



**CRITICAL REVIEW ON RASAOUSHADI IN GERIATRICS WITH SPECIAL REFERENCE TO DEMENTIA**

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**ABSTRACT**

Geriatrics is a branch of medical science related to the medical care, diagnosis and treatment of aging people. As a part of the normal aging process senile memory impairment or dementia is a common condition characterized by mild symptoms of cognitive decline. According to Ayurveda smritibhrasha occurs in Jaraavasta. Therefore, it can probably be correlated to Jarajanya Smriti bhrasha. At 21<sup>st</sup> century aging has become great challenging issue and one among the distinctive demographic phenomenon which has impact on social, health and economical aspect of an individual. In the range of Rasaoushadhis have gained an upper hand. Either as medhya to regain Smriti Shakti, strengthen the nerves, provides energy etc. Aging includes complex of health issues which are to be treated not as a different disease entity but as a whole. Therefore, Rasaushadhi's are considered to be a boon. Here an effort is made to analysis few Rasaushadhis and their probable mode of action in Dementia.

**Keywords:** Rasaoushadhi, Geriatrics, Dementia.

**INTRODUCTION**

Aging is a multidimensional process and refers to the process of "Accruing maturity with the passage of time." It begins with conception and continues throughout life until death. Aging is progressive, ubiquitous and inevitable to all living beings. Normal aging and diseases associated with aging are two separate entities. Normal aging refers to those normal deteriorative processes that all human beings will experience if they live long enough such as decreased bone mass, osteoarthritis and cataracts. Diseases that are associated with aging, but not caused by aging and do not occur in all persons (i.e. probabilistic aging) include dementia, hypothyroidism, stroke and congestive heart failure while they are common they are not inevitable to all persons and not all seniors will have them.

Homeostasis's the concept where normal aging decreases the body's ability to withstand stress and challenges as homeostatic mechanisms decline over time. Our functional capacity and ability to respond to stress progressively declines in a linear or exponential fashion beginning as far back as the third decade.

Each system's decline is independent of changes in other organ systems, and is influenced by genetics, diet, environment and personal habits<sup>1</sup>

According to Ayurveda Vaya (age) has been classified in Bala (0-30 years), Madhyama (30-60years) and Vriddha (60 and above). Rasaoushadhis are one such entity in Ayurveda. Which are having rasayana effect and can be given in vriddhaavasta or Jaraavasta in which, person may experience smritibramsha, nidranaasha, alpabala etc. Therefore, in present article few of the Rasaushadhi's are analysed which can enhance the smriti, bala, nidra as well as the problems related Jaraavasta.

**BIOLOGICAL THEORIES OF AGING<sup>2</sup>**

No one knows why we age, and the upper limits of the human life span is about 120 years, have not altered over the interval of recorded history despite advances in preventative health care and medicine that have occurred over the last few centuries. Few theories those explains regarding the aging are follows

**Table 1: Theories of aging**

DNA damage theories	Various cellular mechanisms constantly repair ongoing occurring DNA damage (i.e. caused by radiation, mutation). The repair efficiency is positively correlated with life span and decreases with age.
Oxidative damage / Free radicals	Life span is inversely proportional to the extent of oxidative damage caused by unstable & reactive chemical compounds and directly proportional to antioxidant activity.
Error catastrophe	Faulty DNA/RNA transcriptional and/or RNA translational processes produce ineffective or toxic proteins.
Apoptosis	Programmed cell death induced by extracellular signals or "gerontogenes" that tag a cell for removal by phagocytosis.
Cross Link Theory	Chemical bonds form between and within molecules and affect function (e.g cross-linking in collagen causes loss of elasticity in blood vessels).

“Wear-and-tear” theories	Ordinary insults and injuries of daily living accommodate and decrease the organism's efficiency to subvital levels.
Immunological theories	Damage to the immune-system makes the body vulnerable to disease. B and T cells are less effective and less numerous as we age.
Neuro-endocrine theories	Failure of cells with specific integrative functions brings about gradual homeostatic failure
Age versus Cancer theory (Jan 2002)	Aging may be a side effect of the natural safeguards that protect us from cancer. Over expression of tumour suppressor genes in transgenic mice causes premature aging

### GERIATRIC GIANTS<sup>3</sup>

“Geriatric Giants” is a term coined by Bernard Isaacs and the expression refers to the principal chronic disabilities of old age that impact on physical, mental and social domains of older adults. Many of these conditions, commonly misperceived to be an unavoidable part of old age, can in fact be improved. These “Giants” include:

- Cognitive Impairments (dementia, delirium or depression)
- Incontinence
- Postural Instability and fall
- Caregiver Stress and burnout
- Dizziness
- Iatrogenesis and “Polypharmacy”
- “Failure to Thrive” (often from the above)
- Frailty
- Elder Abuse

### COGNITIVE IMPAIRMENTS

A cognitive impairment is a change in how a person thinks, reacts to emotions or behaves. The most common differential diagnosis in older adults of an acquired cognitive impairment includes three major categories:

1. Dementia
2. Delirium
3. Depression

### DEMENTIA

A diagnosis of dementia is made when newly acquired cognitive impairments are sufficient to interfere with social or occupational

functioning in a person without depression or delirium. More often it is other family members, rather than the affected person who notices the first symptoms of dementia.

There are over 70 different causes of dementia, and each has a particular pattern of decline, impairments and underlying neurohistopathological processes. Alzheimer’s Dementia (AD) is the most common cause worldwide, and accounts for about 65% of cases. Vascular Dementia (VaD), mixed vascular and AD, Dementia Lewy Body (DLB) and Frontotemporal Dementia (FTD) each account for about 10% of cases,

Increases population of advanced age group is directly proportional to the number of patients suffering from age-related disorders. Conservative estimation revealed that 25% of the elderly persons have significant psychiatric symptoms and the number of psychologically ill elderly persons was estimated to be 9 million in the year 2005.

According to Ayurvedic literature, if there is any impairment of memory then it is called Smritibhramsha and it occurs due to vitiation of Rajas and Tamas doshas which are considered as manasika doshas. When a person attains the age related changes at appropriate age then it is called as “KalajaJara” and smritibramsha occurring at this age can be considered as, Jarajanya Smritibhramsha.

Geriatric is a such a branch where in it is difficult to diagnose single disease rather it will be a syndrome. Hence, it seems therapeutic measures of Rasaushadhis are exclusively needed for elders because they are brain tonics and improve the psychological faculties and will have effect on Dhi, Dhrti and Smriti.

**Table 2: Rasaushadhi’s and mode of action**

Drug name	Composition	Functions
Swarna bhasma <sup>4</sup>	Swarna	Its Medhyarasayana, Brumhana, Vishahara, Smritivardhaka and Ojovardhaka. Acts on Vatavahinadis.
Vasantakusumakara rasa <sup>5</sup>	Swarnabhasma, Rajatabhasma, Naga bhasma, Vangabhasma, Lohabhasma, Abhrakabhasma, Pravalabhasma and Muktabhasma- Bhavana with Vasa etc.	Excellent rasayana and antiaging agent. Treats Smritibhramsha. Improves memory & concentration.
Smritisagara rasa <sup>6</sup>	ShuddhaParada, ShuddhaGandhaka, ShuddhaHaratala, ShuddhaManashila and Tamrabhasma. Bhavana with Vacha, Brahmi and Jyotishmati	This rasayan helps increase smaranashakti. Acts as nerve tonic in turn help treating depression, dementia, anxiety. Enhances smaranashakti by combating vridhakapha
Brahma rasayana	Amalaki (2000), punarnava, jeevanti, yasti etc. Swarnabhasma, rajatabhasma, tamra bhasma, lohahasma and pravalabhasma	Admistered after shodhanadi karma to increase Ayu, bala. Person gets Deerghayu and Mahabala. Excellent memory booster. Smritivardhaka, kantivardhaka
Mahachaitasa ghrta <sup>7</sup>	Trivrut, shana, dashamula, gokshura, erandamula, shatavari, rasna, munakka, kharjura, ghrta etc.	Mainly indicated in unmada-apasmara but can be considered to enhance smriti and buddhishakti.
Makaradhvja <sup>8</sup>	ShudhaParada, ShudhaGandhaka, ShudhaSwarna equal quantity.	Sreshtarasayana and vajikarana. It enhances medhashakti, bala. Advances intellectual power, longevity and complexion
Saraswaatarista <sup>9</sup>	Kashaya – brahmi, shatavari, vidari, haritaki, ushira, shunti and mishreya Prakshepaka – madhu, sita, dhataki, renuka, trivrut, pippali, vacha, kusta, vibhitaki, vidanga, ashwagandha, etc	It is ayu, veerya, medha, smriti, vardhaka. It is rasayanavara- best rasayana. Medicinal properties–Anti-dementia, Anti-depressive, Anti-stress, Neuroprotective and immunomodulator.

## DISCUSSION

Geriatric is a branch which deals with diagnosis, medical care of age-old people. There are clusters of disorders that age old people experience and one among them is dementia along with reduced immunity etc. It has become great trouble to encounter all the problem with minimal or few medicines. Therefore, treatment of old age people is more sensitive, in Ayurveda there are many rasaoushadhi's with minimal dosage act in broad spectrum as anti-dementia, neuroprotective, immunomodulator, increases memory power etc. wherein care should be taken regarding the dosage and periodicity of prescribing rasaoushadhi's in an individual.

## CONCLUSION

As the prime aim of Ayurveda is Swasthasya Swasthya Rakshnam (maintaining the health of a healthy individual). So, to maintain the healthy state of a person one should follow the Swasthavritta principles. Rasayanatherapy is one among them in present world persons follow sedentary life style and faulty food habits which is the main cause for metabolic imbalance which leads to aging to start early than its schedule. Rasaoushadhi's which acts as rasayana and are more potent than kastaoushadhi thus act faster and give the rejuvenation effect soon. Even though many scientific advancements has come and there are new inventions , discoveries every second still the age old references of Rasaoushadhis have greater contribution in treating Geriatric disorders. It's important to know the limitation of Rasaoushadhi's so physician should be very cautious regarding the dosage as well as periodicity of prescribing them.

## REFERENCES

- 1.Christopher Misiaszek; Geriatric Medicine Survival Handbook, 7<sup>th</sup>ed, Michael G. DeGroote School of Medicine at McMaster University, page no5
- 2.Brian Christopher Misiaszek; Geriatric Medicine Survival Handbook, 7<sup>th</sup>ed, Michael G. DeGroote School of Medicine at McMaster University, page no 9
- 3.Christopher Misiaszek; Geriatric Medicine Survival Handbook, 7<sup>th</sup>ed, Michael G. De Groote School of Medicine at McMaster University, page no 5
- 4.Bahirava, Anandakanda, translator Siddi Nandan Mishra, chaukambha orientalia, New Delhi, edition :1<sup>st</sup>, 2008, dwitiyollasa, verse 45-48, pg no.69
5. Sri Gopal Krishna bhatt, Rasendrasarasangraha, chaukambha Sanskrit sansthan, Varanasi 2<sup>nd</sup> edition, 2012, 5<sup>th</sup> chapter, verse 80-85, pg.no.974-975.
- 6.Vd. lakshmipathy shastry, Yogaratnakara, edited by Brahmashankar sastri, Chaukambha prakashan, Varanasi, reprint 2013, apasmaraadhikara, pg.no.502.
- 7.Agnivesha, charakasamhita, with ayurved-deepika commentary, Chaukambha Publications, New Delhi, reprint-2014, chikitsasthana 1<sup>st</sup> chap, 1<sup>st</sup>rasayanapadaverse-58, pg.no9-10.
- 8.Govinda das Bbhaishajyaratnavali, English translation kanjivlochan, chaukambha Sanskrit sansthan, Varanasi, vol-3, vajikaranaadhikar, verse 114-123, pg.no. 528.
- 9.Govinda das Bbhaishajyaratnavali, English translation kanjivlochan, chaukambha Sanskrit sansthan, Varanasi, vol-3, rasayanaadhikar, verse 182-196, pg.no. 506-507.

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