



Review on Ageing: Ayurvedic and Modern Perspective

Author: Santosh G Girbide¹

Co Authors: Priti Ramchandra Sutar², Savita R Gudade³, Milind Kamble⁴ and Pooja Singh⁵

^{1,2-4,5}Department¹ of Rognidana and Vikruti Vigyana, R. A. Podar Medical (AYU.) College, Worli, Mumbai, MS, India

³Department of Rasashatra, Government Ayurved College, 'Madhuban', Tulajapur Road, Osmanabad, MS, India

ABSTRACT

In modern and ayurvedic science, the concept of ageing is described. This denotes the value of ageing in ancient and also in the modern era. Modern science puts the various theories regarding this topic, while ayurvedic texts described it as "*Jara*". Ayurveda described '*Jara*' at minute level. According to the modern science, the 'Free radicle theory' is the popular theory among different theories.

Other side, *yoga* told us about *Aasana*, *Pranayama*, *Anuloma- Viloma*, *Suryanamskara etc.* regimen in day to day life. Besides that, '*Chyavanaprasha Avaleha*' of Ayurveda becomes more popular among society. Now days, various anti - ageing therapies are also come in light.

Key Words: Ageing, Ayurveda, Chyavanaprasha Avaleha, Jara

INTRODUCTION

Ageing is a progressive and deleterious process.

Hence, in Ayurveda, description available on *Jara* and it is explained in '*Rasayana Chikitsa Adhyaya*'.

Various theories are coming in light as time passes. As per modern science, the free radicle theory is most prominent theory and well-studied by scientists.¹

Ageing is the most popular topic and it is the major interest among scientists, general population and physician. Because, most of the countries having population of old aged people more than young people. At the end of the year 2020, the world will have more than one million people aged 60 yrs.

and over. More than 2/3rd old aged people will be present in the developing countries².

AIMS AND OBJECTIVES

1. To discuss the various concepts related to ageing.
2. To understand the modern and ayurvedic aspect and effects of ageing on human body.
3. To re – evaluate the measures for prevention of ageing according to Ayurveda.

MATERIALS AND METHODS

Ayurvedic texts and their available commentaries etc. are used to collect the information.



AGEING ACCORDING TO MODERN SCIENCE –

Jara is an inevitable and irreversible process in other words it is a catabolic process¹. Ageing is related to the various process of wear and tear that affect us continuously. The science, which studies the ageing is called as “Gerontology”, this is not in consideration until the French physician Jean Martin Charcot published his book on ageing.

Gerontology is the science, which describes the bodily changes and pathological changes in the process of ageing. Now days, the anti- ageing market is flourished in the form of various products – such as vitamin supplements, yoghurt cures, exercise programmes and fad diets.

The other branch is developed in the field of Biology is “Biogerontology”. This branch is deals with the causes of physiological failure to maintain homeostasis and different ways to arrest or slow down the process of ageing or reverse the degenerative processes in the living organisms².

Many causative factors can be observed in day to day life. These factors are especially seen in food cultivation techniques such as use of chemicals in the form of fertilizers, pesticides, environment and modern technology for food processing. These were affected on the process of natural ageing, which become fast. Hence, these are the main factors contributing in the process of premature ageing.

Psychological stress is one of the most important cause in the development of the ageing³.

To discover the cause of the ageing process, some theories are as follow -

AGEING RELATED THEORIES –

At this stage, many theories are explained ageing but among all of that neither any theory is satisfactory.

BIOLOGICAL THEORIES –

Modern biological theories of ageing in humans currently fall into 2 main categories –

- Programmed Theory
- Damage or Error Theory

Programmed Theory – This theory describes about ‘Programmed’ meaning biologically regulated time at gene level by the body and it is responsible for the maintenance of ageing.

Programmed theory includes –

- Programmed Longevity
- Endocrine Theory
- Immunological Theory

Damage or Error Theory - This theory is deals with environmental effects on the living organisms which induced damage at the various levels, which is the cause of ageing.

This theory includes –

- Rate of living Theory
- Cross Linking Theory
- Free radical Theory

OTHER THEORIES –

- Disengagement Theory
- Activity Theory
- Neuro Endocrine Theory
- Membrane theory of ageing
- Mitochondrial decline theory⁴.

AGEING ACCORDING TO AYURVEDA -



AGE CLASSIFICATION ACCORDING TO AYURVEDA-

CHARAKA SAMHITA –

1. *Bala* – 0 – 30 years

- *Aparipakva Dhatu* – 0 – 16 years
- *Vivardhamana Dhatu* – 16 – 30 years

2. *Madhya* – 30 – 60 years

3. *Jeerna* – 60 – 100 years⁵.

SUSHRUTA SAMHITA –

1. *Balyavastha* –

- *Kshirapavastha* – 0 – 1 year
- *Kshirannada* – 1 year – 2 year
- *Annada* – 2 year – 16 years

2. *Madhyamavastha* –

- *Vridhhi* – 16 years – 20 years
- *Yauvana* – 20 years – 30 years
- *Sampurnataha* – 30 years – 40 years
- *Hani* – 40 years – 70 years

3. *Vridhhavastha* –

- *Jara* – 70 years – Death⁶

KASHYAP SAMHITA –

1. *Garbhavastha* – *Garbhasthapana* – *janmavastha*

2. *Balyavastha* – *Janmavastha* - 1 year

3. *Kaumaravastha* – 1 year – 16 years

4. *Yauvanavastha* – 16 years – 34 years

5. *Madyamavastha* – 34 years – 70 years

6. *Vridhhavastha* – 70 years – Death⁷

8 different branches are described in Ayurveda⁸.

In that, '*Jara*' word denotes, one of the branches, which is related to "*Rasayana* (Rejuvenation)

Chikitsa". As the word suggests, this branch is deals with the prevention and treatment of *Jara*⁹.

Aacharya Sushruta included *Jara* in "*Swabhavabalapravritta Vyadhi*".

Swabhavabalapravritta Vyadhi are again classified into 2 types.

1. *Kalaja Jara* (Natural)

2. *Akalaja Jara* (Premature/early)¹⁰.

Ayurveda advocates wonderful approaches to delay *Kalaja Jara* (Natural ageing) and to avoid *Akalaja Jara* (Premature aging).

PREVENTION IN AYURVEDA -

Ayurveda gives primary importance to prevention of diseases, promote health care and maintain the positive health. The major preventive approaches for maintaining and improving the quality of life include individualized specific measures like *Dinacharya*, *Ritucharya*, *Ratricharya*, *Hitakara* and *Matravata Ahara*, *Sadvritta plans*, *Aachara Rasayana* etc.¹¹.

Dinacharya palana is easy way to fight ageing, in which *Abhyanga* and *Vyayama* are most important one. There is reference of *Jara* is present in the importance of *Abhyanga*, which is described as follow -

"*Abhyangam aacharet nityam sa jarashramavataha* |"¹².

Vyayama is also important to improve physical activity and strength of body. The description of *Vyayama* available in Ayurveda as "*Laghavam karmasamrthyam...*"¹³.

Other measures for prevention of *Jara* are described by *Acharaya Charaka*, which are



*Haritaki guna, Shilajita guna*¹⁴, *Ushnaahara* and *Snigdha Aahara guna*¹⁵.

Acharya Charaka has prescribed a “*Vayahsthapana Mahakashaya*” meaning drugs that are capable of maintaining the youthful vigour consisting of 10 items.

Brahmacharya (Celibacy) is also indicated for its specific role in increasing the mental faculties and the longevity of life¹¹.

These measures can delay the process of aging. Furthermore, *rasayana* therapy, practices of *yoga*, time to time *panchakarma* therapy for purification of body and various herbal drugs are very effective methods for geriatric health care in present time.

Rasayana word comprises 2 words – “*Rasa*”- nutrition and “*Ayana*” – means circulation. Ayurvedic system of medicines specially ‘*Rasayana Tantra*’ is the one discipline of *Ashtanga Ayurveda*, which is exclusively devoted to geriatric health care.

Essentially *Rasayana* therapy has a very wide scope and it is the only rejuvenation method for delayed ageing. ‘*Rasayana*’ is specialized procedure practised from ancient time with the help of various revive measures, dietary regime and fitness promoting methods. The effect of the *Rasayana* is seen in the *dhatu* of the body. Ayurvedic literature describes that a person undergoing *Rasayana* therapy attains longevity, improved memory, intelligence, freedom from disease and youth.

Rasayana drugs act on the *Rasa dhatu*, *Agni* and *Strotas*¹¹. Hence, the *prakruta Rasa dhatu* is formed and helps to prevent ageing process.

Acharya Charaka, in ‘*Chikitsasthana*’ mentioned some *rasayana* drugs. These are as follow -

Special Rasayana drugs –

1. *Chyavanaprasha*
2. *Amalaka Ghrita*
3. *Brahmarasayana*
4. *Amalakavaleha*
5. *Amalaka Churna*
6. *Nagabala Rasayana*
7. *Bhallataka Kshira*
8. *Bhallataka Kshaudra*
9. *Amalakayasa Brahmarasayana*
10. *Endra Rasayana*
11. *Triphala Rasayana*
12. *Indrokta Rasayana*¹⁶

Role of Yoga -

Some of the psychophysical practices of *yoga* including some *Aasana* (body postures), *Pranayama* (breath control) and meditation has been proven very effective method for improving health and spiritual well being in the elderly people.

Some *aasana* which gives relaxation to body such as *Shavasana*, *Makarasana*, *Yoganidra* etc. helps to relieve stress and improves autonomic balance and also helping to correct numerous psychological and somatic conditions which are prevalent in older age.

Pranayama such as *Anuloma - Viloma*, *Bhramari* etc. helps to control the process of respiration and removes the instability of mind in elderly people.

The *Dharana* and *Dhyana* helps to normalize the higher functions and modifying the individual



perspective thus cultivating a positive attitude towards life.

Role of Panchakarma Therapy -

Panchakarma is a purificatory method comprising 5 procedures that facilitates better bioavailability of the pharmacological therapies and helps to maintain homeostasis of body humors, cleansing of channels, eliminates the vitiated *dosha* and checks the recurrence of the many diseases and progression of disease.

Hence in the management of *Jara*, health as well as psychological care included socialization, financial planning etc. are important.

DISCUSSION

Theories regarding to the ageing process are explained in modern literature. Ageing and the role of mind also described by the various *acharya*. Hence, different *Aasana*, *Pranayama* etc. measures had play major role in maintain peace of mind. Ayurvedic literature explains *Jara* at the minute level and also described the preventive measures and treatment.

CONCLUSION

On the basis of above study, it is concluded that ayurvedic and modern science are described the ageing process since a long time. New concepts and theories are also discussed in modern literature. Also focussed on the ayurvedic concepts which are related to prevention of ageing and treatment of ageing (*Jara*) is important.

In today's lifestyle the concern regarding to the anti – ageing many textual things are also useful to the society to prevent ageing.



REFERENCES

1. Ramaswamy B., Theories of Ageing, <http://www.physio-pedia.com>, Published January 3, 2008
2. Stefansson H., (2005). The Science of Ageing and Anti – ageing, (2005), (Suppl 1): S1 - S3
3. Parmar N., Vyas M., Vyas H., (2012). Critical study of *Jara* (ageing) and its management. 33(2), 264-269
4. Jin K., (2010). Modern Biological Theories of Ageing, 1(2): 72-74, published August 1, 2010
5. Shukla V., & Tripathi R. (2011). Charak Samhita (Part 1), Delhi: Chaukhambha Sanskrit Pratishthan.
6. Shastri A., (2014). Sushruta Samhita (Part 1), Varanasi: Chaukhambha Sanskrit Sansthana.
7. Srisatyapal B., (2006). Kashyapa Samhita, Varanasi: Chaukhambha Sanskrit Sansthan.
8. Garde G., (2011). Sarth Vagbhata, Varanasi: Chaukhambha Surbharati Prakashana.
9. Shukla V., & Tripathi R. (2011). Charak Samhita (Part 2), Delhi: Chaukhambha Sanskrit Pratishthan.
10. Shastri A., (2014). Sushruta Samhita (part 1), Varanasi: Chaukhambha Sanskrit Sansthana.
11. Gupta V., Keshari B., Murthy N., (2013). Concept of Jara (ageing) and its management in Ayurveda, IJAAS, 2 (11), 341- 349
12. Garde G., (2011). Sarth Vagbhata, Varanasi: Chaukhambha Surbharati Prakashana.
13. Garde G., (2011). Sarth Vagbhata, Varanasi: Chaukhambha Surbharati Prakashana.
14. Garde G., (2011). Sarth Vagbhata, Varanasi: Chaukhambha Surbharati Prakashana.
15. Shukla V., & Tripathi R. (2011). Charak Samhita (Part 2), Delhi: Chaukhambha Sanskrit Pratishthan.
16. Shukla V., & Tripathi R. (2011). Charak Samhita (Part 2), Delhi: Chaukhambha Sanskrit Pratishthan.