INTRODUCTION
Ageing is the accumulation of changes in a person over time. It is defined as a progressive generalised impairment of function resulting in the loss of adaptive responses to stress and a growing risk of age-associated diseases. India has the second largest aged population in the world. Currently there are an estimated 100 million elderly in India and by 2050 it is said to reach 326 million. Ageing causes considerable decrease in the functional ability of the organ system resulting in many problems. It is among the largest known risk factors for human diseases. So it is the need of the hour to understand the Ageing in detail to manage it efficiently.

The phenomenon of ageing is described in Ayurveda as Svabhavika (natural) and is inevitable. Ayurveda, the science of life was introduced to earth so that man could enjoy a long and healthy lifespan. Ageing can be delayed and the problems related with ageing can be managed with Rasayana Chikitsa (rejuvenation therapy).

Ageing in Ayurveda
Ayurveda explains Ageing process starting from birth to death as Vaya (chronological ageing). The chronological age is mainly divided into three stages. i.e., Baalya, Madhyma and Vriddha. Acharyas have also explained the biological changes occurring during these phases. 1,2,3

### Table No1-Classification of Vaya in Brihat Trayees.

<table>
<thead>
<tr>
<th>BAALYA</th>
<th>MADHYAMA</th>
<th>VRIDDHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.S. Birth to 30 years</td>
<td>30 – 60 years</td>
<td>&gt; 60 years</td>
</tr>
<tr>
<td>S.S. Birth – 16 years</td>
<td>16 – 70 years</td>
<td>&gt; 70 years</td>
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<tr>
<td></td>
<td>Ksheerapa – till 1 year</td>
<td>Vridhdi- 16-20 years</td>
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<tr>
<td></td>
<td>Ksheerannada 1 - 2 years</td>
<td>Youvana-20-30 years</td>
</tr>
<tr>
<td></td>
<td>Annada – above 2 years</td>
<td>Sampoornata-30-40 years</td>
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<tr>
<td></td>
<td></td>
<td>Parihaani -40-70 years</td>
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<tr>
<td>A.S. Birth to 16 years</td>
<td>16 – 60 years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stanyavritti</td>
<td>Youvana- 16-30 years</td>
</tr>
<tr>
<td></td>
<td>Ubhayavritti</td>
<td>Sampoornata- 30-40</td>
</tr>
<tr>
<td></td>
<td>Aharavritti</td>
<td>Aparihani- 40-60 years.</td>
</tr>
</tbody>
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**BAALYA**
Baalyavastha is extending from birth to 30 years of age. It is further divided into two stages. First stage – extending from birth to 16 years and is characterised by Sukumaarata (tenderness), Akleshasahata (inability to bear stress), Aparipakva Dhatu (immature Dhatu) and
Ajaatavyanjana (Gangadhara explains it as the features like Shmashru etc which develops after puberty are not seen). It is the underdeveloped period. This separation of age upto 16 years is done for the Chikitsa purpose as in this stage Alpa, Mridu Bheshaja should only be given due to Aparipakva Dhatu. Second stage is the developing period – extending from 16 years to 30 years, in which gradual development of Dhatu takes place quantitatively and qualitatively.

Anavasthita Satva is seen in this period. Baalyavastha is dominated by Kapha Dosha.

MADHYAMA

Madhyamavastha is mentioned as extending from 30 – 60 years. Characteristic features : optimal strength, virility, valour, courage, cognition, retention, recollection, good speech and knowledge and best qualities of dhatu are seen in Madhyama Vaya. Pitta Dosha is predominant in this stage.

Vriddhī is the stage from 16 to 20 years wherein Vardhana (development) is seen. Youvana is extending from 20 to 30 years. In this stage further development takes place. Sampoornata is the stage between 30 to 40 years characterised by the complete nourishment and development of all the Dhatus, Indriya, Bala and Veerya. Parihaani, the last stage of Madhyama Vaya extends upto 70 years and in this stage all the properties start to decrease or diminish.

VRUDDHA

This is the last stage of life. It is also called as Vaardhakya and Jara. After 70 years of age gradual declination of physical and mental faculties are observed. There will be decrement in Dhatu, sensory motor system, strength, virility, enthusiasm associated with wrinkles, greying, baldness, frequent attacks of cough, breathlessness, etc. Mental abilities like perception, retention, recollection, speech and knowledge and physical strength decline gradually. Vata Dosha is predominant during this stage. Reduced digestive capacity and tremors are also seen.

Types of Jara:

Kaalaja Jara (Physiological Ageing): when the symptoms of Ageing appear on the expected period of time, it is called as Kaalaja Jara. After 60 years it is inevitable. Kaalaja Jara is Parirakshana Krita i.e., It occurs at the proper age even after following the daily and seasonal regimen mentioned in Swasthavritta. In Kaalaja Jara, one’s chronological Ageing and biological ageing occurs at the same time. The speed of ageing depend upon the cumulative effect of genetic, environmental and life style factors.

Akaalaja Jara (Premature Ageing): the Ageing that which occurs before the prescribed time. When the changes of old age occur before 60 years it can be called as Akaalaja Jara. This is of Aparirakshana Krita ie occuring before the proper age due to not taking proper care of the Shareera by Swasthavritta and Sadvritta. In Akaalaja Jara, biological ageing is more intense than that of the chronological ageing.

Jara as Svabhavika Vyadhi:

Swabhavika Vyadhis are the naturally occurring diseases from which nobody can avoid. Kshudha, Nidra, Pipasa, Jara and Mrityu are explained as Swabhavika Vyadhis. These Swabhavika Vyadhis are Nishpratikriya (irremediable).

Chakrapani explains that Swabhavika Vyadhis can’t be treated by any other therapeutic devices except Rasayana. Even Rasayana can’t cure or prevent these Vyadhis. Rasayana can only delay these diseases. This suggests that after sometime they will relapse. Hence, these are considered Nishpratikriya.

Sushruta classifies diseases into three as Adhyatmika, Adhidaivika and Adhibhoutika. Adhidaivika Vyadhi includes Svabhavabalaprabrutta Vyadhi under which the natural diseases like Kshudha, Pipasa, Nidra, Jara and Mrityu are described. Svabhavabala Pravrutta Vyadhi are classified into Kalaja and
Akalaja types. Svabhava or Prakriti of an individual is the inherent factor which is very specific to that individual. The nature of an individual within the species varies according to habitat (Desha), time or season (Kala) and body constitution (Prakriti) and accordingly ageing may appear early, timely or late with less, moderate or more symptoms.

Decade wise decrease of properties:

<table>
<thead>
<tr>
<th>Age – decade</th>
<th>A.S.</th>
<th>Sha.Sam.</th>
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<tbody>
<tr>
<td>Birth – 10 years</td>
<td>Baalya</td>
<td>Baalya</td>
</tr>
<tr>
<td>10 – 20 years</td>
<td>Vruddhi</td>
<td>Vruddhi</td>
</tr>
<tr>
<td>20 – 30 years</td>
<td>Prabha</td>
<td>Chhavi</td>
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<tr>
<td>30 – 40 years</td>
<td>Medha</td>
<td>Medha</td>
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<tr>
<td>40 – 50 years</td>
<td>Tvak</td>
<td>Tvak</td>
</tr>
<tr>
<td>50 – 60 years</td>
<td>Shukra</td>
<td>Drushti</td>
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<tr>
<td>60 – 70 years</td>
<td>Akshi</td>
<td>Shukra</td>
</tr>
<tr>
<td>70 – 80 years</td>
<td>Shruteendriya</td>
<td>Vikruma</td>
</tr>
<tr>
<td>80 – 90 years</td>
<td>Mana</td>
<td>Buddhi</td>
</tr>
<tr>
<td>90 – 100 years</td>
<td>Sarvendriya</td>
<td>Karmendriya</td>
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<tr>
<td>100 – 110 years</td>
<td></td>
<td>Cheta</td>
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<tr>
<td>110 – 120 years</td>
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<td>Jeevita</td>
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</tbody>
</table>

Shareera Doshas responsible for decrease of lifespan:

The harmful Shareera Doshas are caused by the following Nidanas. They are Gramya Aahara, Kshara, Shushka Mamsa, Tila, Palala, Pishthanna, Viroodha Nava Shooka etc Dhanya, Vishamashana, Adyashana, Madyapana etc. The Viharaja Nidana told are Divasvapna, Ativyayama, Atisamkshobha, Ativyavaya etc. Manasi factors like Bhaya, Shoka, Krodha, Lobha, Moha also have a role in Shareera Dosha production. By all these Nidanas, Shareera Doshas are produced which are responsible for the unwanted changes in the body. Mamsa becomes Shithila, Sandhi Vimochana, Rakta Vidaha, Meda Vishyandana, Asandhaana of Majja in Asthi, no Shukrapravartana, Ojo Kshaya take place. Thus all Dhatus are affected including the Ojus and the person will become debilitated, exhausted and will be with Nidra, Tandra and Alasya. He loses initiative, gets dyspnoea and becomes incapable of physical and mental work. He also loses his memory, intellect and complexion and becomes as abode of disease. Thus he fails to enjoy the full life span of his life.

Anti-ageing measures in Ayurveda:

Dinacharya, Ritucharya and Svasthavrutta- Regimens which should be followed in day-to-day life is Dinacharya. Regimen according to the Ritu is Ritucharya. These are concerned with the personal aspect of an individual. The codes and conduct which should be followed by a person for a social life is concerned with Swasthavrutta. If one follows these measures properly, the physical and mental youthness can be prolonged.

Rasayana- The methods that give optimum quality of the Dhatu and that in turn allow Dhatus to flow all over the body through different Srotas, so that the entire body gets proper nourishment is called Rasayana. It increases life span, improves (intelligence), cures diseases, stabilizes youthfulness, improves lustre, complexion and voice and makes body senses strong and healthy. There are many Rasayana yogas explained which can be adopted as per the condition.

Nitya Ksheera-Ghrita Abhyaasa. Daily intake of milk and ghee is said to be providing long and healthy life. It is the best among Rasayanas.
Acharya Rasayana- The physical and mental conduct of an individual designated as Rasayana.10

Dravyas- Amalaki is the best Vayasthapaka dravya.11 Use of Nitya Abhyaasa Dravyas in proper quantity and avoidance of Ahita Ahara helps in maintaining the swaashtyha.12

Vayasthapana Dashemani- Acharya has explained ten Vayasthapana drugs which can be used for anti-ageing purpose.13 They are Amruta (Tinospora cordifolia), Abhaya (Terminalia chebula), Dhaatri (Emblica officinalis), Mukta (Rasna – Pluchea lanceolata), Shveta (Rasna Bheda – Alpenia galanga), Jeevanti (Leptadenia reticulata), Atirasa (Asparagus racemosus), Mandoookaparni (Centella asiatica), Sthira (Desmodium gangeticum) and Punarnava (Boerhavia diffusa).

DISCUSSION

Charaka and Ashtanga Samgraha considered Vridhavastha above 60 years and Sushruta considered it as above 70 years of age. The difference of old age of both scholars may be due to that the process of Ageing has been started at 60 years but it may not be obvious. Ageing further progresses and after 70 years of age the features are clearly visible. Charaka being a physician might have observed the minute changes of ageing which starts at 60 years. So he identified Vridha above 60 years. Sushruta, being a surgeon might have thought to consider old age from 70 when most of the symptoms of ageing are visible. Moreover Sushruta has mentioned that from 40 to 70 years there will be Hani. Ashtanga Samgraha mentions from 40 to 60 as Aparihana. That indicates that Hani is more visible during 60 to 70 years. So above 60 years can be considered as the Hani stage which is included in the Vridha Avastha.

Probable mode of action of Rasayana Dravya:

By Rasa, Guna, Veerya, Vipaka and Prabhava: A Rasayna Dravya acts based on the Rasa Panchaka of the drug. Through the Ojovardhaka properties of Madhura Rasa, Madhura Vipaka, Sheeta Veerya and Snigdhi Guna a drug acts as Rasayana.

By Agnideepana: Vayasthapana through Rasayana is mainly brought about by the Agnideepana. The increased Jataragni does the proper Pachana, metabolism and thus removes Aamadosha which is the prime cause of the diseases and age associated problems. By doing Agnideepana in Jataragni level Dhatvagni also gets corrected and Dhatvagnideepana occurs. Thus the excellent Dhatu are produced by Rasayana.

The Shareera Doshas formed by the Ahaaraja and Vihaaraja Nidan are responsible for the changes that are taking place like Mamsa Shithilata, Sandhi Vimochana, Rakta Vidaha etc. These Doshas also produce different Rogas. Rasayana Dravya removes these Doshas and causes Vayasthapana.

Ghrita and Ksheera are having Madhura Rasa, Snigdha Guna, Madhura Vipaka and Sheeta Veerya. Ksheera is Aajanmasaatmya to living beings and is best Jeevaneeya also. Ghrita is Ojovardhaka and best Snehadraya. Amalaki is Amlarasapradhana. But it does not increase Pitta due to Sheetaveerya and Madhuravipaka. It is best among the fruits. Bhava Prakash explains it as Traidoshahara- due to Amlaras, decreases Vata, (thus prevents Ageing as Vata is the main cause of Ageing) due to Madhura and Sheetaveerya decreases Pitta and due to Rooksha, Kashaya Guna decreases Kapha. So Amalaki is the best Vayasthapaka Dravya.

Almost all the drugs which are explained in this Dashemani are having Madhuravipaka, Sheetaveerya and Rasayanganuna. (Punarnava is an exception with Usnaveerya and Katuvipaka.) Thus Vayasthapanadravyas are acting through their Rasapanchaka and Prabhava. The properties like Madhura Vipaka and Sheet
Veerya are similar to the Ojoguna and thus results in the increase of Ojus.

CONCLUSION
Ayurveda explains Ageing as the process starting right from the birth through different stages of life and ending in the death as Vaya. It is inevitable and it can only be delayed.

During this process the Hrasa or decline in specific features can be observed in specific decades.

Ahara and Vihara certainly have an impact on the sudden or delayed manifestation of the Jara. So one should avoid Ahita Ahaara like Gramya Ahaara and should consume Hita Ahara. Vihara like Achara Rasayana should be adopted to delay ageing.

Intake of Ghrita and Ksheera daily in proper quantity should be practiced from the childhood and can be continued lifelong for maintaining the youth.

REFERENCES


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