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RASAYANA- REJUVENATION: UNIQUE THERAPY OF AYURVEDA FOR LONG LIVING: REVIEW

Jitendra Varsakiya¹*, Divyarani Kathad² and Rahul Shingadiya³

¹Assistant Professor, Department of Kayachiktsa, Chaudhary Brahm Prakash Ayurved Charaka Smasthan, Najafgarh, Khera Dabar, New Delhi 110073.

²MS Scholar, Department of Shalakya Tantra, Government Akhandanand Ayurveda College, Ahmedabad.

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*Corresponding Author Jitendra Varsakiya

Assistant Professor,
Department of Kayachiktsa,
Chaudhary Brahm Prakash
Ayurved Charaka Smasthan,
Najafgarh, Khera Dabar,
New Delhi 110073.

ABSTRACT

Background: Rasayana Chikitsa or rejuvenation therapy helps to promote and preserve health and longevity in the healthy, and to cure disease in sick. We all want to look forever young and increase our life span by staying healthy, Rasayans or vitalizes, as they are called, do exactly the same. They replenish the vital fluids of our body, thus keeping us away from diseases. Rasayana refers to the nutrition and its transportation in the body. Such a state of improved nutrition is claimed to lead to a series of secondary attributes like longevity, immunity against diseases, mental competence and delaying of aging. Rasayana is a specialized type of treatment influencing the fundamental aspect of body like Dhatus, Agni and Srotansi and ojas etc. Rasayana Chikitsa boosts the ojas and immune system. The term

Rasa has different connotation. In the present context, it means the body fluid which is responsible for nourishment of entire physique. Impairment of circulation of this body fluid results in diseases and decay. This body fluid of good quality should not only be present in adequate quantity, but also it should be able to permeate (circulate) throughout the various cells of the body to provide the type of nourishment they need.

KEYWORDA: Rasayana, Rejuvenation, Ayurveda, Health, Immunity.

³Assistant Professor, Department of RS & BK, IPGT & RA, Gujarat Ayurveda University Jamnagar.

INTRODUCTION

Background

Rasayana therapy is as old as the *Vedas*, Descriptions of divine *Rasayana* agents like *Soma*, *Pippali, Jivanti and Punarnava* etc are available in Vedas. *Achara Rasayna* and *Sadavrita* are also available in the vedic texts.^[1] It has been the cherished wish of human race to achieve long life and to live at least 100 years in perfect health. "*Jivema Sharadah Shatam*".^[2]

Rasayana Tantra is one of the eight major divisions of Ashtang Ayurveda. Healthy state of mind and body can be achieved by Rasayana Therapy. Rasayana Chikitsa or rejuvenation therapy helps to promote and preserve health and longevity in the healthy, and to cure disease in sick. Rasayana replenish the vital fluids of our body, thus keeping us away from diseases. Rasayana refers to the nutrition and its transportation in the body. Rasayana is actually that which increases the essence of each Dhatu, starting from Rasa. Taking Rasayana is helpful to increase the immunity of person to keep him away from diseases. The person becomes healthy and strong. Literally the term Rasayana refers to the means of obtaining the optimum nourishment to the Dhatu.

Meaning of Rasayana

Rasayana mean by which one gets the excellence of *Rasa* (The nourishing fluid which is produced immediately after digestion) is known as *Rasayana*. Apart from the excellence of Rasa, the individual is endowed with Psychic excellence like sharp memory, by virtue of rejuvenation therapy. Drugs, diet and regimens which promote longevity by delaying aging and preventing diseases are called *Rasayana*.

Rasayana Chikitsa in Samhita

Charak Samhita

Charak Samhita which have given extensive consideration on Rasayana therapy dealing with the physiological, pharmacological, therapeutic and clinical aspects of the Rasayana. Charaka has advocated a large number of Rasayana Drugs both the single and compounds, herbs and minerals. In beginning of Rasayana therapy term Bheshja and its Synonyms are explained. Health are divided into 2 types: Some of them tone up the health of healthy person i.e. "Swasthasyaurjaskara and some of them treat the ailments of the patients "Kinchit Artasya Rognut" Medicine belonging to first category is considered to be useful for a healthy person. Those medicines which invigorate a healthy person are mostly rejuvenators.

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Bhela Samhita^[7]

Bhela is specific indicated of Rasayana therapy in "Rajyakshma". Pippali Rasayana and Pippali Vardhman Rasayana are also described. Rasayanas preparations have been newly introduced by Bhela were Jivakadi Rasayana Ghrita, Mahasneha Rasayana, Shatavaryadi Rasayana Basti, Pancha Mulyadi Rasayana,

Sushruta Samhita^[8]

Classification of *Rasayana* made by *Dalhana* to the development of *Rasayana* therapy. [9] They described have two aspects: Kamya Rasayanafor healthy Person and Rasayana For diseased person. Also introduced a number of newer Rasayana drugs like, Varahi Kanda, Guduchi, Gambhari Phala the 24 types of somas are described. [10] Also had been given some compound drugs i.e. Shveta Bakuchi Rasayana Yoga, Krishan Bakuchi Rasayana Yoga, Vacha Rasayana Yoga.

Kashyapa Samhita^[11]

Naga Bala, Mandukparni, Yashtimadhu, Brahmi, Rasona has been specially indicated in the treatment of Rajyakshama. While describing the properties of Shatapushpa, Shatawari and Lashun Kalp, Kashyapa touch the concepts of Brinhana, Balkara, Vrishya, Varna-Ojovardhana, Ayushya, Samriti Medha Vardhna and Vayasthapana effects of Rasayana therapy.

Vagabhatta^[12]

Vagabhatta observed regarding the age factor in selection of subjects for the use of Rasayana therapy is indicated in younger or middle age groups. Vagbhatta has also indicated the Poorvakarma before the administration of Rasayana drugs.

Chakradutta^[13]

Chakradutta has emphasized the role of Samshodhana therapy as a Poorvakarma for Rasayana therapy. Bhallataka Yoga, Vardhmaan Pippali Rasayana, Agastya Haritaki, Vyaghri Haritaki and Loh Rasayana etc Rasayana Yoga are described. Use of Haritaki in various seasons under the term Ritu Haritaki also described.

Sharangadhara^[14]

Sharangadhara had given most significant description definition of Rasayana. Rasayana as measures which may delay aging and prevent diseases and thus may maintain the positive health.

Bhavaprakash^[15]

Bhava Prakash defines Rasayana as a measure which may delay aging and prevent disease; Longevity and improvement in mental faculties have been claimed as Rasayana. Rasayana drugs like Mandukparni Punarnava, Ashwagandha and Guggulu and Haritaki have been given.

Yogaratnakara^[16]

There is a description of *Madhya Rasayana* in this text. *Jala, Dugdha, Madhu*, and *Ghrita* have been indicated as *Rasayana* and special description on *Haritaki* is presented. There is also a description of *Vardhamana Bhallataka Prayoga*.

Classical Concepts about practice of Rasayana therapy

Rasayana therapy is the fundamental concept of comprehensive clinical effects designated as *Vaya Sthapana*, *Ayushkara*, *Medhakara*, *Balakara* and *Jara Vyadhi Nashana* effects. In conformity with this comprehensive effect the practice of *Rasayana* therapy has been advocated to involve *Prakriti* (Constitutions), *Vaya* (Age), *Satmya* (Biological adaptability to *Desha/Kala/Ritu.*), *Dhatus* (Tissue and tissue nutrition.), *Srotasa* (Microcirculation) *Agni* (Digestive and metabolic factors), *Ojas* (Vitality).

Consideration of Prakriti

Rasayana drugs are administered to person according to constitution or *Prakriti* on the basic Pharmacodynamic properties of a particular *Rasayana* Drugs e.g. *Bhallataka*, *Rasona*, *Guggulu* and *Pippali* may be suitable *Rasayana* drugs for a person of *Kaphaja Prakriti* because drugs have Pharmacodynamic properties as *Ushana Veerya*, *Katu- Kashaya Rasa*, *Ruksha Laghu Guna*. Drugs like *Amalaki* and *Shatavari Rasayana* drugs for person of *Paittika Prakriti* probably due to their *Sheeta Veerya* properties. Through *Prakriti* described in Ayurveda is subtotal of the physique, Physiology and Psychology of a particular persons; *Vatika Prakriti* is specially predominated by neuropsychological components. In view of this fact an appropriate *Rasayana* Drugs for a person of *Vatika Prakriti* should be such which

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may have the restorative effects on the mind and the body like *Vacha*, *Nagabala* and similar other drugs may be ideal *Rasayana* for a person of *Vatika Prakriti*.

Consideration of Vaya (Age)

Rasayana therapy exhibits the anti aging effects like Vaya Sthapna, Ayushkara and Jara Nashak the maximum utility of Rasayana therapy can be obtained when used during early adult and middle age life i.e. 3rd to 5th decades as suggested in classics, early adult and middle age is the best period for Rasayana therapy. Sharangadhara describes that a person loses their Bala, Vridhi, Chhavi, Medha, Twak, Dristi, Shukra, Vikrama, Budhi and Karmendriya in 1st, 2nd, 3rd, 4th, 5th, 6th,7th, 8th, 9th, and 10th decades of life respectively. In relation to these features specific Rasayana drugs may be selected and administered in respective age groups.

Regarding use of *Rasayana* Drugs for different age groups (Udupa K.N. and Singh R.S. (1995)

Table No-1: Age group Desired effect Suitable Rasayana Drug^[17]

Age Group	Content	Drug
1-10	Bala	Vacha, Swarna, Kashmari
11-20	Vridhhi	Ashwagandha, Bala
21-30	Chhavi	Louha, Amalaki.
31-40	Medha	Jyotishmati, Shankhpushpi
41-50	Twaka	Priyalu, Somraji
51-60	Drishti	Triphala, Saptamrita Lauha
61-70	Shukra	Atamgupta & Shilajit, Swarna

Consideration of Satmya

Broadly one may need different *Rasayana* drugs in different *Ritu* or seasons and different *Desha* or climates. Basis on Pharmacodynamic properties of different *Rasayana* Drugs have to be taken consideration with *Desha Satmaya*, *Snigdhoshna* drugs may be good for *Jangala Desha*; *Rukshoshna* drugs for *Anoopa Desha*.

Consideration of Dhatus/ Agni/Srotasa

It has been determined in consideration of Pharmacodynamic properties and *Panchmahabhautika* Constitution of different *Dhatu* and different *Rasayana* drugs.

For nourishment of Rasa Dhatu included Kashmari, Kharjura, Draksha, for Rakta Dhatu Lauhadi Rasayana, Amalaki, for Mansa Dhatu include Ashwagandha, Bala, Nagabala, Kashmari, for Meda Dhatu like Amrita, Haritaki, for Asthi- Dhatu Ashthishrinkhala, Laksha,

for majja Dhatu Lauha, Vasaa, Majja and for Shukra Kheera, Ghrita, Ashwagandha, Shatavari are described. Rasayana effect of these drugs acting at level of Rasa by improving the specific nutritional values of Poshaka Rasa.

Consideration of Ojas

Oja is essential part of all *Dhatus* which are supposed to induce *Bala*, *Vyadhikshamatva* or immunity. *Jivaniya* classes of drugs, *Yashtimadhu*, *Swarna* are of classes of drugs which improves quality of *ojas*.

Classification of Rasayana

Rasayana is Primarily divided in to two types: -Dravyabhuta Rasayana and Adravyabhutas Rasayana (Achara Rasayana). Further can classify into following manner.

(A) As per method of use (Charaka) devided into Kuti Praveshika (in door use) And Vatatapika (outdoor use)(B) As per Scope of use Kamya Rasayana (Promotor of normal health) include 1.Prana Kamya (Promotes Longevity) 2. Medha Kamya (Improves mental faculties) 3. Shri Kamya (Improves lustre of body), Naimittika Rasayana and Ajasrika Rasayana (C) As per content of Rasayana, Ausadha Rasayana, Dietary Rasayana and Achara Rasayana Conduct of Rasayana, (D) Specific Rasayana drugs and measures include Medhya Rasayana and Achara Rasayana (E) According to Prabhava (Effect): Samshodhana Rasayana and Samshamana Rasayana (F) According to Satmya include Ritu Satmya (Aadana Kala, Visarga Kala) and Desh Satmya (Sadharana Desha, Jangala Desha, Anupa Desha) (G) According to Sapta Dhatus: Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra (H) Classification According to Modern Medical Science:-To Promote Immunity, To improve metabolism, To improve endocrine and exocrine secretions.

Kutipraveshika Rasayana

Rasayana is administered in cottage constructed at a good site and where the required appliances can easily be procured. The cottage is three wall (*Trigarbha Kutti*). In a favorable *Muhoorta*, a person desirous of undergoing rejuvenation therapy should enter into the cottage. Person administered elimination therapy prior to *Rasayana* Therapy. After administration of elimination therapy person kept proper diet (*SamIsarjana Krama*) should be given to patient by this he will regain his strength. [18]

Vatatpika Rasayana

It is not administered in *Trigarbha Kutti*. It can be administered even if the individual is exposed to the wind and sun hence called *Vatatpika Rasayana*.

Kamya Rasayana: To be used for improvement of health and vigor in normal state. *Kamya* means desire. The *Rasayana* used for achieving a specific desire is called *Kamya Rasayana*. It is further divided into *Prana Kamya*, *Medha Kamya*, *Shri Kamya* used in the healthy persons for promotion of *Medha*, *Pran*

Naimitika Rasayana: *Naimitika Rasayana* is to be used in person suffering from specific disease. *Naimitika Rasayana* is not the specific medical treatment for particular diseases, but it is used as adjuvant along with the specific management of disease e.g. *Ashwagandha Churna*, *Ashwagandharishta* is indicated in the treatment of *Rajyakshma*. [19]

Perticular Naimitika Rasayana for Drishti Mandya include Triphala, Shatawari Jyotishmati, Yashtimadhu, for Kushtha Bhallataka Rasayana, Tuvaraka, Vidanga, for Rajyakshama Ashwagandha, Pippali, Shilajatu, Nagabala, for. Shwasa Agastya Rasayana, Bhallataka, for Prameha Shilajatu, Amalaki, Rasayana, Haridra, for Pandu Amalaki Rasayana Lauha Rasayana, for Vata Vyadhi Rasona, Guggulu, Vacha, Nagabala are mentioned.

Ajasrika Rasayana

Ajasrika Rasayana can be used daily as diet Dugdha, Ghrita are commonly Rasayana.

Samshodhana Rasayana/ Sanshamana Rasayana

Rasayana Drugs which eliminate the vitiated Doshas by expelling from body called Samshodhana Rasayana and drugs which producing Dosh Shamana effect. These drugs are called Sanshamana Rasayana.

Medhya Rasayana

Effect of *Medhya Rasayana* is also at different levels such as at level of *Rasa*, *Agni*, *and Srotsa*. At level of *Srotasa*, these drugs improve the Agni and circulation of *Rasa* by opening and cleaning the micro channel and then ultimately improve the function of *Medha*. These drugs have beneficial effect on body as well as on mind. Various *Medhya Rasayana* drugs used are *Mandukparni Svarasa*, *Shankhpushpi Kalka*, *Guduchi Svarasa and Mulethi Churna*. *Panchamahabhoot* are said to have characteristic of three *Mahaguna Satva*, *Raja*, and *Tama*. *Medha* are attributed to predominance of *Satva Guna*, Hence *Aakashiya*, *Taijas*, *Aapya* drugs

having *Satva Guna* predominance improve *Medha*. On the basis of Rasa *Tikta Rasa* has direct action on the promotion of *Medha*.

Achara Rasayana

Achara Rasayana means good conduct. A careful analysis of qualities of Achara Rasayana reveal that most of them are related with Mana, Dhee, Dhriti along with good conduct and these results in maximum benefit. A person must be truthful, free from anger, which is devoid of alcohol, sex indulgence; a person must not indulge in violence or exhaustion. A person may regularly offer prayers to Gods, Teachers, Preceptors and old people. A person must be absolutely free from barbarous acts, his period of awakening and sleep is regular, must take milk and Ghee regularly, should be free from ego, Whose conduct is good, must not be narrow minded, Should have love for spiritual Knowledge, must have excellent sense organ, having self control, who regularly read scripture, must have regard for elderly people. If a person endowed with these qualities takes rejuvenation therapy they get all the rejuvenation benefit. [20]

Aim of Rasayana therapy is to achieve long and healthy life

Rasayana Chikitsa boosts the ojas (vital force of life) and immune System. Ojaswi is used to describe those people who keep good health in all seasons and all stages of life. It is like obtaining high rank in a physical or mental fitness. Ojas gives a bright look, sharp memory, high performance and every expected pleasure. Rasayana is though to improve metabolic processes which results in best possible biotransformation and produce the best quality bodily tissue and delay senility and prevent other diseases of old age.

Mode of Action of Rasayana Drugs

Rasayana is a specialized type of treatment influencing the fundamental aspect of body i.e. Dhatu, Agni and Srotasa. Rasayana drugs acting at level of Rasa by improving Specific nutritional values of Poshak Rasa. Probably Rasayana drugs are having Madhura, Guru, Snigdha, and Sheeta properties act as Rasayana at level of Rasa by promoting the nutritional value of the Rasa which in term helps in obtaining the best qualities of Dhatus i.e Shatavari, Madhuyashti, Bala, Dugdha, Ghrita etc. Rasayana drugs have a fundamental effect at level of Agni or digestion and metabolism. Rasayana drugs possessing the Ushana, Laghu, Ruksha and Katu, Tikta, Kashaya Rasa may be acting at level of Agni, Vitalizing the organic metabolism leading to an improved structural and function pattern of Dhatus and Production of the Rasayana effects. Drugs such as Pippali, Guggulu, Rasona, Bhallataka, Rudanti

mainly acts at level of Agni so improve the digestion and create excellence of *Sapta Dhatu*. *Rasayana* Drugs like *Vidanga*, *Chitraka*, and *Haritaki* are experienced to enhance *Agni* at level of *Jatharagni*. *Rasayana* drugs with *Katu*, *Tikta*, *Kashaya Rasa*, *Vishada*, *Ruksha*, *Laghu Guna*, *Ushana Veerya* and *Katu Vipaka* may cause *Sroto Shodhana* and may help in the evaluation of the *Rasayana* effect in the body. *Rasayana* drugs which influence oja are supposed to induce *Bala* and *Vyadhiksamatava* or Immunity.

Modern Aspect of Rasayana Therapy

The possible mechanism by which action of *Rasayana* can be interpreted with modern aspects as below.

Antioxidant Action^[21]

Rasayana drugs acts as Antioxidants. Antioxidants are substances that reduce oxidative damage such as that caused by free radicals. Free radicals are highly reactive chemicals that attack molecules by capturing the electrons and thus modifying chemical structures. Well known Antioxidants include a number of enzymes and other substances such as vitamin C, Vitamin E and beta carotene (which is converted to vitamin A) that are capable of counteracting the damaging effect of oxidation. Oxidative damage to cells is also important phenomenon in aging process. Antioxidants may possibly reduce the risk of cancer and age related macular degeneration. Many Rasayana drugs like Amla, Ashwagandha acts are Antioxidants. Main constituents of Amla are vitamin C, carotene, and riboflavin. It is having a role in cellular oxidation reduction. They have also a role in collagen fibrin synthesis, helps in formation of fibrin, Absorption of iron. Withanolide in Ashwagandha, also acts as Antioxidants by increasing levels of three natural Antioxidants like super oxide- dismutase, Catalase, Glutathione peroxidase

Immuno-modulatory Action

An immunomodulator is a drug used for its effect on the immune system. Clinical problems that require an evaluation of immunity include chronic infections, recurrent infection, unusual infecting agents and certain autoimmune syndromes. Certain *Rasayana* drugs like *Guduchi* (Tinospora cordifolia) at as Immuno-modulator strengthening of immunity is done in various ways by promoting bodily defense Mechanisms like increasing the WBC count, improving immune function. also increase number of immune cells known as T cells & B cells helping to fight infections.^[22]

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CONCLUSION

Rejuvenation literally means to return to youthful conditions or to the normal from diseased state. Rejuvenation therapy helps to promote and preserve health and to cure disease in sick which the motto of *Ayurveda*. Hence *Rasayana* Therapy can helpful to prevent and to cure the diseases and fulfill the belief of *Ayurveda*.

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