



Review Article

JARA AND SENESCENCE: A HOLISTIC VIEW OF AGING FROM AYURVEDA AND MODERN SCIENCE

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ABSTRACT

As the global population ages, there is an increasing need for thoughtful and effective approaches to elder care. Ayurveda, the ancient Indian system of medicine, provides a holistic perspective on aging- termed *Jara*- viewing it as a natural yet manageable process. This article examines how Ayurveda differentiates between natural aging (*Kalaja Jara*) and premature aging (*Akalaja Jara*), both of which are influenced by imbalances in the body's energies (*Doshas*), the weakening of bodily tissues (*Dhatus*), and alterations in digestion and metabolism (*Agni*). Ayurveda's insights into aging are aligned with many modern scientific theories, including those that address cellular wear and tear, immune system decline, and oxidative stress. What makes Ayurveda particularly relevant today is its proactive approach, offering practical tools to sustain vitality and postpone age-related decline. These tools include rejuvenating treatments called *Rasayana* therapies, seasonal detox methods known as *Panchakarma*, herbal remedies for different ages, daily and seasonal routines called *Dincharya* and *Ritucharya*, and strategies for mental well-being known as *Satvavajaya Chikitsa*. By integrating ancient wisdom with contemporary insights, Ayurveda offers a compassionate, preventive, and empowering approach to healthy aging- one that not only seeks to extend lifespan but also enhances the quality of life.

INTRODUCTION

Aging is a complex, universal, intrinsic, and progressive process that ultimately leads to senescence and death. It involves a gradual decline in vigor and physiological functions. As the global population of elderly persons is increasing, the relevance of understanding and addressing aging has grown. In 2018, for the first time ever, the global population of people aged 65 and older surpassed the number of children under the age of five.^[1] This demographic shift presents significant challenges.

Aging, known as *Jara*^[2] or *Vridhnavastha* in Ayurveda, is considered a natural and *Yapya* (palliative) disease.

The term '*Jara*' itself is derived from the root '*Jru*,' meaning 'decline stage' or 'old age,' signifying the phenomenon of becoming old by wearing out.

Ayurveda, one of the oldest systems for health management, offers a holistic approach to addressing the issues associated with aging. The concept of geriatrics, known as *Jarachikitsa* or *Jara* in Ayurveda, has been embedded in its principles from the beginning. *Jarachikitsa* is the branch of Ayurveda that focuses on promoting health, improving mental state, and boosting immunity against diseases.

AIM AND OBJECTIVES

Aim

To provide understanding of *Jara* (aging) by correlating Ayurvedic principles with modern perspectives and to examine traditional Ayurvedic interventions for improving the quality of life in the elderly.

Objectives

1. To explain the Ayurvedic classification, causes, and pathophysiology of *Jara* (aging), and their relevance to modern geriatric science.
2. To compare Ayurvedic and modern biological theories of aging, highlighting conceptual parallels and complementary insights.

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3. To evaluate the role of Ayurvedic therapies- like *Rasayana*, *Panchakarma*, and *Satvavajaya Chikitsa*- in maintaining physical vitality, mental health, and longevity in older adults.

Concept of Jara (Aging)

Jara^[3] is known as aging, defined as that which has lost age, meaning it has become old by the act of degeneration of bodily tissues and organs. This happens due to the degradation of body elements, referred to as *Paramanu Vibhaga*.^[4]

The body is in a continuous state of decay from birth, reflected in the etymology of the Sanskrit word *Shariram* ("Shiryate Iti Shariram" - that which decays). *Charaka* also explains degeneration and decay as natural characteristics of the human body.

Synonyms of Jara^[5]: Terms that may be related to *Jara* are

Pravaya- '*Pragaṭam vayoasya*' (one has crossed his youth)

Sthavira- '*Ajira sisira iti nipataḥ*' (one has stayed for a long time)

Vridhha- '*Vardhate sma*' (one has already attained Vridhhi)

Jino- '*Jinati vayasō hiyate jinah*' (one is attaining deterioration.)

Jirna- '*Jirnam paripakva purnayoh*' (same meaning as Jina)

Jarana- '*Jiryateratrun*.'

Here, the term '*Pravaya*' indicates the elapsing of the years after the birth; the term '*Sthavira*' indicates about the incapacity or the impairment of the body. According to *Rasaratna samuchchaya*.^[6]

movement of the aged person; the term '*Vridhhi*' is used for the mentally matured person, whereas '*Jirna*' and '*Jarana*' are indicative of the increased catabolic and degenerative

According to *Sushruta*, *Jara* is a *Vata*-dominant stage, considered largely untreatable (*Upachararahita*) and palliable (*Yapya*), occurring with time (*Kalakritvyadhi*).

Acharya Sharangdhara described a decade-wise decline, including the diminishing of *Balyavastha* (infancy) in the 1st decade, *Vridhhi* (growth) in the 2nd, *Chhavi* (complexion) in the 3rd, *Medha* (intellect) in the 4th, *Twak* (skin) in the 5th, and *Drishti* (vision) in the 6th decade.

Ayurveda distinguishes between two types of aging:

Kalaja Jara (Timely or Chronological Aging)

Kalaja Jara occurs at the proper age, usually after 60 years. It is *Parirakshana-krita*, meaning it happens despite following preventive measures and daily/seasonal routines, including timely purification (*Shodhana*). This aging progresses slowly and less intensely. The main cause is *Kala* (time), which leads to the reduction of *Doshas*, *Dhatu*s, and *Malas*, resulting in old age (*Vridhnavastha*).

Akalaja Jara (Untimely or Premature Aging)

Manifests before the prescribed age due to various etiological factors, often referred to as "*Aparirakshana-krita*." This happens when proper care of personal hygiene (*Swasthavritta*) and timely *Shodhana* are not followed. *Akalaja Jara* can be of greater intensity and progress rapidly if not addressed.

Causative factors	Leads to
<i>Panthanam</i> i.e., excess walking	Aggravate <i>Vata Dosha</i> , drying <i>Rasa Dhatu</i> and hampering the nourishment of subsequent <i>Dhatu</i> s.
<i>Atisheeta sevana</i> i.e., excessive cold intake	Aggravates <i>Vata</i> , blocking body channels.
<i>Kadanna sevana</i> i.e., unwholesome food	Compromised nutrition and early aging.
<i>Manapratikula</i> i.e mental stress	Improper digestion and nourishment.

Understanding *Jara* requires a clear knowledge of *Vaya* (age). However, various *Samhitas* present differing views on these life stages, which are summarized in the table below.

Samhitas	Avasthas of Vaya				
	Balya	Yuva	Maddhyama	Vridhha	Ayupramana
<i>Charaka samhita</i> ^[7]	1-30 yrs.	-	30-60 yrs	60-100 yrs	100 yrs
<i>Sushruta samhita</i> ^[8]	1-16 yrs	-	16-70 yrs.	70-100 yrs	100 yrs
<i>Kashyapa samhita</i> ^[9]	1-16 yrs.	16-34 yrs.	34-70 yrs.	70-100 yrs	100 yrs
<i>Astanga samgraha</i> ^[10]	1-16 yrs.	-	16-60 yrs.	60-100 yrs	100 yrs
<i>Astanga hridaya</i> ^[11]	1-16 yrs.	-	16-70 yrs.	70-100 yrs	100 yrs
<i>Bhavaprakasha</i> ^[12]	1-20 yrs.	-	20-70 yrs.	70-100 yrs	100 yrs

<i>Chakrapani</i> ^[13]	1-36 yrs 1-25 yrs.	-	36-72 yrs. 25- 50 yrs.	72-120 yrs 72-80 yrs	120 yrs <i>Pravaayu</i> . 80 yrs. <i>Madhyamaayu</i>
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Age is traditionally defined in terms of chronological age and biological age.

Biological age is a way of understanding how your body is actually aging, rather than just counting the number of years since you were born. Unlike chronological age, which is the same for everyone born in the same year, biological age looks at how your lifestyle, genes, environment, and overall health have affected your body over time. That means two people who are the same age on paper can have very different biological ages- one might be much younger or older in terms of physical health and disease risk. It's a more accurate reflection of your true health and how you're aging.^[14]

The "Age Gap" Concept

The distinction between biological age and chronological age- commonly referred to as the "age gap"- acts as an additional marker of the aging process. A positive age gap (biological age > chronological age) suggests accelerated aging, while a negative gap indicates slower aging or better health relative to peers.^[15]

Older adults are typically categorized into three age-based groups: the young-old (ages 65–74), the old (ages 75–84), and the very old (85 years and above).^[16]

Senescence: Refers to the slow deterioration of normal biological functions, likely caused by changes in both mitotic cells (like fibroblasts) and post-mitotic cells (such as neurons), along with modifications in structural elements like bones and muscles.

Senility: Derived from the Latin word 'senilitus' and describes the period of physical and mental decline typically associated with old age.^[16]

Premature senility: Refers to the early appearance of senile features, occurring before the usual age of onset, sometimes as early as 40 years.

Senile: Denotes anything related to old age.

Senilism: Describes the state of old age, especially when it occurs prematurely.

Acharya Sushruta described various signs of *Jara*, including deterioration of body elements and sense organs, loss of power and fertility, lack of energy, wrinkles, graying/loss of hair, cough, breathlessness, inability to perform activities, emaciation, loss of intellect, tremors, loss of appetite, husky voice, heaviness, restlessness, and inappropriate digestion.

The progression of *Jara* is associated with factors like *Dhatukshaya*, *Ojakshaya*, and *Srotodusti*.

Vitiation of *Vayu* and *Mandagni* can cause *Srotodusti* in the form of obstruction (*Srotosanga*),

leading to improper nourishment of tissues. *Oja* depletion results in degeneration of the body.

Pathophysiology of Aging in Ayurveda

The pathophysiology of aging in Ayurveda centers on the interplay of *Doshas* (biological energies), *Agni* (digestive/metabolic fire), and *Dhatu* (tissues), with distinct mechanisms for natural aging (*Kalaja Jara*) and premature aging (*Akalaja Jara*).

Kalaja Jara (Natural Aging)

Role of *Vata Dosh*

- *Vata* becomes dominant in later life, driving degenerative changes such as tissue atrophy, diminished immunity (*Ojas* and *Bala*), and impaired sensory/motor functions.
- Reduced *Snehansha* (oiliness) due to declining *Kapha* exacerbates dryness and fragility.

Decline of *Pitta* and *Kapha*

- Reduced *Pitta* weakens digestion (*Jatharagni*), leading to coldness and loss of lustre.
- *Kapha* depletion diminishes nourishment, stability, and mental resilience.

Agni and *Aam*

- *Mandagni* disrupts digestion, causing *Aam* (toxins) to accumulate. This impairs tissue metabolism (*Dhatwagni*) and accelerates aging.^[17]

Akalaja Jara (Premature Aging)

Etiological Factors

- Exposure to stressors depletes *Prakrit Kapha* (innate *Kapha*) and aggravates *Vata*, destabilizing *Agni* (*Agni Vaishamya*).

Srotodushti and *Dhatukshaya*

- Vitiated *Doshas* block *Srotas* (channels), impairing nutrient flow to tissues (*Rasadi Dhatu*).
- Poorly nourished tissues (*Apreenana Rasa Dhatu*) weaken subsequent tissues (e.g., muscle, fat), culminating in *Dhatukshaya* (tissue emaciation).
- *Vata/Pitta*-dominant individuals are predisposed to faster degenerative changes due to inherent *Dosha* properties.

Balance and Degradation

The body undergoes continuous growth (*Shareerarambha*) and degradation (*Shareeravinasha*), mediated by *Vata*. Aging is exacerbated when *Pitta* (destructive energy) synergizes with *Vata*'s degenerative effects.

This shows aging as a multifactorial process rooted in *Doshic* imbalance, metabolic dysfunction, and tissue integrity loss.

Ayurvedic Wisdom vs. Contemporary Theories

Modern science has proposed numerous theories to explain aging, broadly categorized into Programmed theories and damage/error Theories. While none are universally accepted, Ayurvedic concepts offer potential correlations to some of them.

- **Programmed Longevity:**^[18] This theory suggests aging is genetically programmed.^[19] The Ayurvedic concept of *Kalaj Jara* (timely aging) as a natural, time-bound phenomenon driven by inherent nature (*Swabhava*) aligns with this.
- **Endocrine and Neuroendocrine Theories:** These emphasize the role of hormones and the nervous system. Ayurveda's principles regarding *Tridosha*, *Agni*, *Dhatwagni*, *Bhutagni*, *Manas* (mind), *Prana* (vitality), *Buddhitatwa*, and *Samayogavahitwa* (homeostasis) may offer elaborations or parallels. The body's ability to maintain homeostasis (*Samyogavahitwa*) is attributed to its *Buddhitatwa* maintaining balance through the senses (*Indriya*).
- **Immunological Theory:** This focuses on the decline of the immune system. In Ayurveda, *Ojas* (vitality/immunity) is closely linked to immune function, and its decline contributes to aging.
- **Wear and Tear Theory:** Suggests cells and tissues wear out from use. This aligns with the Ayurvedic concept of *Dhatu Kshaya* (tissue depletion) and the general decline described in *Jara*.
- **Rate of Living Theory:** Proposes that metabolic rate influences lifespan. In Ayurveda, *Agni* (metabolic fire) is central to body processes, and its state influences the aging process. *Pitta Prakriti*, associated with higher metabolic fire, is sometimes linked to shorter lifespan.
- **Cross-Linking Theory:** Attributes aging to the formation of abnormal protein cross-links. Ayurveda links abnormal linking and resulting derangement of homeostasis (*Samayogavahitwa*) to altered *Buddhitatwa*.
- **Free Radical Theory and Oxidative Stress Theory:** These link aging to damage from reactive oxygen species. Ayurvedic concepts of *Rasayana* therapies, *Bhutagni*, and *Dhatwagni* are considered relevant here, as *Rasayanas* often possess antioxidant properties and *Agni* relates to metabolic processes generating byproducts.
- **Caloric Restriction Theory:** Suggests restricting calories can prolong life. This has parallels in the Ayurvedic therapeutic measure of *Langhana* (lightening therapy), aimed at stimulating *Agni* and *Prana* and nullifying the effects of *Aam*.

Some modern theories, such as Mitochondrial Theory and Telomere Theory, do not have direct correlates mentioned in the provided Ayurvedic sources. However, the sources suggest that most modern theories of aging can be explored using Ayurvedic fundamentals.

Ayurvedic Concepts and Modern Findings on Jara:

According to Ayurveda, the *Jara Avastha* (old age) is primarily dominated by *Vata dosha*. This disturbance in the *Doshas*- especially the rise of *Vata*, aggravation of *Pitta*, and decline of *Kapha*- affects various bodily components and plays a role in the aging process.

Aging is characterized by several changes at the physiological level,^[20] including:

- **Dhatu Ksheena (Tissue Depletion):** A decrease in the powerhouse function at the cellular level, a decline in DNA formation, or loss of sequence in DNA. *Heyamana dhatu* (decreasing *Dhatu*s) is a feature of old age. The proper formation and nourishment of *Dhatu*s are hindered, affecting functions like *Preenana* (nourishment).
- **Indriya Ksheena (Sensory Organs Depletion):** Deterioration of sensory and motor organ functions. Examples include lens opacity causing blindness and high frequency acuity diminishing causing deafness. Various disorders of *Jnanendriya* and *Karmendriya* are observed in old age.
- **Bala Ksheena (Decreased Strength):** Reduced T-cell function and increased autoantibodies. *Ojas*, considered the quintessence of all seven *Dhatu*s and responsible for strength and resistance against diseases (*Vyadhi kshamatva sakti*), is also affected.
- **Agni Impairment:** The 13 types of *Agni* represent the digestive and metabolic fire. Caraka states that *Agni* is responsible for *Ayu* (life span), *Varna* (color), *Bala* (strength), *Svasthya* (health), *Utsaha* (enthusiasm), *Upacaya* (nourishment), *Prabha* (lustre), *Ojas*, and *Prana*. In old age, *Visamagni* often prevails due to *Vata* dominance, leading to digestive issues like indigestion (*Ajeerna*), bloating (*Adhmana*), and pain (*Sula*). Hampered *Agni* also leads to *Malakshaya* (diminished waste products).
- **Vali, Pali, Khalitya** – (Greying and falling of hairs) – as the age increases growth rate of hair decreases and decrease in melanocytes within keratin.
- **Srotas Changes:** *Srotas* (channels) are a network connecting the body for transportation of nutrients and waste. Aging can lead to *Khavaigunya* or *Srotovaigunya*, causing blockages or deformities that manifest as various disorders depending on the affected channel (e.g., osteoporosis in *Asthivaha Srotas*, constipation in *Pureesa vaha Srotas*).

According to Modern Science^[21]

Normal Aging and Changes in Body Systems		
System	Normal ageing	
Cardiovascular	A slight enlargement is observed, while stroke volume and left ventricular ejection fraction remain within normal limits. Oxygen consumption during exertion decreases by 7.5–10% with each passing decade, leading to a reduction in exercise capacity.	
Respiratory	By the age of 70, vital capacity declines by approximately 40%. Both FEV1 and FVC decrease by about 30% by the age of 80. Peak expiratory flow rate (PEFR) shows a gradual decline starting after age 30.	
Alimentary	Peristalsis becomes diminished and irregular, with age-related changes such as presbyesophagus and slower colonic transit. There is also decreased absorption of certain nutrients and a reduction in overall energy needs.	
Heptobiliary	Hepatic mass and metabolic reserve decline with age, but overall liver function remains preserved.	
Renal	There is a decline in glomerular filtration rate (GFR) along with a decrease in the number of functional tubules and glomeruli. Serum creatinine levels may appear lower due to reduced muscle mass.	
Genitourinary	Men	Women
	Reduced testosterone	Post menopausal low oestradiol; raised LH/FSH
	Normal FSH/LH	Loss of female atropic reproductive capability.
	50 % of men over 70 have abundant spermatogenesis	Loss of muscle mass leads to decline in strength.
		Reduced mental agility and minor loss of mental ability.
Endocrine	Pituitary function declines, accompanied by irregularities in thyroid and pancreatic activity. Additionally, the adrenal glands show a diminished response to stress.	
Musculoskeletal	Increased body fat and loss of muscle mass.	
Dermatological	Collagen loss in the skin results in thinning and a fragile, paper-like appearance. This can lead to bruising, such as ecchymoses and senile purpura.	
Haematological and immune system	Age-related decline in T cell function may contribute to the development of late-onset autoimmune diseases. Changes in the immune system with aging may also be linked to a) Increased risk of certain cancers, and b) altered responses to infections and illnesses.	

Ayurvedic Approaches to Geriatric Care and Delaying Aging

Ayurveda offers a multidimensional approach to geriatric care, aiming to delay aging and manage age-related issues. This is primarily addressed through *Jarachikitsa* or *Rasayana Tantra*, a branch focused on rejuvenation and longevity. The approaches include:

- **Kayachikitsa:** This branch involves the use of internal medicine and other modalities for the diagnosis and treatment of ailments, as well as overall health restoration^[22]. It helps balance *Doshas*, strengthen *Dhatus*, enhance nourishment, regularize circulation, and detoxify the body, combating degenerative aging effects.
- **Rasayana Therapy:** *Rasayana* is not just a single drug but a rejuvenative regimen involving remedies, dietetics, healthy lifestyle, and positive psychosocial conduct. It is considered one of the foremost branches of *Ashtanga* Ayurveda. The primary objective of *Rasayana* is to attain optimum nourishment of the *Dhatus*. Its use produces the best qualities of body tissues, improving metabolic and immunological status.

Rasayana drugs advised for particular age group^[23]

Age group in years	Rasayana drugs	Desired effect
1-10 yrs	<i>Vacha, Kashmari, Suvarna</i>	<i>Balya</i>
11-20 yrs	<i>Kashmari, Ashvagandha, Bala</i>	<i>Vridhi</i>

21-30 yrs	<i>Lauha, Amlaki</i>	<i>Chavi</i>
31-40 yrs	<i>Sankhpushpi, Brahmi, Jyotishmati</i>	<i>Medha</i>
41-50 yrs	<i>Jyotishmati, Priyala, Somraji, Bhringraja</i>	<i>Twaka</i>
51-60 yrs	<i>Jyotishmati, Triphala, Lauha-Satavari, Amlaki</i>	<i>Dristi</i>
61-70 yrs	<i>Atmagupta, Vajikarna drugs</i>	<i>Sukras</i>
71-80 yrs	Drugs may not be effective	<i>Vikrama</i>
81-90 yrs		<i>Buddhi</i>
91-100 yrs		<i>Karmendriya</i>

Rasayana can be classified ^[24] in various ways:

- **By Method of Use:** *Kuti Praveshika* (administered with strict rules and confinement) and *Vatatapika* (administered without strict rules, allowing exposure to air and sunlight).
- **By Scope:** *Kamya Rasayana* (desire-fulfilling, e.g., for longevity, memory, beauty), *Naimittika Rasayana* (disease-specific, e.g., *Shilajatu* for diabetes), and *Ajasrika Rasayana* (promoting health daily).
- **By Content:** *Ahara Rasayana* (dietary), *Aushadha Rasayana* (medicinal), and *Achara Rasayana* (conduct).

Numerous single and compound *Rasayana* drugs and formulations are mentioned, including *Amalaki*, *Guduchi*, *Ashwagandha*, *Shatavari*, *Brahmi*, *Pippali*, *Chyavanaprasha*, *Brahma Rasayana*, *Triphala Rasayana*, and *Silajatu Rasayana*. These drugs often act by general tonic properties, increasing functional capacity, and may possess properties like immunomodulation, adaptation, antioxidation, and nootropics. They can act on *Agni*, *Doshas*, and *Dhatu*s.

➤ **Achara Rasayana (Code of Conduct):** As part of the *Rasayana* concept, *Achara Rasayana* is a unique socio-behavioral code of conduct focusing on psychological and spiritual health. Following proper conduct strengthens the mind, nourishes the body, and helps individuals remain disease-free and youthful. This aligns with living a stress-free life and promoting longevity and immune strength.

Medhya Rasayana^[25] (Cognitive Support): *Medhya Rasayanas* are a category of *Rasayana* specifically targeted at the brain tissue and improving intellectual faculties. They are considered brain tonics and rejuvenators. *Medhya Rasayanas* are known to improve *Dhi* (intelligence), *Dhriti* (retention), and *Smriti* (memory). They can be beneficial in managing stress, anxiety, and depression. These herbs are utilized to prevent and manage age-related neurological and psychiatric conditions that involve memory loss and cognitive impairments. Some key *Medhya Rasayana* drugs mentioned include *Mandukparni*, *Yashtimadhu*, *Guduchi*, *Shankhpushpi*, *Brahmi*, *Ashwagandha*,

Jyotishmati, and *Tagara*. These drugs act through various mechanisms, such as increasing circulation to the central nervous system, possessing antioxidant and anxiolytic properties, and supporting the regeneration of brain cells. Research supports their potential in delaying age-related cognitive decline and managing degenerative brain disorders like dementia. It is suggested that *Medhya Rasayanas* are most effective when administered in young and middle age, but they can still be used effectively in old age to delay deteriorating aspects of *Jara*.

➤ **Diet (Ahara):** Consuming an appropriate diet is fundamental to slow aging. Avoiding foods that accelerate aging is important. Nourishing foods with *Snigdha Guna* (unctuous quality) are particularly important for maintaining vitality.

➤ **Panchakarma:**^[26] These are purificative procedures that help maintain physical fitness and promote longevity by preventing disease and delaying aging^[27]. *Panchakarma* aims to correct digestive fire (*Agni*), improve metabolism, and remove toxins (*Aam*) and free radicals that contribute to tissue injury and loss. Periodic and seasonal *Panchakarma* helps prevent *Agni* vitiation by removing accumulated *Doshas*.

The procedures involve *Poorvakarma* (preparatory steps like *Langhana/Pachana* to stimulate digestion, *Snehana* for lubrication, and *Svedana* for liquefaction and movement of *Doshas*), *Pradhankarma* (main cleansing procedures like *Vamana* for the upper tract, *Virechana* for the lower tract, *Vasti* for *Vata* vitiation, and *Nasya* for head/neck issues), and *Paschatkarma* (post-therapy regimen like *Samsarjana Karma* to restore digestive power). Specific procedures like mild *Vamana* and *Virechana*, *Matra Basti* (therapeutic oil enema), *Abhyanga* (massage), *Swedana* (oleation), *Shirodhara*, and *Shirobasti* are considered suitable for the elderly. *Panchakarma* is said to improve sense organ perception, skin complexion, vigor, and intellect.

➤ **Lifestyle and Behavioural Regimens:** Ayurveda places great emphasis on following specific daily and seasonal regimens to prevent premature aging and maintain overall well-being.

- **Dincharya (Daily Regimen):** Includes practices like waking up during *Brahma Muhurta* (about two hours before sunrise), maintaining oral hygiene (brushing teeth, cleaning the tongue, chewing betel leaves after meals), eye care (*Anjana*), ear care (*Karnapurana*), nasal drops (*Nasya*), full body oil massage (*Abhyanga*) to prevent dryness and stiffness, regular exercise (especially walking) to improve circulation and organ efficiency, bathing (*Snana*) to improve enthusiasm and strength, and avoiding suppression of natural urges (*Vega Niyamana*). Other practices mentioned include *Udwartan* (powder massage), wearing footwear, using an umbrella, and using a walking stick.
- **Ritucharya (Seasonal Regimen):** Following specific dietary and lifestyle practices according to the season is crucial for balancing *Doshas* and maintaining health.
- **Ratricharya (Night Regimen):** Includes practices for the evening and night, such as proper oral hygiene and chewing betel leaves after meals.

These regimens help balance the *Tridoshas*, maintain the *Agni* at all levels, ensure healthy formation and nourishment of *Dhatus*, prevent *Dhatu Kshaya*, and lead to a disease-free life.

➤ **Satvavajaya Chikitsa^[28]:** This treatment modality is specifically aimed at managing diseases of *Manasa* (mental) origin. In the context of aging, it addresses socio-psychological problems common in the elderly, such as loneliness, isolation, and stress from life changes. *Satvavajaya* involves controlling feelings like *Kama* (desire), *Krodha* (anger), *Lobha* (greed), *Moha* (attachment/illusion), and *Irsha* (jealousy). Key components include:

- **Dhee:** Discriminative knowledge to distinguish between good and bad. Family members play a role here by making elders feel included and needed.
- **Dhairya:** The ability to overcome critical life conditions. Support, care, and patience from family members are essential, especially during loss.
- **Smriti:** Memory and recollection. Spending time with elders, sharing experiences, and seeking their advice helps them remember their past. Community activities also contribute.
- **Gyan:** Promoting spiritual knowledge through watching/reading spiritual content and visiting holy places.
- **Vigyan:** Understanding traditions and culture, and respecting elders. It also involves elders learning new technologies to connect with the younger generation.

- **Samadhi:** Helping the person reach the ultimate goal of life through deep counselling.

This approach highlights the vital role of family and community support in the well-being of the elderly.

CONCLUSION

Aging is a complex process involving structural and functional changes. Ayurveda provides a detailed understanding of aging (*Jara*) as a natural phenomenon (*Kalaja Jara*) that can be accelerated by preventable factors (*Akalaja Jara*). Ayurvedic principles highlight the crucial roles of *Agni*, *Dhatus*, *Doshas*, *Ojas*, *Srotas*, and *Manas* in the aging process.

While the irreversible process of *Kalaja Jara* cannot be "cured," its progression can be delayed and managed. *Akalaja Jara*, or premature aging, is considered preventable by adopting appropriate measures. *Kayachikitsa*, particularly through *Panchakarma* (purification) and *Rasayana* (rejuvenation) therapies, alongside ideal lifestyle regimens, ethical conduct, diet, and mental practices, are the main tools recommended by Ayurveda to maintain physical, physiological, and psychological health in older age and enhance lifespan. Ayurveda offers a promising alternative approach for geriatric care, providing a hopeful solution for the increasing aged population.

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