



Review Article

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CONCEPT OF RASAYANA IN RASA SHASTRA

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ABSTRACT

In all the literatures of Rasa shastra, the word Rasayana has been used in two senses, one for medicine as a whole for example “Kupipakva Rasayana” and for whole group of medicines having mercury or other minerals in them. Others have used this word for “rejuvenation” while describing the properties of a substance or in specific chapters entitled Rasayana. So going through our rasa shastra texts, we find an extensive description of Rasayana with better herbo-mineral combinations. There is need to go through the concept of rasayana in changing environment with modernization during the developing era of Rasa Chikitsa as it is more of value in present context since the statistics of occurrence of diseases like AIDS, tuberculosis and diabetes mellitus etc. are still uncontrolled. Moreover, latest techniques of drug analysis have been developed so in present scenario we can study rasayana in a more scientific way.

Keywords: Rasayana, Rasa shastra, Rasa Chikitsa, Rejuvenation

INTRODUCTION

Ayurveda, the science of life is the oldest health science. It has been divided into eight branches by our acharyas and rasayana (rejuvenation) is one of them. Rasayana is formed by the union of two words “Rasa (rasa dhatu = nutrition)” and “Ayana (circulation and promotion)”. So from the literary meaning of rasa and ayana, it can be drawn that rasayana is a regimen or substance with the help of which one can attain, metabolize and channelize the better quality of rasa and other dhatus up to smallest unit of the body. Rasayana deals with the science of nutrition, geriatric, and rejuvenation. It signifies not a single drug or medication rather refers to a rejuvenative regimen which of course uses rejuvenative remedies, dietetics, and overall healthy life style and positive psychological conduct.

According to Acharya Gopal Krishna Bhatta¹ and Sharnghadhara², rasayana is the medicine which increases the “Ojas” in a healthy person, cures diseases in ailing individuals and also delays ageing.

Rasa Shastra is believed to have come into existence in about the 6th and 7th century. Nagarjuna, The Buddhist sage, is considered the first to have used mercury so extensively and is believed to be one of creators of treatment by metals and minerals used in appropriate form. Different texts of rasa shastra have been written in two types of formats, some predominantly dealing with the pharmacological aspects of the drugs e.g. Rasatarangini, Rasa Ratna Samucchaya, Ayurveda Sara Samgraha etc. They have given drug-wise description explaining mainly their origin, types, pharmaceutical preparation into consumable form and their properties. Other texts contain disease-wise description of rasayana and the chapters are entitled as Jvaradhikar, Rajayakshama and Rasayana etc, e.g. Rasendra Sar Sangrah, Bhaishajya Ratnavali etc. They have a number of rasayana yogas described in one chapter. In all these

literatures of rasa Shastra the word rasayana has been used in two senses, one for medicine as a whole for example “kupipakva rasayana” or some authors have used rasayana word for whole group of medicine having mercury or other minerals in them. On the other hand, this word is used for “rejuvenation” while describing the properties of a substance or in specific chapters entitled “Rasayana”.

Elements of Rasa shastra indicated as Rasayana

There are a large number of potent medicines in rasa shastra which are described as rasayana. Apart from a number of combinations in “Rasayanadhikara” there are a lot of compounds described in various other chapters that work principally as rasayana but are better indicated in that particular disease. They mostly contain various substances having rasayana property e.g. ras sindoor, swarna bhasma, elements of maharasa group and different ratnas etc.

Mercury (Parad) is considered to be a very powerful medicine. When mercury is properly processed, it balances all three doshas, has a soothing effect on the body and prevents diseases and old age. It nourishes all the vital parts of the body and increases the strength of the eyes. It is a vrishtya (aphrodisiac), balya (tonic), snigdha, rasayana (rejuvenative), vrana shodhana and ropana (wound cleaner and healer), and krimighna (antimicrobial) and yogvahi. When it is compounded with specific herbs it heightens its medicinal properties. Mercury is said to give a firm physique, a stable mind, and to be the best destroyer of disease.³

Apart from mercury there are a lot of minerals and metals with rasayana properties. Just as herbs have their rasa, so do minerals. For example, swarna is madhura (sweet) and kashaya (astringent) in rasa, snigdha (oily) and laghu (light) in guna, sheeta (cold) in virya, and madhura in vipaka. Its actions are vishaghana, varnya, rasayana,

brimhana, ruchikara, deepana, medhya, smriti vardhana and aphrodisiac. It checks wasting of the body tissues, improves body complexion and acts as an antimicrobial and antipyretic.

Rajat (silver) has kasaya (astringent) and amla (sour) rasa. It gives strength to the brain, heart and stomach. It is indicated for bhrama (vertigo) and unmada (insanity), palpitations, premature ejaculation, and mada (intoxication). Some common elements described as rasayana in rasa shastra are shown in table 1.

Table 1: Elements of Rasa Shastra indicated as Rasayana^{4-7,12}

Elements of Rasa Shastra	Reference*
Parad	R.T. 7/88
Abhraka (Satva)	R.T. 10/112
Vaikranta	R.T. 23/167, R.R.S. 2/56
Swarna Makshika	R.T. 21/26, R.R.S. 2/80, A.P. 4/9
Shilajeet	R.T. 22/84, A.P. 4/123, R.S.S.1/234, V.R.R.S. Pg. 180
Sasyaka	R.R.S. 2/128
Gandhaka	R.T. 8/37, R.R.S. 3/16, R.S.S.1/125, V.R.R.S. Pg. 52
Shuddha Hartala	R.T. 11/55
Shuddha Manhshila	R.T. 11/116, 3/91
Nilanjana	R.R.S. 3/104
Tuttha Bhasma	R.T. 21/128
Hingula	R.R.S. 3/140
Swarna	R.T. 15/69, R.R.S. 5/8, A.P. 3/25, 3/29, V.R.R.S. Pg. 62
Rajata	R.R.S. 5/24
Lauha	R.R.S. 5/88 & 139
Vanga	R.T. 18/39
Hiraka	R.T. 23/24
Manikya	R.T. 23/57, A.P. 5/100
Suryakanta	R.T. 23/184, A.P. 5/140, V.R.R.S. Pg. 209-210
Rajavarta	R.R.S. 4/6, V.R.R.S. Pg. 210
Vatsanabh	R.T. 24/26, V.R.R.S. Pg. 217

*Abbreviations: R.T. = Rasa Tarangini, R.R.S. = Rasa Ratna Samuchchaya, A.P. = Ayurveda Prakash, R.S.S. = Rasendra Sar Sangraha, V.R.R.S. = Vrihat Rasa Raj Sunder

So, there is an extensive description of rasayana dravyas in rasa shastra texts with better herbo-mineral combinations.

Scope of Rasayana

The rasayana therapy has principle aims to promote rejuvenation, retard ageing process, defend body from various diseases, regulate metabolism and provide physical and mental strength. This object when analyzed clinically, pharmacologically and biochemically is not indicating a single activity but a number of mechanisms that may vary from compound to compound. The possible mechanisms by which, action of rasayana can be represented in modern aspects are;

1. Jara Nivartaka (Delay ageing process) and Deergha Ayushkara (Provide longevity)
2. Vyadhi Nivartaka (Prevents diseases)
3. Prashasta Dhatu (Promotes health)

Jara Nivartaka (Delay Ageing Process) and Deergha Ayushkara (Provide Longevity)

Ageing is an inevitable physiological process. Ayurveda considers it as swabhava of life. Swabhava is that which is very natural so jara is a phenomenon very natural to

humans. Modern science is trying hard to identify the causes of ageing. A number of theories and observations have been projected such as genetic theory of ageing, immunological theory, stress theory and free radical theory etc. But it is not yet understood whether aging is a multifaceted process or is a result of single cause.

It is widely accepted that in ageing, DNA damage occurs and how the rasayana prevents the damage of DNA is not known yet. But, rasayana acting as anti-oxidants mostly prevents enzymatic oxidative stress-induced damage. Work is in progress on Ayurvedic medicines to evaluate their nature as antioxidant. The interesting fact while working in this field is that the bhasmas sometimes behave entirely different from the substance it is made from. Metal ions (e.g. Fe²⁺/Fe³⁺ and Cu⁺/Cu²⁺) are considered as catalyst for the free radical reactions, but the bhasmas used in Ayurveda may behave contrary to it. Shilajatu (Mineral pitch) is a herbo-mineral compound with many beneficial therapeutic properties. It has been extensively used by all the ayurvedic scholars in all chronic debilitating disorders since decades. It has kashaya tikta rasas, sheeta virya, tridosahara, vrishya, balya, mutrala, lekha, yogavahi and rasayana properties. It has many rich, bioactive molecules (nutrients, iron manganese, phenols etc) which act as powerful adaptogen in the wear and tear phenomenon of aging process.⁸

Similarly Tamra bhasma, when given in lower doses potentiates the antioxidant activity in rats. It inhibits lipid per oxidation (LPO) and enhances the initial value of Glutathione (GSH). In lower doses (5 mg/kg body weight and below) it protects GSH against the aerial oxidation but in higher doses it has no protective response. In the case of superoxide dismutase (SOD) a biphasic response is observed. In lower doses (5mg/kg body weight) the SOD activity in the liver homogenate remains lower, but in higher doses the activity is enhanced. This could be because SOD has a property of substrate induced induction. In lower doses it is not producing any kind of superoxide therefore the SOD activity remains in the normal range but in higher doses, the bhasma might be generating this radical as a side effect, which may be the root cause of enhanced SOD activity. This adverse effect in higher doses is also supported by the enhanced lipid per oxidation in higher doses but in lower doses <10 mg/kg body weight, there is decline and proper control of lipid per oxidation.⁹

Swarna bhasma preparations used in Indian system of medicine have a significant antioxidant and restorative effects in global and focal models of ischaemia. Significant restoration of altered values of enzymes (lipid peroxidase, reduced glutathione, catalase, glutathione reductase, glutathione-S-transferase, glutathione peroxidase, superoxide dismutase, and glucose-6-phosphate dehydrogenase) to near normal levels by Ayurvedic Swarna Bhasma and Unani Kushta Tila Kalan (25 mg/kg, orally for 10 days), suggest potentials for swarna preparations in cerebrovascular diseases.¹⁰

In an experimental animal model, swarna bhasma treated animals showed significantly increased superoxide dismutase and catalase activity, two enzymes that reduce free radical concentrations in the body.¹¹

Vyadhi Nivartaka (Prevents Diseases)

Rasayana provides drug base therapy (Vyadhihara) and remedial measure as pathya, prasamana, and prakritisthapanam. Although most of the Rasayana of Ayurveda are non-specific type of immunomodulators, they usually act to strengthen the immune system as a whole, increasing the quality and quantity of the components up to the level of perfection.

As immunostimulants they help in the formation of healthy and potent components of immune system (i.e. cells, immunoglobulins and other components of immune system). As immunosuppressants, their action is to prevent autoimmune response and some other non-autoimmune inflammatory diseases. Here they again help firstly by formation of healthy and absolutely normal cells in all systems of the body (e.g. connective tissues in rheumatoid arthritis) including immune system so as to prevent misjudgment of the self as non-self and useful as harmful and check over response (hypersensitivity etc.) to a particular substance and also control the activities of the CD₄⁺ T cell mediated immune response which cause killing of the antigen containing macrophages with widespread destruction of innocent cells too.

But the Rasayana having minerals or other rasa shastriya dravya in them (also some purely herbal Rasayana) are more accepted for specificity in immune action, that is why most of the Rasayana in the rasa chikitsa texts are mentioned in the chapters describing specific diseases e.g. Basantakusumakar rasa in Prameha and Mahamriganka rasa in Rajayakshma and Brihadchintamani rasa in Jvara. Their expected mode of action is more specific with respect to system, particular organ, tissue or even the single component of the immune system.

Prashasta Dhatu (Promotes Health)

Rasayana may be thought to improve metabolic process, which results in the best possible biotransformation and produce better quality body tissues. It invigorates the body in general by sustaining the required balance between anabolic and catabolic processes. This may include all the processes from good appetite, proper digestion, absorption to assimilation and utilization of the nutrients up to the cellular level. Indication of various Rasayanas of Rasayanadhikar in pandu, rakta-pitta, kshaya, shosha etc. and their effects like balya, kantikara, vrishya, jara etc. clearly indicates their hemopoietic and anabolic activities.

CONCLUSION

Rasayana therapy helps to attain optimal physical strength, sharpness of sense organs, qualities of dhatus, longevity, immunity or bala and mental competence. It nourishes the whole body and improves immune system and hence the natural resistance to infection will be more. Along with its antioxidant, haematogenic, anabolic and

nutritive properties, compensation of essential elements, minerals and other nutritive substances cannot be ignored. This was the need of the day in changing environment with modernization during the developing era of Rasa Chikitsa and it is more of value in present context as the statistics of occurrence of diseases like AIDS, Tuberculosis and Diabetes Mellitus etc. are still uncontrolled. Now a days better techniques of drug analysis have come up which can help us in authenticating the rasayana and their effects on health. If such beneficial branch of Rasa Shastra and Rasayan therapy of Astang Ayurveda gets standardized, it will bring a revolution in Ayurveda and remarkable glory in society.

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