



CONCEPT OF JARA AND ITS MANAGEMENT THROUGH KSHARA POTENTIATED RASAYANA

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Abstract: Ayurveda, the science of life covers a wide range of subjects and issues of living beings in relation to total approaches of individual development and health care. Different Ayurvedic literature preaches wide and in depth knowledge of ideal living including promotive, preventive and curative aspect of health sciences. Jara (aging) management in present time is a challenging task for present health providing system. Our ancestral knowledge helps to tackle these challenges through kshara potentiated rasayana.

Keywords: Kshara, rasayana, jara, srotas, agni.

Introduction: Ayurveda, deals with physical, social, psychological as well as spiritual well being of an individual. The desire to live is common to all living creatures evolved on this graceful planet, the Earth. Man, is a step ahead in the sense, desires not only to live but to live a long, happy and disease free life as far as possible.

Shifting of Medical Challenges–Due to incorrect life style, dietary habits and stress in day to day life premature ageing in very common in present time. The present study designed with the hypothesis that Stress, incorrect Life style & Dietary Habits have found to be major impacts on Ageing. In today's lifestyle of stress is increasing day by day. Modern medicines on the one hand are, no doubt good for short term management but having many troublesome effects and having their own limitations. On other hand Rasayana therapy if practiced in daily life has excellent results in prevention and treatment of diseases.

Etymology of Jara: Term Jara (old age) is originated from root word “Jrish vayohano” which indicates to the loss in the period of life span. The deduction from the remaining half of the expected duration and every spent year would be considered as a loss in the age.^[1]

Types of Jara

1. **Kalaja Jara:** Jara coming at the proper age is Kalaja Jara (after 60 yrs.). It is ‘Parirakshana

Krita’ means it occurs at the proper age even after following the daily and seasonal regimen mentioned in Swasthavritta. This is nothing but chronological Ageing i.e. Dhatu kshaya janya jara.

2. **Akalaja Jara:** ‘Akalotpanna lakshana Akalaja’, ‘Akalat jata iti Akalaja’ means that thing which occurs Akalaja i.e. before its prescribed time. Occurs before the proper age due to not taking the proper care of personal hygiene (Swasthavritta). This Akalaja Jara is of greater intensity, rapidly progressing one if neglected. This is Biological Ageing i.e. Marga avarodha janya jara^[2].

Etiological Factors of Akalaja Jara

A. Etiological Factors Related to Dietary Habits: Lavana (salt), Amla (sour), Katu (spicy) rasa pradhana Kshara (alkali) Suska shaka & Mamsa (dry vegetable & Meat), Tila Samyoga, Pista Anna, Viruddha Anna (Incompatible Diet), Asatmya Anna (Unfavorable Diet), Ruksha Anna (Dry Cereal), Abhisyandi Anna, Klinna & Guru Anna (Heavy Diet), Puti & Paryushita Anna (Polluted & Out dated Diet), Vishamashana (Improper Eating Habits), Adhyashana (Over Eating).^[3]

B. Etiological Factors Related to Life Style: Atimarga Gamana (Excessive Walking), Diwa Swapna (Day Sleeping) Nitya Stri Sevana (Excessive Intercourse), Nity Madya Sevana (Excessive Intake of Alcohol) Vishama Vyayama

Sevan (Improper Exercise) are main etiological factors related to life style.

C. Etiological Factors Related to Disturbed Mental Health: *Bhaya* (Fear), *Krodha*, (Anger), *Shok* (Sorrow), *Lobha* (Greed), *Moha* (Affection) and *Ruksha Vani* (Harsh words) are main etiological factors related to disturbed mental health.^[4]

Decade Wise Ageing Process: *Vagbhatta* was the first one to record such an observation, which was followed later by *Sharangadhara*.

बाल्यं वृद्धिः छर्विमेघा त्वग्दृष्टिः शुक्रविक्रमौ ।

बुद्धिः कर्मेन्द्रियं चेतो जीवितं दशतो हृसेत् ॥ (शा.सं.पू.6/20)

बाल्ये वृद्धिं प्रभामेधात्वक् शुक्राक्षिस्रोतीन्द्रियम् ।

दशकेषु कमाघ्नन्ति मनः सर्वेन्द्रियाणि च ॥ (अ.सं.शा.8/25)

It is clear that ageing does not occur simultaneously in all the tissues. Different body tissues are affected ageing at different time period. Gradual declination of a particular faculty takes place in each decade of life and by the end of decade, that particular faculty is lost.

Chief Complains of Jara: *Twak Parushata* (dryness of skin), *Slatha sara* (Flabbiness of the body), *Slatha mamsa* (Decreased muscle tone), *Slatha Asthi* (Bone weakness), *Slatha Sandhi* (Flaccid joint), *Dhatu Kshaya* (Loss of tissues), *Kayasya Avanamanam* (Bending of the body), *Vepathu* (Tremors) *Khalitya* (Falling of hairs), *Vali* (Wrinkling), *Palitya* (Graying of hairs), *Kasa* (Coughing) *Shwasa* (Short breath) *Medha hani* (Decreased functions of Grasping power, retention power, memory power, Speech and Knowledge), *Utsaha hani* (Decreased Enthusiasm), *Parakrama hani* (Decreased Physical Strength), *Paurusha hani* (Decreased Virility), *Prabha hani* / *Chhavi hras* (Changes in Complexion), *Shukra Kshaya*, *Dristi hras* (Diminished vision), *Karmendriya hani* (Decreased Loco motor activities) and *Buddhi hani* (Deterioration in Wisdom).^[5]

Ageing Process

A Modern Review

Geriatrics: Greek word “*geros*” mean the old age + “*iatic*” mean the medical treatment. This is the branch of medicine concerned with the problems of *Ageing*, including physiological, pathological, and psychological problems.

Definition of Ageing: “The processes that occur during life which culminate in changes that decrease an individual's ability to cope with biological changes”. Some Theories of Ageing are given below:

Waste accumulation theory, Limited number of cell divisions theory, Hay flick limit theory, Death hormone theory (DECO), Thymic

-stimulating theory, Mitochondrial theory, Errors and repairs theory, Redundant DNA theory, Cross-Linkage theory, Autoimmune theory, Caloric restriction theory, Gene mutation theory, The Rate of Living theory, Order to disorder theory, The Telomerase theory of Ageing, Neuro Endocrine theory or Weak Link Theory and Free Radical theory of Ageing.

Free Radical Theory (Most Accepted Theory): “Free radical” is a term used to describe any molecule that differs from conventional molecules in that it possesses a free electron, a property that makes it react with other molecules in highly volatile and destructive ways. The changes induced by free radicals are believed to be a major cause of *Ageing*, disease development and death.^[6]

Anti Ageing Therapies in Ayurveda

- Use of *rasayana*.
- Use of balanced diet with their code & conduct.
- Use of *panchakarma*.
- Follow of life style mentioned in *Ayurvedic* literature.
- Follow code of conduct as mentioned in *Ayurvedic* literature.
- Yogic practices and meditation practices.
- Medication of specific *jaravastha* born diseases^[7].

Mode of Action of Rasayana: *Rasayana* basically promotes the nutrition through four modes. They are:

1. By directly enriching the nutritional intake of the body through increasing the consumption of *Amalki*, *Satavarai*, Milk, Ghee, etc
2. By improving *Agni* i.e. digestion and metabolism through *Bhallataka*, *Pippali* etc, there by promoting nutrition.
3. By promoting the capability of *Srotas* or microcirculatory channels in the body, through herbs like *Haritaki*, *Guggulu*, *Tulsi* etc.
4. By its an anti-toxic property

Effect of Rasayana

“*Rasasya Ayanam Rasayanam* “

“*Labho payo sashtanam rasadinam rasayanam*”

(ch.chi.1.)

The Therapy, which gives the benefit of good *Rasa*, is *Rasayana*. Hence, it is the therapy by which one gets the *Rasa*, *Raktadi Dhatus* of optimum quality..*Rasayana* - Delays *Ageing* and death, Increase intelligence, memory and luster, Excellence in the body tissues, Increases the immunity, Removes diseases and Gives Long life.

Rasayana Potentiating Effect of Kshara: Uses of *kshara* in *Rasayana* chapter of *Carak samhita* have generate curiosity to think about importance of *kshara* in *Rasayana Yogas* [8]. If we discuss about the properties of *kshara* which are plant ash residue having minerals [9], we can assume that it may potentiate *rasayana* in following four ways–

1. As a Micronutrient: As the principle of सर्वदा सर्वभावानां सामान्यं वृद्धिकारणम्, *kshara* having *Agni mahabhuta* so it nourishes the *Agni mahabhuta* predominant *Dhatu* and *updhatu*. Eg. *rakta*, *mutra*, *artava*. Due to predominance of *Agnimahabhuta* in *Kshara* which is opposite to the properties of *rasa* and *shukra*, it act as *ahridya* and *shukraghna*, if taken in excess quantity for long duration.

2. As an Agnidipak Property: Due to its *Agni mahabhuta* predominance, it act as *Agnidipak*. For digestion of *Rasayana dravya kshara* is mixed. So that the person having low digestive capacity *Kshara* mixed *rasayana* are recommended.

3. As a Srotoshodhak: Due to its *ksharana* property, *kshara* remove the obliterate, maintain micro- channel patency, i.e. carminative and *bhedana* like action, which help in maintaining normal physiology of the body that is why *Acarya Carak* has used *kshara* in *kaphanashak niruh vasti*. (c.si.3/57, 10/24), in *vasti vyapat marga-avrit Adhyamana* treated by *Kshara* containing suppositories. (c. si. 7/23), *Kshara* as a ingredient of *Tikshna vasti*.(c.si.7/63)and in *mritikabhakshana janya pandu chikitsa*. (c.chi.16/121)

4. As an Anti- toxic Property: *Ama-visha* (food poisoning) is nullified by *kshara*. So, these are few hypothesis to explain the *rasayana* potentiating effect of *kshara*.

Few Example in Samhita to Show the Kshara as Rasayana Potentiating Agent

- Soaking *pippali* with *palash ksharodaka* – *Amalakavaleha Rasayana*
- Use of *palash ksharodaka* in second *Indrokta Rasayana* (indicated by God Indra for Sages)
- *Pippali* triturated with *Palash ksharodaka* – *Pippali Rasayana*
- Ingredient of *pippalyadi churna* for potentiating *Agni* in *Kaphaja grahaniroga*. c.chi.15/169)
- As a ingredient of *ksharghrita*, *pippalimuladya kshara*, *bhallataka kshara*,

duralabhadya kshara, *Bhunimbadi kshara*, *kshara gutika* etc.(c.chi.15). [10]

Research Based Rasayana Mechanism: An antioxidant is a molecule capable of slowing or preventing the oxidation of other molecules. Oxidation is a chemical reaction that transfers electrons from a substance to an oxidizing agent. Oxidation reactions can produce free radicals, which start chain reactions that damage cells. Antioxidants terminate these chain reactions by removing radical intermediates, and inhibit other oxidation reactions by being oxidized themselves. The chief role of antioxidants in biology focused on their use in preventing the oxidation of unsaturated fats, which is the cause of rancidity.

Antioxidants are almost used in all pharmaceutical products to prevent them from degradation. Antioxidants are also widely used as ingredients in dietary supplements in the hope of maintaining health and preventing diseases such as cancer and coronary heart disease. The diet that is high in anti -oxidants neutralizes free radicals .though there are lots of benefits of free radicals they can cause damage to healthy cells as well. The diet that is high in anti-oxidants reduces free radicals there by fighting ageing [11].

Conclusion: *Akalaja Jara* can be effectively managed by *kshara* potentiated *rasayana*. *Kala*, *Swabhava*, *Vayu* and *Virodhaka Bhava* play a major role while *Desha*, *Ahara Sausthavam* (Dietary Habits), Lifestyle and *Avighata* (disturbed *Manasika Bhava*-Stress) contribute to the Ageing process. In the present stressful environment, disturbed *Manasika Bhava* like *Shoka*, *Chinta*, *Bhaya* etc. are observed to be playing a vital role in the etiopathogenesis of premature Ageing. Stress induced free radicals being highly reactive and unstable damage the cell membrane and cytosol and if unchecked, hastens the process of Ageing. This free radical damage can be reduced by use of alkaline concept of *Ayurveda* as application of *kshara*. [12]

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