**ROLE OF RASAYANCHIKITSA IN PROMOTION OF HEALTH**

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| \*Corresponding Author**: Pradnya Deepak Dandekar**  Professor Department of Kriya Sharir,  Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (Hirapur), Wardha, Maharashtra.  E-mail: drpddandekar@rediffmail.com  **ABSTRACT**  Rasayanchikitsa is one of the eight specialized branches of Ayurveda that primarily deals with the maintenance of health. Rasayana is intended in classical Ayurveda as an effective tool to synthesize the excellent quality of dhatu that entails the prevention and alleviation of senility and diseases. It consists of dietary & therapeutic measures like herbal preparations which are able to correct as well as improve dhatus immunity by a proper nutrition. Experimental studies done on various rasayana drugs prove that they have immune stimulant, antioxidant, adoptogenic and anti-stress properties. Rasayanas are believed to build a barrier against stress and infection. These act principally by strengthening the immune system of the body acting as both brain and body tonic, promotes vitality and maintain it. Rasayana therapy aids in reviving the health of a healthy person as well as in combating the disease of the diseased one. Rasayan drugs consist of the substances which are rich in Vitamin C, Vitamin E, Beta carotene, riboflavin. So these substances are capable of counteracting the damaging effect of oxidation by working as anti-oxidants & prevent aging process.  Key Word: Rasayan, Rejuvenation, antioxidant, Vayasthapan  **INTRODUCTION**  Ayurved science is the life science having two aims, one is to maintenance of health of healthy person and the second is to cure diseases of diseased person1. The current modern definition of health is “Health is a state of complete physical, mental and social well being and not merely absence of disease. (W.H.O.) which is already mentioned by Sushrut2. Ayurvda has best provision to achieve good healthy life. Rasayan therapy & Panchakarma therapy works for it; to promote healthy life by preventing the diseases. Rasayana means the science of Rejuvenation. The branch of rasayana or rejuvenation is one of the eight specialized branches of Ayurveda that primarily deals with the maintenance of health. Rasayan chikitsa consist of certain dietary & therapeutic measures like herbal preparations which are able to correct as well as improve dhatus immunity by a proper nutrition. Preparatory procedures for Rasayan therapy which may include Panchakarma therapy works to correct dosha disturbances & improve agni .Panchkarma therapy also keeps the body healthy by eliminating excess & vitiated doshas,  **What is Rasayan?**  The word Rasayana is composed of two words Ras + Ayan. ‘Rasa’ means fluid or juice3 & ’Ayan’ means pathway4. Hence the literal meaning of rasayana is ‘path of juice.’ Techniquely the term Rasayan refers to the means of obtaining “augmentation of rasa”. Rasa is the vital fluid produced by the digestion of food. Rasa provides nutrition, enhances the immunity, and sustains life. Rasayana is the method of treatment through which the rasa is maintained in the body. The purpose of rasayana is to give strength, immunity, ojus, vitality, will power and determination. It also attains longevity, memory, intelligence, excellence of luster, complexion and voice, optimum strength of physique and sense organs5.  In today’s era, because of fast and stressful lifestyle and eating habits of junk food; the immunity of Dhatu goes on decreasing. 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. According to Acharya Sushrut, the substances which decreases aging process, increases the longevity and increases the mental as well as physical strength & which destroys the disease process is called as Rasayan6.  **Historical Background of Rasayan therapy**  **Rasayana therapy is as old as the Vedas because many references on Rasayana therapy are available in the Atharva Veda7. Extensive descriptions of divine Rasayana agents like Soma are available in classics. References about Achara Rasayna and Sadvrita are also available in the vedic texts similar to Charaka description8,9.** Besides extensive references is available regarding the superiority of certain other common Rasayana drugs like Pippali, Jivanti and Punarnava etc. Similarly a concept of Ajasrika Rasayana also appears in vedic literature.  **Why Rasayan is required?**  Our diet and lifestyle is totally responsible for vitiation of Doshas in our body. These vitiated doshas are responsible for generation of diseases. The doshas get vitiated because of substandard diet and ingredients of food which are sour, saline, pungent and alkaline. Intake of dry vegetables, meat, ingredients which are mutually contraindicated like fruit salad, banana with milk, fish and milk, abhishandi diet (eg. Eating curd in night), heavy, putrid and stale food, habits like irregular time of diet, taking food before the previous meal is digested. Lifestyle like addiction of day sleep, sexual enjoyment and alcoholic beverages, exposed to stressful life, irregular and excessive exercise, subjected to excess of fear, hunger, grief, greed and overwork.  These factors vitiated the Doshas. Vitiated doshas vitiate the body. Muscles become flabby; fat which is accumulated in excess gets liquefied. There is impairment in the ejaculation of semen & the ojas undergoes diminution. Because of these, person feels exhausted and falls a victim to excess of morbid sleep (Tandra), loses initiative, gets dyspnoea and becomes in capable of physical and mental work. He also loses memory, intellect and complexion.  **Types of Rasayana (Rejuvenation) therapy:**  **I According to achievable outcom10**, rasayana is of three types: Naimittika rasayana, Ajasrika rasayana, and Kamya rasayana.  **Naimittika rasayana** (nimitt – Sanskrit for “cause”) is given to combat or balance a specific cause, which is causing a disease in the body. It is also called as Rogapaharan or Curative type of Rasayan. It hastens the recovery from prevailing diseases. Some examples of this rasayana are Dhatri rasayana, Mandookaparni rasayana, Brahmi rasayana, and Triphala rasayana.  **Ajasrika rasayana** is used to maintain good health and improve the quality of life through a healthy lifestyle, diet, or exercise. It is also called as **Vayasthapan Rasayan**. It includes use of milk, ghee, honey and adopting the principles of proper sleep and celibacy.  **Kamya rasayana11** is used to fulfill a wish or desire or to serve a special purpose (kama - desire). It is of four types:   * Prana Kamya; used for achieving or maintaining the best quality of prana (life energy) in the body. * Medha Kamya; used for enhancing the memory and intellect.eg. Shankhapushpi Rasayan * Ayush Kamya; used for increasing longevity. * Chakshu Kamya; used for maintaining healthy eyes.   **II According to mode of Administration12-** The rasayanas are further classified into two types: Kutipraveshika and Vatatapika.  **Kutipraveshika** (kuti – cottage13, pravesha – enter) is a therapy in which the person lives in a specially prepared cottage for a long period while taking various rasayana herbs. It is indoor management13.  **Vatatapika**, on the other hand, does not bear stringent rules and can be practiced in your routine life. It is outdoor management. This is rightly indicated in the name “vatatapika”, where “vata” means air, and “atapa” means heat or sun3. So this is a method of taking rasayana, while a person remains exposed to air and heat.  Vatatapika method is good for people who are engaged in every day life activities. Some special formulas of this category include Chyavanaprasha, Brahma rasayana Shilajitu rasayana, Amalaki rasayana, Haritaki rasayana, Pippali rasayana, Lohadi rasayana and Loha shilajitu rasayana. A total of 63 combinations of various rejuvenation formulae are described in the Charaka samhita.  **III According to modalities** 14**–** There are three types of Rasayanas.  **Achar Rasayan** ( Behavioural modalities)- Being a holistic science with equal focus on the body, mind, and soul, Ayurveda also describes a type of rasayana for psychological and spiritual health. called as “Achara rasayana”, this type does not require internal administration of rejuvenating formulas. “Achara” literally means “discipline”.  **Ahar Rasayan** (Dietary modalities) Following the rules relating to eating, sleeping, and celibacy create rejuvenation in a person. In addition, following a sattvik diet and life style, speaking the truth, practicing non-violence, living in harmony with the nature, following social ethics and conducts, are all included under this category of rasayana. Following these principles leads to formation of high quality dhatus (tissues) and increases the quantity and quality of ojus, a vital factor for health and immunity. Hence, a person can get the same benefits as attained by internal administration of rasayana.  **Dravya (Aushadha) Rasayan** (Drug based modalities) This type of Rasayana therapy includes some herb and food types that are indeed beneficial for the optimum functioning of the body as well as the brain.  All therapies in Ayurveda aim to provide complete health – physical, mental, and spiritual - so that people can engage in achieving the real goal of life—self-realization. The rasayana therapy makes it easily possible with its remarkable benefits on health, immunity, and longevity.  **Benefits of Rasayantherapy –**  According to Acharya charak, the person undergoing the Rasayantherapy benefits15   * Enhancement the intelligience, memory power, will power, body strength, skin luster, sweetness of voice & physical strength. * It nourishes the saptadhatu & prevents chronic degenerative changes & illness. So it increses strength of dhatus & protect from chronic degenerative disorders like arthritis & senile diseases. * Rasayan deals with preventive health for enjoying normal life. Rasayan was designed in classical Ayurveda as an effective tool to synthesize the excellent quality of dhatu that entails the prevention and alleviation of senility and diseases. * It helps to attain optimal physical strength & sharpness of the sense organs.   Sharangdhara (1300 AD) describes the rasayan therapy in terms of sequential loss of certain biological qualities specific to different decades of life. Rasayan therapy for different constitution & for different dhatus is mentioned.  **Table 1 Classification of Rasayan according to Sharangdhar in different decades**16   |  |  |  | | --- | --- | --- | | Age in years | Effectively on | Rasayan Drugs | | 1-10 | Balyam (Childhood) | Vacha,Kashmari, Suwarna Bhasma | | 11-20 | Vriddhi (Growth & Development) | Kashmari,Ashwagandha, Bala | | 21-30 | Chhavi(Complexion) | Lauha Bhasma, Amalaki | | 31-40 | Medha(Perception Sharpness) | Shankhapushpi, Brahmi, Jyotishmati | | 41-50 | Twaka (Skin) | Jyotishmati, Priyal, Somaraji, Bhringaraja | | 51-60 | Drushti (Visual acuity) | Jyotishmati, triphala, Lauha, Shatawari, Amalaki | | 61-70 | Shukra (Fertility) | Atmagupta, Vajikaran drugs | | 71-80 | Vikram | Drugs may not be effective. | | 81-90 | Buddhi (Memory) | | 91-100 | Karmendriya(physical Capacity) |   **Table 2 Classification of Rasayan According to Deh Prakriti**17   |  |  | | --- | --- | | Prakriti Dosha Dominance | Rasayan Drugs | | Vata | Bala, Nagabala & Ghrit | | Pitta | Amalaki, Shatawari | | Kapha | Bhallatak, Rasna, Guggul, Pippali |   **Table 3 Specialized Rasayan Drugs to specific Dhatu** 18   |  |  | | --- | --- | | **Dhatu** | **Rasayan Drugs** | | Rasa | Draksha, Shatawari, Dates | | Rakta | Amalaki, Bhringaraj, Suwarnamakshik Bhasma | | Mamsa | Masha, Ashwagandha, Bala, Kupilu, Rajat Bhasma | | Meda | Guggul, Shilajit, Haritaki, Guduchi | | Asthi | Hukti Bhasma, Kukkutandatwak Bhasma, Vamshalochan | | Majja | Shankhapushpi, Suwarna Bhasma, Lauha Bhasma | | Shukra | Ashwagandha, Suwarna Bhasm, Ghee & cow milk | |
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| **Advanced Findings validating claims of Rasayan Chikitsa** |

Experimental studies done on various rasayana drugs prove that they have immune stimulant, antioxidant, and anti-stress etc properties. They work like-

**Immunomodulator**- a substance that alters the immune response by augmenting or reducing the ability of the immune system to produce antibodies or sensitized cells that recognize and react with the antigen that initiated their production19.

**Adaptogen** – An adaptogen is a metabolic regulator which increases the ability of an organism to adapt to environmental factors, and to avoid damage from such factors. Environmental factors can be either physiological (external), such as injury or aging, or psychological(internal), such as anxiety20.Some adaptogenic herbs- are Ashwagandha, Tulsi, haridra, Pippali,Amalaki, Guduchi, shatavari etc

**Antioxidant**- Antioxidants are defined as 'substances whose presence in relatively low concentrations significantly inhibits the rate of oxidation of targets'. Being present in serum, these antioxidants circumvent the damage caused by oxygen free radical21.

**Nootropic**- they are substances which promote intelligence and functions of brain. These drugs can be categorized as Medhya Rasayana drugs . Acharya Charaka has described four important medhya Rasayana drugs namely- Mandookparni, Guduchi, Yashtimadhu and Shankhpushpi22.

Thus, the formulations of Rasayanas are elixirs of life which enhance & preserve vigor & promote intellectual abilities. Rasayanas promotes vitality and maintain it. Rasayana therapy aids in reviving the health of a healthy person as well as in combating the disease of the diseased one. It enables the body to develop its own vital energy or the defensive mechanism against disease. Rasayanas are believed to build a barrier against stress and infection. These act principally by strengthening the immune system of the body acting as both brain and body tonic.

Clinical studies have proved rasayanas to be anti-toxic and anti-infective drugs. Ashwagandha (withania Somnifera), Vacha(Acorus Calamus), Brahmi (Centella asiatica) improves antioxidant levels & reduced oxidative damage of nervous system23-29. Amalaki(Embelica Officinalis), Shatavari (Asparagus racemosa), all improves GIT functions & have very good hepatotoxic acivity30-35. Rasayana are perhaps the only ‘wonder’ drugs that can be taken safely for long stretches of time, even in a healthy state, without any specific contradictions.

**DISCUSSION**

Rasayan therapy really works for preservation of positive health of body as well as mind. According to the Panchabhautic concept of Ayurveda, it revels that predominance of Prithvi & Apa mahabhut36of the dravyas provide Sthairyata, Ghanata, Kledan, Snighnata, Apyayan & Sandhankar (Sanyogakar) to the dhatus. So work as Vayasthapak37 (prevents degeneration) of dhatus & work to improve quality of dhatus. The most of the rasayan dravyas are Ushnavirya. So because of predominance of Teja mahabhuta they improve the metabolic activities of dhatwagnis & improve quality of dhatu by nourishing them. Rasayana chikitsa drugs selectively enhance the activity of certain antioxidants, they reduce the oxidative damage of cells & prevent the degenerative changes of dhatus. It has nutritive function. It is a specialized type of treatment which promote activities of basic fundamentals of body i. e.Dosha, Dhatu Agni & srotas, which comprehensively results in good health. Basically acting on agni they impart best qualities of Dhatu. Prashastam Ras-rudhiradinam yo labhopayab sa rasayanam- Arundatta.

Rasayan drugs consist of the substances which are rich in Vitamin C, Vitamin E, Beta carotene, riboflavin. So these substances are capable of counteracting the damaging effect of oxidation. So they work as anti-oxidants. In Amalaki main constituents are Vitamin C, carotene, riboflavin. So it has role in cellular oxidation reduction. Withanolide in Ashwagandha increase levels of three natural antioxidants like super oxide, dismutase, Catalase, Glutathione peroxidase & helps to prevent damage of cells. So work to prevent aging process. Vayahsthairyakaranam Labhopayo rasayanam- Sushrut.

**CONCLUSION**

Rasayan therapy definitely helps to improve immune system. . The nourishing Rasayanas provide supplements and replenishes the nutrients robbed by ageing, and is said to alleviate disease and promote optimum health. Rasayana helps to restore the youthful state of our physical and mental health.

**REFERENCES**

1. Vagbhata, Ashtang Hriday, with Vidyotini Hindi commentary of Kaviraj Atridev Gupta, Chaukhambha Prakashan, Varanasi, Sutrasthana, Chapter 1, Verse No.5, 2009, Page 3.
2. Sushruta; Sushruta Samhita illustrated by Kaviraj Ambikadatta shastri, Chaukhambha Sanskrit Sansthan Varanasi, 15th edition 2007, Sutrasthan Chapter 15/15, pp. 63.
3. Sanskrit Hindi Shabdakosha by Waman Apte, Page 815, Anil Prakashan, Delhi, 2007.
4. Sanskrit Hindi Shabdakosha by Waman Apte, Page 94, Anil Prakashan, Delhi, 2007.
5. Agnivesh Charak Samhita with Chakra Datta Hindi commentary by Brahmananda Tripathi and Dr. Ganga Sahay Pandey, Chaukhamba Subharti Prakashan, edition 5,Chikitsa Sthan Chapter 1/1, Page 4.
6. Sushruta; Sushruta Samhita illustrated by Kaviraj Ambikadatta shastri, , Chaukhambha Sanskrit Sansthan Varanasi, 15th edition 2007, Chikitsasthan. 1/13 pp. 4
7. **AtharvavedaSamhita along with Sayanbhashya edited with Hindi commentary byPt. Ramaswaroopsharma Gaud,Chaukhamba Vidyabhavan,** edition 2, **Volume 3,8/7/4**
8. **RGvedaSamhita together with Padapatha & Sayanbhashya edited by Pt. Ramagovinda Trivedi, Chaukhamba Vidyabhavan,** edition 2, **5/1/7.**
9. **AtharvavedaSamhita along with Sayanbhashya edited with Hindi commentary byPt. Ramaswaroopsharma Gaud,Chaukhamba Vidyabhavan,** edition 2, **Volume 7,16/2/2.**
10. Sushrutha, Sushrutha Samhitha, Ed. Acharya JT,Kavyatirtha NRA, Chaukhambha

Orientalia,Varanasi, 2002, pp. 498-499.

1. Sushrutha, Sushrutha Samhitha, Ed. Acharya JT,Kavyatirtha NRA, Chaukhambha

Orientalia, Varanasi, 2002, pp. 498-499.

1. Agnivesh Charak Samhita with Chakra Datta Hindi commentary by Brahmananda

Tripathi and Dr. Ganga Sahay Pandey, Chaukhamba Subharti Prakashan, edition 5,Chikitsa Sthan Chapter 1/1, Page7.

1. Singh RH, Ayurvediya Nidana Cikitsa Ke Siddhanta(Principles of Ayurvedic Diagnosis

And Treatment), Chaukhambha Amarabharati Prakashan, Varanasi,Vol. I, 1991, pp. 147-166

1. Agnivesh Charak Samhita with Chakra Datta Hindi commentary by Brahmananda

Tripathi and Dr. Ganga Sahay Pandey, Chaukhamba Subharti Prakashan, edition 5,Chikitsa Sthan Chapter 1/1, Page7-8.

1. Agnivesh Charak Samhita with Chakra Datta Hindi commentary by Brahmananda

Tripathi and Dr. Ganga Sahay Pandey, Chaukhamba Subharti Prakashan, edition 5,Chikitsa Sthan Chapter 1/1, Page5-6.

1. Sharangadharacharya, Sharangadhara Samhita, Ed.Vidyasagara PS, Chaukhambha

Orientalia, Varanasi,2002, p. 76.

1. Singh RH, Ayurvediya Nidana Cikitsa Ke Siddhanta (Principles of Ayurvedic Diagnosis

and Treatment),Chaukhambha Amarabharati Prakashan, Varanasi,Vol. I, 1991, pp. 147-166.

1. Singh RH, Ayurvediya Nidana Cikitsa Ke Siddhanta (Principles of Ayurvedic Diagnosis

and Treatment),Chaukhambha Amarabharati Prakashan, Varanasi,Vol. I, 1991, pp. 147-166.

19. http://medical-dictionary.thefreedictionary.com/immunomodulator

20. http://en.wikipedia.org/wiki/Adaptogen

21. Shukla devangi et al, “Role of Mental Health in Etiopathogenesis of Premature Ageing

and its Management with Guduchyadi & Bhringarajadi Ghrita Rasayana” M.D (Ayu)

thesis, March 2007, Gujarat Ayurved University, Jamnagar

22. Charaka. Charaka Samhita, Chikitsa sthana, volume 3 ,karpratichiyarasayanapada

1/3/29- 30, translated in Gujarati by Shastri girijashankar Mayashankar,Publlished by

Sastu Sahitya vardhaka Karyalaya, Ahmedabad, 3rd edition, 1981 p-43

23. Bhattacharya SK, Muruganandam AV (2003) Adaptogenic activity of Withania

somnifera: an experimental study using a rat model of chronic stress. Pharmacol

Biochem Behav 75: 547-555.

24. Rajasankar S, Manivasagam T, Surendran S (2009) Ashwagandha leaf extract:

a potential agent in treating oxidative damage and physiological abnormalities

seen in a mouse model of Parkinson’s disease. Neurosci Lett 454: 11-15.

25. Manikandan S, Srikumar R, Jeya Parthasarathy N, Sheela Devi R (2005)

Protective effect of Acorus calamus LINN on free radical scavengers and lipid

peroxidation in discrete regions of brain against noise stress exposed rat. Biol

Pharm Bull 28: 2327-2330.

26. Shukla PK, Khanna VK, Ali MM, Maurya RR, Handa SS, et al. (2002) Protective

effect of acorus calamus against acrylamide induced neurotoxicity. Phytother

Res 16: 256-260.

27.Prasad L, Khan TH, Jahangir T, Sultana S (2006) Acorus calamus extracts

and nickel chloride: prevention of oxidative damage and hyperproliferation

response in rat kidney. Biol Trace Elem Res 113: 77-92.

28.Sairam K, Rao CV, Goel RK (2001) Effect of Centella asiatica Linn on physical

and chemical factors induced gastric ulceration and secretion in rats. Indian J

Exp Biol 39: 137-142.

29.Haleagrahara N, Ponnusamy K (2010) Neuroprotective effect of Centella

asiatica extract (CAE) on experimentally induced parkinsonism in aged

Sprague-Dawley rats. J Toxicol Sci 35: 41-47.

30. Lee CY, Peng WH, Cheng HY, Chen FN, Lai MT, et al. (2006) Hepatoprotective

effect of Phyllanthus in Taiwan on acute liver damage induced by carbon

tetrachloride. Am J Chin Med 34: 471-482.

31. Chen TS, Liou SY, Chang YL (2009) Supplementation of Emblica officinalis

(Amla) extract reduces oxidative stress in uremic patients. Am J Chin Med 37: 19-25.

32. Al-Rehaily AJ, Al-Howiriny TA, Al-Sohaibani MO, Rafatullah S (2002)

Gastroprotective effects of ‘Amla’ Emblica officinalis on in vivo test models in

rats. Phytomedicine 9: 515-522.

33. Thorat SP, Rege NN, Naik AS, Thatte UM, Joshi A, et al. (1995) Emblica

officinalis: a novel therapy for acute pancreatitis--an experimental study. HPB

Surg 9: 25-30.

34. Sairam K, Priyambada S, Aryya NC, Goel RK (2003) Gastroduodenal ulcer

protective activity of Asparagus racemosus: an experimental, biochemical and

histological study. J Ethnopharmacol 86: 1-10.

35. Visavadiya NP, Narasimhacharya AV (2009) Asparagus root regulates

Cholesterol metabolism and improves antioxidant status in hypercholesteremic

rats. Evid Based Complement Alternat Med 6: 219-226.

36. Vagbhata, Ashtang Hriday, with Vidyotini Hindi commentary of Kaviraj Atridev

Gupta, Chaukhambha Prakashan, Varanasi, Sutrasthana, Chapter 1, Verse No.5, 2009,

Page 3.

37.Charaka Samhita-Agnivesha, Revised by Charaka and Dridha bala with Hindi

Commentary by R.D. Shastri, edited by Y.T. Acharya, Chaukhambha Sanskrit series,

Varanasi 5th edition, Sutrasthana 4/18, page no 34.