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Review Article

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REVIEW OF RASAYANA THERAPY IN VIEW OF GRACEFUL AGEING.

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Medhya.

ABSTRACT

Everybody thinks about spiritual childhood, strengthful youthness and graceful ageing but in ageing physiological changes occurs. As in our classical texts Jara(ageing) is mentioned as Swabhawaja vyadhi which is Nishpratyanika. Rasayana therapy slows down the ageing progress as it is mentioned for maintenance of health. Nowadays due to sedentary lifestyle ageing occurs before expected age. So, for purpose of ageing but gracefully it is Rasayana that will work and gives us graceful ageing with slow transformations and physical fitness ultimately extended life with good quality. Rasayanas are of different form which can act on all over body or on specific system for e.g. Amalaki (Embellica officinalis) is antioxidant, immunomodulatory acts mainly as Chakshushya(good for eyes) and Shankhpushpi as

KEYWORDS: Swabhawaja vyadhi, Nishpratyanika, Jara, Rasayana.

INTRODUCTION

According to Ayurveda Ageing is mentioned as Swabhawaja vyadi.^[1] As Ayurveda mentioned Jara(ageing) is disease. Because, so many physiological changes occur in this stage that produces dukha(mental and physical disturbances) and it is also synonymous to vyadhi.^[2]

According to modern, many of the disease associated with age and ageing can be positively affected by an active life style like Cardiopulmonary, Musculoskeletal, Endocrine Changes associated with age and diseases show a decline in progression with regular physical activity.

Acharya Sharangdhaara Mentioned that in life span of human being with each decade Balya(childhood), Sharairvruddhi, Sharirasoundarya, Medha, Twacha, Drushti, Maithun samarthya, Vikrama, Parakrama, Buddhi, Karmendriya, Mana these decreases respectively.^[3] Swabhawaja vyadis are those infirmities which come about in the natural courses of time, as the result of senility and completion of life span, are to be regarded as natural or terminal conditions and are irremediable.^[4]

The word Nispratikriya^[5] means which can't be counteracted by ordinary treatment but amenable to use of rasayana. Thus there is no any conflict that even after Rasayana treatment, finally senility takes over and as such these natural disorders are irremediable.

Sushruta also explained Rasayana^[6] for

- Attainment of complete life span
- Extension in the life span
- Rise in intellect
- Rise in physical & mental strength
- Immunity against disease

And all above benefits help to prolong ageing.

✓ Rasayana

Three Types of Rasayana^[7]

- 1) Curative (Vyadhiharini)
- 2) Promotive (Swasth urjaskara)
- 3) Preventive (Pratishedhatmaka)

✓ VAYASTHAPANA

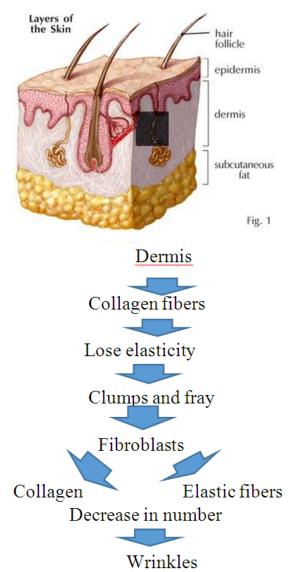
Vaya^[8] -As regards age – that indeed is called age or bodily stage which specially depends on the length of passage of time.

Sthapan – establishment of youthness.

- ^[9]The younger body is generally in better nutritional state its tissues have a better blood supply and its cells have a higher metabolic rate,
- -thus cells can synthesize needed materials and divide more quickly.
- -the extracellular components of tissue also change with age
- -glucose the most abundant sugar in the body plays a role in ageing process.

-as the body ages glucose is haphazardly added to proteins inside and outside cells forming crosslinks irreversible with advancing age more cross links form.

Changes occur in the dermis



o Changes related to eye

- 1) Lens loses elasticity causing presbyopia, cataracts.
- 2) Sclera- Thick and rigid.
- 3) Pupils smaller react more slowly to light & dilate more slowly in dark.
- 4) Retina –diseases detachment.
- 5) Aqueous humor buildup glycoma.

Changes related to ear

• Loss of hearing – degeneration of the nerve pathway

- Tinnitus
- Vestibular imbalance

o Changes related to nose

- Produce mucus that dissolves odorants
- The threshold of smell is low

o Age related changes in cardiovascular system

- Increased risk and prevalence of Hypertension as
- a) blood vessels become less elastic
- b) total peripheral resistance increases

• Serum Cholesterol levels

- in men tend to peak at 60 yrs. of age
- but total cholesterol levels as well as low density lipoprotein (LDL) fraction continue to rise in women until the age of 70 yrs. (*Kannel* 1988)

o Research on cholesterol & heart disease

- Researches show that antioxidants are useful for protection of heart disease this is because oxidation plays a big role in formation of atherosclerotic plaque which is a main pathological event in coronary heart disease.
- Antioxidants are substances that attack molecules by capturing the electrons and thus modifying chemical structure.
- Well known anti oxidants include a number of enzymes and other substances such as Vit-C, Vit-E & beta carotene(Vit A) that are capable of countering the damaging effect of oxidation.

o Amalaki- antioxidant immunomodulatory antistress properties

- Study 1. Facility of pharmaceutical sciences Nagasaki University, Japan
 Amalaki extracts were found to be able to prevent the growth of cancerous cells in stomach skin & womb.
- Study 2. Scientists from biochemistry division, National institute of Nutrition,
 Hyderabad India found that amalaki is able to block a chemical called aldose reductase
 which has been heavily implicated in causing cataracts in diabetic patient

- 3. Several animals studies have been shown that amalaki can help to prevent a toxic built up of heavy metals.
- When vit-C alone was used only partial protection from heavy metals was provided.
 However, when whole amalaki fruit was used almost complete protection was achieved,
- This indicates that the combined action of various ingredient found in the fruit that effectively helps shield DNA from heavy metal poisoning.

o Changes in Respiratory System

Age related changes in the structure and function of the lung can also contribute to an older person reduce vigorous energies.

Less elastic and more rigid

Chest Wall

Rigid

Decrease in lung capacity

35 % in age 70

Decrease in blood level of O2

Decreased activity of alveolar macrophage

Susceptible to Pneumonia, Bronchitis.

Ageing and Endocrine System

Although some endocrine glands shrink as we get older, production of human growth by the anterior Pituitary decreases which one cause of muscle atrophy as ageing proceed.

Endocrine	Change	Effect
Anterior pituitary	Decreases hormone	Muscle atrophy
Thyroid gland	Decrease thyroid	Decrease in metabolic rate
	hormone	& increase body fat
Pancreas	Releases insulin slowly	Receptor sensitivity of glucose declines. Blood glucose increases
Ovaries	No long respond to gonadotrophins	Decreased output of estrogens leads to osteoporosis

Ageing an fluid electrolyte and acid balance

- With increasing age many people have a decreased volume if intracellular fluid and decreased total body K+ due to declining skeletal muscle mass and increasing mass adipose tissue
- Due to decrease in the number and efficiency of sweat gland; water loss from skin declines with age of these changes older adults are susceptible to several fluid and electrolyte disorders.

o Age Related changes in Brain

- the reduction of certain chemicals (biogenic amines) in the brain is thought to be related to depressive mood. There is some evidence that the level of biogenic amines falls in the aging brain which could in turn lead to depression
- As the brain gets older, more and more brain cells die. At the same time arteries may get narrower, so that the blood & oxygen supply to the brain is limited.
- These and other factors may be related to longer reaction times, more inflexibility, increasing caution and decreasing ability to new situation, all which increase susceptibility to depression.
- This causes deterioration in memory and mental function and eventually a change in personality (particularly the person becoming inappropriately emotional and selfcentered).

Medication – induced depression

All medication has side effects, but some can actually cause symptoms of depression or
make a pre – existing depression worse. Harmful drug interactions or a failure to take a
medication as prescribed can also contribute to depression. For elderly individuals with
multiple prescriptions, the risk of medication – induced depression is particularly high.

• Medication that can induce low Intelligence include

Steroids # High blood pressure drugs

#Painkillers # Heart disease medication

Hormones #Tranquilizers

Arthritis medication # cancer drugs

Anxiety

People with anxiety have tendency to overact to everyday stress

This over reaction

- -makes your body produce excess amounts of the stress- hormone adrenaline & cortisol,
- -which can make you hyper alert & anxious.

o Therapeutic Action of Shankhapushpi

- Practioners believe shankapushpi calms your nerves by regulating your production of these hormones. As a result, you feel more balanced throughout the day and sleep better at night
- In one of the studies, published in an Indian medical journal in 1982, researches gave 28 peoples diagnosed with anxiety, 50 mg daily of an herbal formula with shankapushpi as a primary ingredient. After six weeks of treatment 91% of the patients had more energy and 60 to 70 percent could sleep & concentrate better. Symptoms like nervousness also decreased.
- In 1981 study published in an Indian Journal, scientists gave 30 patients with anxiety 30 ml of shankapushpi syrup daily. After 1 month their anxiety levels decreased & the patients felt significantly better.

o Ageing and muscular tissue

With ageing humans undergo

- -slow progressive loss of skeletal muscle mass that is replaced largely by fibrous connective tissue and adipose tissue.
- -this decline is due to decreased level of physical activity.
- -Muscle strength at age 85 is about half that at the age 25.

Ageing and joints

Ageing usually results in decreased production of synovial fluid in joints. In addition, the articular cartilage becomes thinner with age ligament shorten and lose their flexibility.

Ageing and digestive system

Overall changes of the system associated with ageing include –

- Decreased secretary mechanisms
- Decreased motility of the digestive organs
- Loss of the strength and tone of muscular tissue and its supporting structure.
- Changes in neuro-sensory feedback regarding enzyme and hormone release
- Constipation
- $\circ \quad Ayu^{[10]}$
- ✓ Ayu is the combination of sarira, indriya, sattva and atma (Soul)
- ✓ For extension of the life span, to enable the people to attain maximum lifespan is fulfilled by performance of dhatusamya.
- ✓ Everybody want swasth sukhayu.
- ✓ Ageing has changes in vital system which is damage to swasth sukhayu.

o Rasavana^[11]

From Rasayana (promotive treatment) one attains longetivity, memory, intelligence, freedom from disorders, youthful age, excellence of lusture, complexion and voice, optimum strength of physique and sense organs, successful words, respectability and brilliance. Rasayana means the way for attaining excellent rasa etc. dhatus.

- Amalaki Vayasthapananam. [12]
- Amalaka ghrit^[13] By its use life- span stands four hundred years devoid of old age, knowledge is retained, all diseases are alleviated, one attains uninterrupted sesual vigour in women and also is blessed with progeny.
- Amalaka avleha^[14] By its use one attains stable life- span of hundred years without being old.
- Amalakichurna^[15] This provides stable life span of hundred years devoid of old age.
- Amalakayas Bramharasayana^[16] By using this methodically became free from exertion, disease, senility and fear and attaining great strength due to its effect performed penance as desired. This Rasayana provides life- span of thousand years, alleviates senility and diseases and promotes strength of intellect and sense organs,
- Dwitiya Indokta rasayana^[17] This intellect promoting and broad spectrum rasayana should be used property by those who desire success youthful age charming personality and universal fame.

- Indrokta Rasayana^[18] Intellect memory superior strength and other desired merits
- Chyavanaprasha^[19]— It alleviates hoarseness of voice, chest diseases, heart diseases, Vatarakta, thirst and disorders of urine and semen.
- Haritakyadi Rasayana^[20] By its use one attains stable life- span of hundred years without being old.
- Kevalamalaka Rasayana^[21] One becomes like god and Sri (goddess of wealth), Vedas
 and personified knowledge attend to him.
- Medhya Rasayana^[22] 1) Mandukaparni
- 2) Yashtimadhu
- 3) Guduchi
- 4) Shankhpushpi.

These Rasayana drugs are life promoting, disease alleviating, promoters of strength, agni, complexion, voice and are intellect promoting, of them Shankhpushpi is specifically intellect promoting.

- Shilajatu Rasayana^[23]— This formulation provides happy long life, alleviates old age and diseases, stabilises the body.
- Dwitiya Bramharasayana^[24] Firmness like that of mountain, valor like that of wind.

o Importance of Achar Rasayana^[25]

A person who is-

- -truthful, free from anger
- -abstaining from wine and women,
- -nonviolent, non-exerting, calm, sweet spoken,
- -engaged in japa and cleanliness,
- -perseverant, observing charity, penance
- -worshipping god, cow, brahmanas, teacher, preceptor, and elders, devoted to love and compassion
- -observing vigil and sleep in balance
- -using regularly ghee extracted form milk
- knowing place and time with propriety,
- -unconcieted, well behaved, simple having senses concentrated to spiritualism,
- -keeping company of elders, positivist, self-controlled and devoted to holy scriptures

should be regarded as using the rasayana forever,

that who endowed with all qualities uses rasayana attains all the aforesaid fruits of the same.

DISCUSSION

o Rogapaharan -Immunity against disease

Rasayana develop Immunity against disease.

o Ageing and Immune system

- 1) With advancing age most people become more succeptible to all types of infection and malignancies.
- 2) Their response to vaccines is decreased they tend to produce more auto antibodies.
- 3) In addition the immune system exhibits lowered levels of function antibody levels do not increase as rapidly in response to a challenge by an antigen resulting in increased susceptibility to various infections.

So, in this process of ageing everything changes from external appearance to immunity. Ageing affects each and every system of our body as discussed previously and there are different rasayanas which acts on these systems like.

Amalaki- with the action as immunomodulator and antioxidant, it acts on eyes, nose and throat etc.

Shankhapushpi with other medhya rasayanas act very well on brain, they also act in depression, anxiety, stress and also increases intellectual quotient.

Likewise important effects of rasayanas are mentioned earlier as per classical texts.

CONCLUSION

- In today's busy life and with changing lifestyle when our habits are changing from good
 to bad it is surely becoming a necessity to acquire healthy life with the help of nature and
 this property is fulfilled by Rasayanas, which aims not only to free from diseases but also
 maintains health by balancing all the dhatus, and that's what now a days it is knows as
 rejuvenation therapy.
- In Rasayana, behavioural aspect is also one of the type of rasayana, known as Achara Rasayana, which is equally important as other rasayanas.

- As ageing changes described earlier, all rasayanas act on that either systemically or making specific target.
- So, the importance of rasayana is well described in our classical texts and it is mentioned that by using rasayana treatment in early ages lived for thousands of years unaffected by old age debility illness and death. [26]

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