



Review Article

Concept of Jara and its correlation to Geriatrics

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ABSTRACT

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Dietary factors, irregular life style, environmental factors, stress, marital disharmony, unhealthy relationships with family members etc are the determining factors which favors the development of Jara and these factors also influences greatly in the genesis of jaravyadhi. Jara Chikitsa is a specialized branch that focuses on health care of elderly people. It aims to promote health by preventing and treating diseases and disabilities in older adults. There is no set age at which patients may be under the care of a jara chikitsa. Hence Charaka after mentioning 100 years life span further he states that this may be changed to 60 years or 50 years. Accordingly old age should be in corporate depending on life span of an individual. Due to immunosenescence, decreased metabolic rate, degenerative changes, hormonal imbalance, sleeping disturbances, memory impairment, neurological weakness, auditory and visual impairment, sensory impairment etc. greatly compromises the individual capacity to overcome these problems with lot of difficulties. Ayurveda explains management strategies to combat these old age problems and these may be termed as jara chikitsa. One should follow daily regimens, dietary instructions, seasonal regimen, rasayana therapy, vajikaran therapy, control of old age diseases to a greater extent are strategies to combat against old age problems. Rasayan therapy is one of the excellent therapies to combat old age related troubles.

1. Introduction

Jara is a specific stage of life which develops as a late stage of life and is one among classification of vaya. Appearance of physical and physiological characteristics of old age, if observed in youngster or before older then this specific condition is considered as disease or abnormal stage. The Vaya has been divided in to three stages. Balyawastha (Childhood) which lasts up to the age of 16 years; Madhyawastha (middle stage) which lasts up to the age of to 60-years and Vriddhawastha (old age) after 60 years[1]. Old age is up to 100 years and there is progressive diminution of dhatu i.e. tissue elements, strength of sense organs, vitality, manliness, valour, power of understanding, retention, memory power, speech and analyzing facts. There is gradual diminution in the qualities of dhatu and dominance of vata[2].

Sushruta mentioned that after seventy years old age initiates and in whom the dhatus, sensory and motor organs, strength, vigor and enthusiasm decline and degenerate gradually and this age is characterized by development of wrinkles in the skin, grey hairs, baldness and suffers from cough, dyspnoea and inability to

all kinds of activities and person becomes like a worn out house in the rain[3]. Vagbhata mentioned that there is a gradual decline in the dhatu and the function of the sensory system and motor system associated with cough, dyspnea, development of wrinkle, baldness, sluggish functions of agnis, looseness of muscles, joints and bone, roughness in skin, forward bending of body, tremors, and etc[4].

Based on references in Ayurveda on old age can be hypothesized that vriddhavastha or jirnavastha or hani vastha is the last phase of life and is represented by the decay or degeneration of the body.

1.1 Kalaja Jara (Swabhavica Jara) and Akalaja Jara (Jaravyadhi)

Kalaja Jara is a natural phenomena and it is yapya i.e. it is manageable condition and occurs due to the process of decaying with passage of time[5].

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The diseases arising out of temporal factors that bring about old age and death are to be considered as natural ones and natural manifestations are irredeemable. Hence Swabhavika Jara is Nishpratikriya i.e. unavoidable and it should be preserved and protected by all means. Shareer Jiryte Anena Iti Shareeram means Kalaja Jara is a natural process. The body is decaying continuously, but when unnatural and untimely Jara occurs due to involvement of external or internal factors then it is said JaraVyadhi (Akalaja Jara).

1.2 Causative Factors of Jaravyadhi

Gramya Aahara-(Erratic Dietetic Pattern)

All the deteriorating effects in the body are caused by the following-Intake of substandard (Gramya) diet and ingredients of food which are sour, saline, pungent and alkaline; intake of dry vegetables, meat, sesame seeds and pastries; intake of germinated cereals and pulses, freshly harvested corns with bristles and pulses, ingredients which are mutually contradictory, unwholesome and ununctuous, saline and abhisyanidi(those which obstruct the channels of circulation); intake of softened, heavy, putrid and stale food; those who mostly indulge in irregular intake of food or taking food before the previous meal is digested; day sleep, sexual enjoyment with women and alcoholic drinks; excessive physical strain and irregular/improper exercise; excessive fear, hunger, grief, greed, infatuation and overwork[6].

In reference of effect of sleep Charaka also explains like the night of destructions, untimely and excessive sleep and prolonged vigil take away both happiness and longevity[7].

After taking Gramya Aahara predominance of Vata Dosha occur and this gives to major physical changes occur in the body which generally found in old aged people. Therefore Jara Vyadhi arises after decaying of strength of the body due to vitiation of Vata Dosha, because in Charaka Samhita it is very clearly seen the relation between longevity and Vayu that is If in a person, Vayu moves unimpaired, it is located in its own site, and it is in its natural state, then he lives for more than hundred years free from any disease[8].

There are some causes also observed in society in temporary form like

- i. Exercise is very good for health but now a day for maintenance of body person adopts strenuous exercise, heavy weight lifting, aerobics etc. but they don't know their bad effects in the body. It is the cause of damage to mitochondria and DNA of muscles cells.
- ii. Today's era dieting is common in society. Extreme dieting can permanently wreck our health. The person is physically and mentally broken down and so many hazards are presented below-
 - (a). Lose muscle tissue-less energy, cause of the wrinkles of the skin
 - (b). Lose hair
 - (c). Depression
 - (d). Have trouble concentrating and remembering things
 - (e). Lusterless skin

- iii. Chronic and degenerative diseases are a major health issue. If these diseases not treated timely then disability arises and some name of diseases which are the cause of Akalaja Jaraawastha like HIV,AIDS,Tuberculosis etc. these diseases are the cause of Ojo-kshaya(low immunity).
- iv. Irregular life style- Today's person unable to follow regarding prescribed regimen of Triopasthambha due to busy, hectic and competitive life style. Therefore mental and emotional fluctuations are increasing.
- v. Excessive and single use of Amla, Lavan, Katu, Tikta and Kasaya Rasa in diet.

1.3 Pathophysiology of Jaravyadhi

Srotodushti is the important state of routine pathogenesis of any disease. The origin of any disease occurs when there is a strong Dosha-Dushya Sammurchana in a particular Srotas.

The channels (Srotas) of circulation carry the Dhatus (tissue elements or their constituents) undergoing transformation to their destination[9]. As such when Dhatus are vitiated, Srotas are also affected as a natural consequence.

According to Shusurta-The Rasa originated from the assimilated food, serves only to maintain the vitality in the old and spontaneously decayed subjects owing to an exhausted state of the inner vitalizing principle, natural to old age[10]. These principles are called the root principles (Dhatus) in as much as they maintain the integrity of the human organism and guard against its speedy dissolution. Therefore the Apreenana Rasa Dhatu set off a chain of malformations of subsequent Dhatus. This leads to sequential weakening of the Dhatwagnis at the Saptdhatu level. The effect of this is further Dhatukshaya. This is the emaciated condition that is generally in Jara Vyadhi. After that following Vikaras are likely to occur in JaraVyadhi;

Abnormal state of Rasa

Obstruction of the channels of circulation,Panduatam(anemia), impotency(Klaibya), Sadh(asthenia), Krishangta(emaciation), Agni-nash(loss of the power of digestion), AyathaaKaal ValayaPalitya(premature appearance of wrinkles and greying of hairs)[11].

Abnormal state of Asthi

Asthibheda(pain in bone), discoloration and morbidity in hairs of the head, small hairs of the body, nail as well as beard[12].

Abnormal state of Majja

Pain in joints,Bhrama (Giddiness)[13].

Abnormal state of Shukra

Due to the vitiation of Shukra the individual becomes impotent (Klaibya) and there will be Aharshan (even if there is erection of the genital organ there is no power of penetration)[14].

1.4 Jara Vyadhi versus Oja (Sapta Dhatu Sara)

Oja plays a crucial role in age related diseases. The Oja is the most important element of vitality.

The whole body with its limbs and members is permeated with Ojas, and a loss or diminution of its natural quantity leads to the gradual emaciation of organism.

A pathological state of Ojas is characterized in three stages[15].

- i. Visransa,
- ii. Vyapad
- iii. Ksaya

The first of the preceding properties (dislodgment) gives rise to such symptoms as looseness of the bone joints, numbness of the limbs, dislodgement of the deranged humours from their respective receptacles and suppression of the (bodily and intellectual) functions to the second of the foregoing properties, should be ascribed such symptoms as numbness and heaviness of the limbs, dropsy due to the action of the deranged bodily Vayu, discoloured or changed complexion, feeling of malaise, drowsiness and somnolence. The third property of the deranged albumen, loss of wasting, brings on fits of fainting, loss of flesh, stupor, delirium and ultimately death.

Signs and symptoms of Ojokshaya are the considerable as specific characteristics of Jara Vyadhi.

1.5 Jara Vyadhi versus Satwa

In present scenario due to busy and hectic life style day by day stress, anxiety and depression increasing in human beings. This is the cause of vitiation of Vata Dosha and depletion of Kapha occurs. After this Satwa declines leading to decrease in its normal powers of[16].

- (a). Grahana
- (b). Vichar
- (c). Tarka
- (d). Dharana
- (e). Sankalpa
- (f). Buddhi
- (g). Smarana

This accounts for the increasing incidence of dementia, delirium and depression in youngsters.

1.6 Signs of JaraVyadhi[17]

The muscles become flabby, joint become vitiated. In such persons the marrow does not remain intact inside the bones, there is impairment in the ejaculation of semen and the Ojus (vital fluid) undergoes diminution.

1.7 Symptoms of Jara Vyadhi[18]

In such circumstances, he feels exhausted, languid and falls a victim to excess of sleep, drowsiness, laziness, Wrinkles, baldness, greying of hairs, hairfall. He loses initiative, gets dyspnea and he becomes incapable of physical and mental work. He also loses his memory, intellect and complexion and becomes an abode of diseases. Thus he fails to enjoy the full span of his life.

If we see the Rajayakshma patients then we also noticed that those are suffering from depletion of all tissue elements and the strength (Sarvadhatushyartasya).

1.8 Management of Jara Vyadhi

When these sign and symptoms appears according to Kala (time) it is known as Vriddhawastha and these Awastha can be slowed down, prevented and managed via Vayasthapnarth Aushdhi described in Charaka Samhita. When these changes are starts to appear due to improper diet, life- style and degenerated disease, Jirnavastha produced earlier and it is known as Akalaj Jara (premature aging) or Jara Roga.

1.9 Vaya Sthapnarth Aushdhi

Vaya Sthapna process is that which maintains the physical and mental status according to age. A specific class of drugs has been mention in Charaka Samhita as Vaya Sthapak with ten renowned drugs[19]. These drugs should apply according to requirement of patient. These ten drugs are following

- i. Amrita (*Tinospora cordifolia*)
- ii. Abhaya (*Terminalia chibula*)
- iii. Dhatri (*Embllica officinalis*)
- iv. Mukta (Pearl)
- v. Sveta (White variety of *Clitoriaternatea*)
- vi. Jivanti (*Leptadenia reticulata*)
- vii. Atirasa (*Asparagus racemosus*)
- viii. Mandukparni (*Centella asiatica*)
- ix. Sthira (*Desmodium gangeticum*)
- x. Punarnava (*Boerhaavia diffusa*)

These ten drugs are longevity promoters.

However in our opinion treatment of Akalaj Jara is easier to treat because the Kalaj Jara is Swabhavik and it is well known Swabhaonishpratikriya but the damaged Dhatu can be managed, if the treatment principles are followed exactly as described in Ayurveda like

- i. Follow the regimen of Dincharya, Ritucharya and Swasthritta.
- ii. Follow the rules of Dharniya (suppressible urges) and Adharniya Vega (tolerance of unsuppressible urges).
- iii. We must adapt the habit as said in Sadvritta and Aachar Rasayana (ethics having effects of Rasayana and so on)
- iv. Utilisation of Rasayana Aushdhi.

2.0 Rasayana therapy

Rasayana has been defined it is specific type of therapy to maintain the normal and perfect structure and functions of body cells. The abnormal cell may be normalized and damaged cell can repair and regenerated through Rasayana therapy. In this therapy cells are maintained in two ways[20].

The abnormal cells may be maintained with its contents within normal states through Vata-Tapic Rasayana, which can be used in daily life with daily routine work. But till condition of damaged cells or old cells likely to damaged cells is a requirement of generate the new cells or entire fitness of old cells. This requirement can be filled through Kuti-Praveshik Rasayana. Both type of therapy should prescribe according to status of Shareer Dhatu (body cells). Commonly the first Vtatic Rasayana is used in daily practice in most senior citizens of India have aware with this concept and without consultation of any Ayurvedic physician starts to use the Rasayana for maintenance of the body i.e. Amalaki Rasayana, Chayvanprash etc.

This worse clearly convince the Vata-Tapic Rasayana is most common and popularized to treat the Jara.

3. Conclusion

In conclusion it can be pointed out that irregular life style, dietary habits and degenerative diseases are the determining factor of Jara Vyadhi. So we should practice to live in healthy and stress free environment. If the signs and symptoms of Jaraawastha appear before old age (60-70) is considered as disease not a stage of life. This situation arises by avoidance of dietetic regimens, prescribed life style, etc. Ayurveda has enrichment to treat the disease with drugs, daily regimens, instruction related to life style. Rasayana therapy is the specific remedy of Jara Roga. In modern stressful society, Ayurvedic Rasayana therapy can serve the mankind for strength, power, morality etc.

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