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A COMPREHENSIVE REVIEW OF RASAYANA THERAPY

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ABSTRACT

Background: Ayurveda is the world's oldest and most authentic medicinal system. It is the science of life, and it has been aiding humanity for millennia. It is present after the onset of disorders in order to treat them and therefore lead to a better life. The primary goal of Ayurveda is to maintain health and treat sickness. The primary objective of human existence is to live a long and disease-free life by slowing down the ageing process and increasing immunity through a healthy lifestyle. **Material and Methods:** All available materials were studied and analysed for comprehensive knowledge of the concept of *Rasayana* (rejuvenation) therapy. **Discussion:** A long and healthy life is the key to accomplish the *Purushartha Chatustaya* in human life as explained in Ayurveda. Acharya Charak gave the first priority to long life among all as described in the first chapter *Deerghanjeevitiya Adhyaya*. Among all the three *snas* viz. *Praneshna*, *Dhaneshna* & *Parlokeshna*, the *Pranesna* is the prime factor to accomplish anything because *prana* is the base for the others. **Conclusion:** Everyone wishes to be as youthful as possible for as long as possible. Longevity is defined as the ability to live a long life. Longevity is simple to achieve with the help of

Rasayana, which is described in ancient Ayurvedic scriptures. *Rasayana* is the process by which a healthy person can achieve long life, memory, health, youth, good rasa, tremendous strength, lusture, and the finest condition of *Sapta Dhatus* and balanced *Tridoshas*. *Rasayana* therapy helps in the renewal of the cells and tissues and improves overall health. *Rasayana* strengthens the immune system and leads to the formation of prime *Ojas*.

Keywords: Jara, Geriatrics, Rejuvenation, Antioxidant, Ageing, Anti-ageing therapy.

INTRODUCTION

Globally, life expectancy has increased by more than 6 years between 2000 and 2019 from 66.8 years in 2000 to 73.4 years in 2019. While healthy life expectancy (HALE) has also increased by 8% from 58.3 in 2000 to 63.7, in 2019, this was due to declining mortality rather than reduced years lived with disability.¹ Twin studies have estimated that approximately 20-30% of the variation in human lifespan can be related to genetics, with the rest due to individual behaviours and environmental factors which can be modified.² The duration of human life (longevity) is influenced by genetics, the environment, and lifestyle.³ The siblings and children (collectively called first-degree relatives) of long-lived individuals are more likely to remain healthy longer and to live to an older age than their peers.⁴ The aim of human life is not only to get a long lifespan but also having a good life with less morbidity. In research studies it is evident that longevity is affected by the genetic factors.⁵ Ayurveda is said to be the most virtuous one in Vedas and beneficial for

both the worlds (present life and after death in the heaven also) for mankind⁶. Ayurveda has two objectives-to help in the prevention of disease or to protect the health of a healthy person and to cure the disease of a patient.⁷ *Ayurveda* is the subdivision of *Atharvaveda* and having eight branches.⁸ *Rasayana* is one of the most important branch of the *Ayurveda* and it helps to complete the objectives of the *Ayurveda* and also helps in the longevity for life. *Rasayana* contributes to the integrity of the *Rasadi Saptadhatus* and thus increases the longevity (*Dirghayu*).⁹ *Rasayana* means rejuvenation and anti-ageing therapies in *Ayurveda*. *Rasayana* helps in the rejuvenation, prevents diseases and promotes health through its antioxidant properties. It also includes all measures for geriatric healthcare and immunity enhancement. *Rasayana* essentially denotes medicinal nutrition, rejuvenation, longevity, immune-enhancing and geriatric health care.¹⁰ *Rasayana* helps in the maintenance of the doshas in balanced state, helps to attain the prime state of

Dhatus and *Agni*. Now a days the lifestyle is very much responsible in the formation of the diseases.

Aims and Objectives

1. To understand the concept of *Rasayana* therapy for longevity of life.
2. To understand the utility in clinical study.

MATERIALS AND METHODS

1. *Brihatrayee (Charaka Samhita, Sushruta Samhita and Ashtanga Hridaya)* with commentaries,
2. *Laghutrayee (Madhava Nidana, Sharangadhara Sanhita and Bhava Prakash)* with commentaries etc.
3. Conceptual articles & different Ayurvedic Books.
4. Database from websites.

All available materials were studied and analysed for comprehensive knowledge of the concept of *Rasayana* (rejuvenation) therapy.

DISCUSSION

The prime aim of *Ayurveda* is to get the longevity. That's why *Bhardwaj rishi* went to the God *Indra* to get the knowledge of *Ayurveda* and acquired a happy n long life. The four *Purushartha Chatustaya* are *Dharma* (piety), *Artha* (wealth), *Kama* (passion), and *Moksha* (salvation), and health is the underlying cause of the *Purushartha Chatustaya*. Disease destroys

the health, *Shreyasa* (welfare) and *Jivita* (life).¹¹ Except everything else, one should care for the body, because in its absence all the bodily entities also become totally absent.¹² Health is the basic essential factor to attain entire aspects of life viz. physical, mental, social and spiritual aspects. The origin of *Ayurveda* indicates the same *Deerghajeevitamnvicchan* (longevity). *Roga* is classified into varied form, one of them is *Swabhavika Roga* and *Jara* is one of the *Swabhavika* (natural phenomenon) *Rog*.¹³ *Swabhava* is considered as *Nispratikriya* that's why it cannot be controlled. *Jara* is the fraction of *Kala* to the *Vaya* point of view in which *Dhatus* (tissues) of the body get deteriorated continuously along with vital factors like- *Bala*, *Veerya*, *Satva* etc. *Rasa*, the nourishing factor loses its potency to *Preenan Karma* (nourishment). *Rasayana Tantra* is one of *Ashtanga Ayurved*¹⁴ and remarkably *Acharya Charak* has placed it 1st in *Chikitsa Sthana* which highlights the preventive aspect of treatment. *Rasayana* is an integral part of *Jara Chikitsa* (geriatrics). *Acharya Sushruta* includes *Jara* in *Swabhava Bal Pravritta Vyadhia* long with hunger (*Kshuta*), thirst (*Pipasa*), death (*Mrityu*) and somnolence (*Nidra*). He sub-divided the *Swabhavabalapravritta Rogas* (physiological diseases) into two types i.e., *Kalaja* (timely) and *Akalaja*

(premature).¹⁵ According to *Acharya Dalhana* if the *Jara* (old age) appears before the time it is called *Akalaja Jara*.

¹⁶*Acharyas* described the different symptoms of the *Jara*.

According to *Acharya Charak*

Old age is marked by the gradual deterioration of *Dhatu*s, sense organs, strength, potency of action, virility, valour or prowess, power of acquisition, retention, memorization, speech, and critical understanding, and the qualities of *Dhatu*s gradually diminish. It is dominated by *Vayu Dhatu* and can last up to a hundred years.¹⁷

According to *Acharya Sushruta*

After seventy years of age an individual is called 'old' in whom the tissues, sensory and motor organs, strength, vigour and enthusiasm declines gradually, the individual gets effected by wrinkles, grey hairs, baldness, suffers from cough, breathlessness and other kind of complications, he is incapable to do anything and falling in rain just like aworn house.¹⁸ *Rasayana* and *Vajikarana* are the two therapies which helps to improve strength and immunity to the optimum level through its invigorating properties in a healthy individual and these substances also alleviates the ailments.¹⁹

Need of *Rasayana*

There is no other stage of life as attractive as young age. Any difficult work can be accomplished in this age due to the high enthusiasm but this young age remains for a short period only and cannot be reversed.

As the nectar for the Gods and ambrosia for the serpents in ancient times, this rejuvenation (*Rasayana*) therapy becomes useful for the great sages. It kept them free from *Jara* (old age), debility, illness and death and they lived for thousands of years by the intake of the rejuvenating drug. One who uses the *Rasayana* treatment according to the prescribed procedure attains not only longevity but also the auspicious life enjoyed by the godly sages and finally gets submerged in indestructible God.²⁰ Those who desirous for good longevity, vital strength and happiness should use the *Rasayana* methodically and carefully.²¹

Rasayana

Ras+Ayana; *Rasa* means seven *Dhatu*s (all *Dhatu*s are formed from the *Ahara Rasa*) and *Ayan* means method to produce the best quality of *Dhatu*s within the body. Hence it helps in longevity by controlling the destruction of the *Dhatu*s and by balancing the *Tridoshas*. *Rasayana Tantra* (geriatrics) deals with the method to maintain youth, to increase longevity, intellectual capacity and strength as well as to enable the patient to be freed from

disease.²²The meaning of *Vayasthapana* is to delay the old age and stabilizing the young age.

According to Acharya Dalhana²³

The science which stabilizes the age, increasing the age upto 100 years and more is known as *Rasayana* Tantra. By the help of *Rasayana Rasadi Dhatus* gets the prime nutrition.²³ The prime role of *Rasayana* is to avail nutritive supplementation to each *Dhatus* of the body and as a result, all the vital factors of the body are revitalized. The medicines which delay the ageing process and do the *Vyadhi Nashana* are known as *Rasayana* (rejuvenators).²⁴

Acharya Charak described the benefits and uses of the Rasayana

The one taking rejuvenating (promotive) therapy attains-long life-span, excellent memory, intellect, disease free or healthy status, youthful age, munificent glow or lustre, complexion and words, and reverence or virility. It is said that by using *Rasayana*, one can achieve excellent *Rasa* (nutrient of the whole body).²⁵

Rejuvenation therapy is just like another ambrosia, beneficial for Gods, possessing incomprehensible, wonderful effects, which also promotes or increase longevity, bestows health, stabilizes age, eliminates abnormal sleep, drowsiness, exhaustion or lethargy, lassitude and debility maintains the equilibrium of *Tridosha*, produces

stability, eliminates laxity of muscles, excites *Agni* (digestive and metabolic fire) and brings excellence of glow, complexion and voice. By the use of this the great sage like *Chyavana* etc. regained youthful age and became most desired by the women and also attained firm, even and properly divided musculature, strong and stable body, limpid, propitious strength, complexion and conative and cognitive organs, got endowed with irresistible prowess and endurance.²⁶

In yore years, the old great sages like *Chyavana* etc. who desiring vital strength, attained immeasurable life-span with the help of *Rasayana* formulations. After attaining longevity, they performed as desired, spiritual penance, celibacy, self-meditation and migrated to heaven at the end. Hence those who desire longevity, vital strength and happiness should use the *Rasayana* methodically and carefully.²⁷

According to Acharya Gangadhara

The science which helps to achieve long life and memory is known as *Rasayana*.²⁸ Whatever therapeutic measure or drug which prevents and controls aging and its consequences, which postpones aging, improves vision, vitalizes and nourishes the tissue, which acts as aphrodisiac and exerts pro fertility action is called as *Rasayana*.²⁹ The various methods are applied for making strong, stable and

healthy body physique and its systems, sensory organs, dentition structures and to prevent the wrinkling, graying hairs, alopecia are known as *Rasayana*.³⁰ *Rasayana* is having the property to correct *Dhatu Daurbalya* by producing *Dhatus* of optimum quality to protect body from disorders.

Types of *Rasayana*-

On the basis of use- The *Rasayana* Therapy is divided into two types-³¹

1. *Kuti Praveshika (Indoor Management)*-³²

In this method an individual is restricted to live in a cottage (*TrigarbhaKuti*) all through the treatment.

2. *Vatatapika (Outdoor Management)*-³³

In this method the *Rasayana* therapy is administered even an individual exposed to the sun and wind. These can be administered in a daily routine.³³ It is also called as *Saurya-Marutika* method.³⁴

According to objective there are three types of *Rasayana*³⁵

1. ***Kamyā Rasayana***-Which is used for a specific purpose (to get *Prana*, *Medha*, strength, vigour etc.). It helps to maintain the normal health and improves vitality.

Pranakamyā- promotes the longevity

Medhakamyā-promotes Intelligence

Shrikamyā- promotes complexion

2. ***Naimittik Rasayana***- Which is used in the management of specific disease are known as '*Naimittika Rasayana*'. Eg: - *Shilajatu*, *Bhallatala*, *Tuvaraka* etc.

3. ***Aajsrik Rasayana***-It is *Nitya Rasayana*, used daily. It maintains and improves the health. Eg: - Milk, ghee etc.

Acharya Dalhana further divided the *Rasayana* into two parts on the basis of mode of action³⁶

1. *Sanshodhana (purification)*-

Which performs the purification of *Doshas* is known as *Sanshodhana Rasayana*.

2. ***Sanshamana (palliative)***- Use of drugs like *Nagabala* etc. is known as *Sanshamana Rasayana*.

Acharya Sushruta has classified *Rasayana Chikitsa* into four types naming four different chapters on the basis of their action i.e., *Sarvopagathasamaniya* (to prevent diseases), *Medhayuskamiya* (to increase intellect and life span), *Svabhavavyadhi Pratisedhaniya* (which slow down the onset of *Svabhavika Vyadhi* like *Jara*, *Mrityu* etc), *Nivrttasantapiya*

(helps to avoid the disturbance caused by the diseases).³⁷

Special category

1. *Medhya (nootropic) Rasayana*-³⁸

Acharya Charak has described the following four *Medhya Rasayana* preparations –

- A. *Mandukparni Swarasa* (juice)
- B. *Yastimadhu Churna* (powder) mixed with milk
- C. *Swarasa* of *Guduchi* along with its root and flowers
- D. *Kalka* (paste) of *Shankhpuspi*

2. *Achara Rasayana* (Behavioural therapy)³⁹

Person who are- truthful, free from anger, devoid of alcohol, sex indulgence and violence, peaceful and pleasing in their speech, calm, talk sweetly, Chants *Mantra* regularly and clean, courageous, donates regularly, meditates; who respects the God, cows, Brahmins, teachers and elders, always compassionate, sympathy towards the ailed person, awake and sleep on time regularly, consume milk and ghee regularly, having the knowledge of place and time, expert in the knowledge of rationality, devoid of ego, having good

conduct, consumes health unspoiled food, spiritual, excellent sense organs, who have reverence of seniors, believes in god, having self-control, devoted to religious scriptures should be known as using *Rasayana* therapy regularly. A person having the above said qualities and follows the *Achara Rasayana* gets all the benefits of rejuvenation (*Rasayana*) therapy.

Suitable person for *Rasayana* Therapy⁴⁰

Acharya Charaka described the following suitable for Rejuvenation Therapy-

One who is capable, free from diseases (healthy), endowed with intellect, having good self-control, wealthy and have sufficient time to perform *Kutipraveshika* method is performed, otherwise the *Vatatapika (Saurya-Marutika)* method should be performed. However the *Kutipraveshika* method is difficult to perform but superior than other method.

*Ayogya (unfit) for Rasayana*⁴¹

The following seven persons are said to be unfit for the use of *Rasayana*- who don't have self-control, lazy, poor, having *Mada*, *Vyasani* (addict), do sinful acts and who hates the medicine on account of their respective ignorance, inactivity, poverty, fickleness of mind, dependence, lack of self-control and inability to secure the genuine medicines.⁴¹

Method to acquire benefits of Rasayana⁴²

An individual can never get the benefits of *Rasayana* if not undergone for the process of *Sanshodhana* (purification) for physical as well as mental impurities. The treatment meant for providing longevity, for relieving senility and disease succeed in person having purified mind and self-controlled. Such a treatment should not be prescribed to those who have degenerate self, are disease free, are not twice born and who are reluctant to receive such a treatment.⁴² A wise physician should always prescribe *Rasayana* therapy for those persons in youth or middle age after oleation (*snehana*) followed by purification of body. *Rasayana* administered to a person who is not purified will fail to produce the desired effects, just as the application of a dye to a piece of dirty cloth will prove ineffective.⁴³

Dual Action of Rasayana⁴⁴

1. ***Swasthya Urjaskara (Preventive Medicine)***-Which helps to enhance the health to the optimum level in a healthy individual. It means by using such kind of medicines one can easily prevent the disease by getting the nutrition which enhances the immunity.
2. ***Aartasya Rognuta (Curative Medicine)***-which helps to cure the disease by administrating these

medicines, a patient can be treated accordingly.

It establishes Ojas within the body by consolidating the state of *Bala* (Immunity) in *Shareera* (body), *Indriya* (senses), and *Satva* (mind). The *Rasayana Dravyas* (drugs) opposes unfavorable developmental phenomena, helps treatment, and accelerates recovery in order to achieve total disease cure. *Rasayana Dravya* increases *Bala* through '*Prashasta Rasadi Dhatu*' which is a factor that prevents sickness from developing.

Probable mode of action of Rasayana⁴⁵

The objective of *Rasayana* is fulfilled by the following actions-

1. ***Agni Sandhookshana***- promoting digestion and metabolism.
2. ***Dosha Samyakaram***- achieving homeostasis of *Doshas*.
3. ***Dhatu Vardhana***- improving *Dhatuposhana*.
4. ***SrotoPrakritisthapana***- promoting competence of *Srotas*.
5. ***Mana Prasannata***- promoting mental endurance.

The *Rasayana* medications improve digestion, metabolism, maintain *Dosha* equilibrium, enhance nutrition, and boost bodily and brain functioning with the assistance of its *Rasa*, *Guna* (physio-chemical property), *Veerya* (metabolic effect), *Vipaka* (bio-transformation), and

Prabhava (inexplicable impact). As a result, it becomes the most effective medicine for treating ageing, promoting excellent health and immunity, and allowing people to live longer. It also encourages the development of new cells (regeneration) and keeps a cell alive.

Cell age because of accumulation of mutations, progressively decreased replication, and defective protein homeostasis. People age because their cells age.⁴⁶

Biology of Ageing⁴⁷

Ageing can be defined as a progressive accumulation through life of random molecular defects that build up within cells and tissues. Eventually, and despite

multiple repair and maintenance mechanisms, these result in age-related functional impairment of tissues and organs. There is evidence that variants in many genes contribute to ageing. The implicated genes include those that are involved in regulation of DNA repair, telomere length and insulin signalling. Genetic factors only account for around 25% of the variance in human lifespan, however; nutritional and environmental factors determine the rest. At a cellular level, production of reactive oxygen species is thought to play a major role in ageing. These molecules cause oxidative damage at a number of targets.

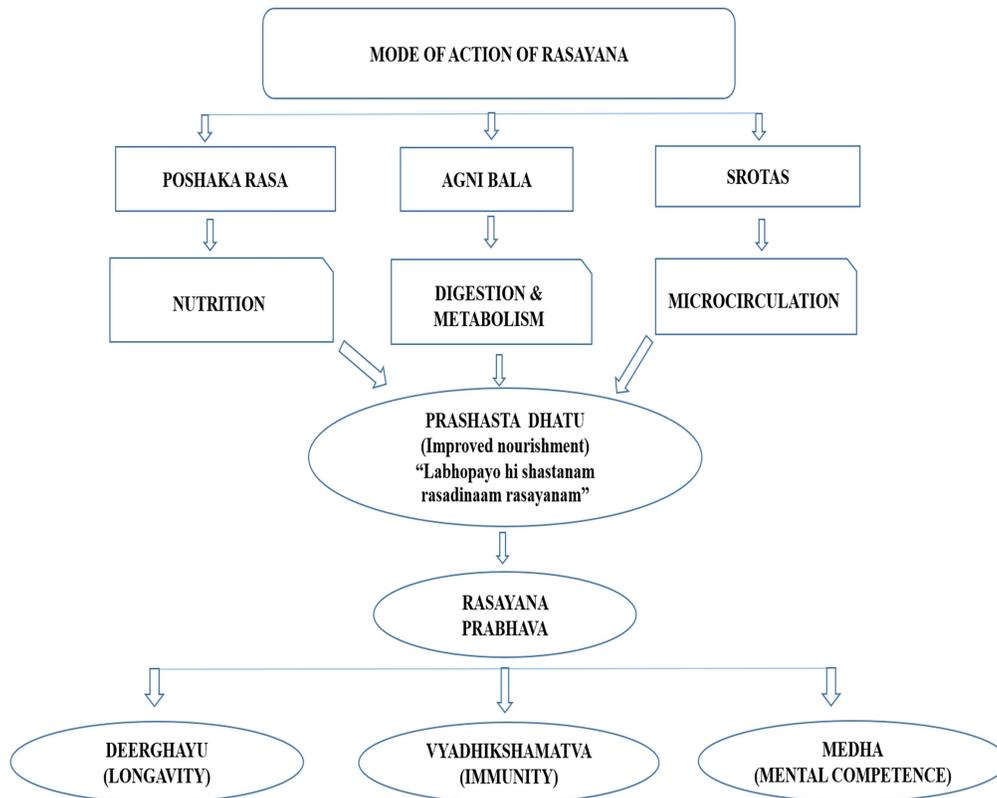


Figure 1⁵²

Essentiality of Rasayana in Jaravastha

As said before, the Prakrit Karma of *Aadya Rasa Dhatu*, i.e., *Preenana*, is inherently deficient, resulting in a significant setback to health and consequently to the longevity of life. *Rasayana* assists in the formation of *Dhatu*s (tissues) with the best properties and corrects the required potential form of *Rasa Dhatu* and its *Ayana- Sanvahana* (circulation) through *Srotas* to make its nutritive property available to all body elements, preventing metabolic losses and enhancing *Bala-Arogya* maintenance. *Rasayana* therapy destroys *Jara* by delaying the anti-ageing process and enhances the lifespan of cells of the body. An individual can live a long life free of diseases by following the rules of *Dincharya*, *Ritucharya*, *Ahar Vidhi Vidhan* and *Achara Rasayana* along with the use of *Rasayana* Therapy mentioned in Ayurveda. There are many other measures which are not included as medicine and called as *Adravya Rasayana* like- *Achar Rasayana*. It also as useful as the *Dravya Rasayana* because by following them one can achieve the benefits as of *Dravya Rasayana*. Rejuvenation therapy helps a person to achieve all the aspects of health and alleviates the diseases described by W.H.O. i.e., physical, mental, social and spiritual wellbeing. *Rasayana* drugs act as an immunomodulator and as an

antioxidant. Antioxidants are believed to quench free radicals. Antioxidants reduces the oxidative damage such as that caused by free radicals. Free radicals are atom or molecules with unpaired electron which makes them highly reactive and modifies the chemical structure.⁴⁸ The body generates free radicals as the inevitable byproducts of turning food into energy. Free radicals are also formed after indulging or exposure to cigarette smoke, air pollution, and sunlight.⁴⁹ Free radicals are normally neutralized by efficient systems in the body that include the antioxidant enzymes (superoxide dismutase, catalase, and glutathione peroxidase) and the nutrient-derived antioxidant small molecules (vitamin E, vitamin C, carotenes, flavonoids, glutathione, uric acid, and taurine).⁵⁰ Rejuvenating drugs helps to prevent or delay the cell death in the body. Many *Rasayana* drugs like *Guduchi*, *Ashwagandha*, *Amla* acts as Antioxidants. Certain *Rasayana* drugs act as immunomodulator. Strengthening of immunity is done in various ways - by promoting bodily defense mechanisms like increasing the WBC count, improving immune function. Certain *Rasayana* drugs increase number of immune cells known as T cells & B cells helping to fight infections.⁵¹ Antioxidants have been shown

to protect against heart disease, diabetes, cancer, and age-related muscular dystrophy in studies. Cellular oxidative damage is another significant aspect of the ageing process. As a result, antioxidants can assist to slow down the ageing process.

CONCLUSION:

Due to natural ageing, longevity is inherently restricted. However, when the *Rasayana* is used correctly, it can assist to slow down the ageing process while also increasing immunity by raising the *Ojas*. *Rasayana* contains antioxidant qualities that help to minimise oxidative stress and hence free radical generation. With the use of *Rasayana*, we may simply extend our lives while also preventing ailments. However, rejuvenation therapy should only be used once the body has been cleansed (*Panchkarma / Shodhana*). Because it is essential, one cannot get the advantages of *Rasayana* without first purifying one's body. It can be used in all age groups and prevents the ageing before the time. Because of its immunity-boosting characteristics, rejuvenation therapy is also particularly beneficial in *Janpadodhvansha* (pandemic). So, with the aid of *Rasayana* therapy, we can create a disease-free country while simultaneously curing the ones that already exist.

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