread on the

surface of banana leaf covered with another leaf. The thin flat sheet of material exposed after removing banana leaves is termed as *Parpati*.

When product obtained from grinding mercury with sulphur and other metal ingredients subjected to controlled heating in a longneck glass flask and collected after sometimes from bottom of flask is termed as *Kupipakwa Rasa*.

Properties of *Rasa Dravyas*

The *Rasa Dravyas* contains metal like gold generally possess properties of *Swarna* like; *Madhura* and *Kasaya Rasa*, *Snigdha* and *Laghu Guna*, *Sita Virya* and *Madhura Vipak*. The formulations containing metal offers *Rasayana*, *Brimhana*, *Varnya*, *Visanga*, *Rucikara*, *Medhya*, *Dipana* and *Vrisya* actions. The *Rasa* drugs containing silver offers *Kasaya* & *Amla Rasa*, *Snigdha Guna*, *Sita Virya* and *Madhura Vipak*. These types of formulations possess *Vayasthapana*, *Vrisya*, *Lekhana*, *Balya*, *Vatapitta Hara* and *Rucya* action. The formulations containing mercury as *Rasa* possess *Vrisya*, *Balya*, *Rasayana*, *Snigdha* and *Krimighna* properties.

Biological activity

- The gold preparation offers anti-stress, anti-depressant, immunomodulation, anti-oxidant and aphrodisiac activities.
- Silver containing formulation possesses nootropic, analgesic and anxiolytic effects.
- Copper based (*Tamra*) preparation offers hepato-protective, anti-ulcer and anti-oxidant effects.
- *Mica* based (*Abhrak*) formulations possess anabolic and immunomodulation actions.
- *Conch* (*Sankha*) based formulation produced anti-ulcer effect.
- Zinc (*Jasad*) based formulation offers relief in myopia and give hypoglycemic effect.
- *Mukta* preparations possess anti-inflammatory and analgesic activities.
- Iron (*Mandur*) based formulations gives hepato-protective response, anti-ulcers effects and treat anemia.
- *Shilajit* offers anti-inflammatory, anti-depressant, rejuvenating and aphrodisiac effects.

Some formulations comes under category of *Rasa Dravyas*

- *Muktaadya Churna*
- *Indrokta Rasaayana*
- *Navaayas Churna*
- *Asanaadi Ayaskruti*
- *Mandura Vataka*
- *Taapyaadi Loha*

Conclusion

The *Rasashastra* is one of the important branches of Ayurveda that offers various principles towards the management of optimum health status. *Rasashastra* mainly described use of mineral, metal and *Rasayana* drugs, etc for different therapeutic purposes. These formulation generally prepared by using specific procedures such as; *Sodhana*,

Marana and *Putta*, etc. *Maha Rasa*, *Uparasa*, *Dhatu*, *Ratna* and *Visha*, etc. are different types of *Rasa Dravyas* used in *Rasa Shastra* that offers health benefits in various health ailments such as; nootropic, analgesic, anxiolytic, hepato-protective, anti-oxidant, immunomodulation, hypoglycemic, analgesic, rejuvenating and aphrodisiac effects.

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