

RASA DRAVYAS AS PREVENTIVE AND CURATIVE ASPECT IN GERIATRIC DISORDERS

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ABSTRACT

Background: *Rasa Bhasma* is a unique therapeutic methodology to delay ageing and to minimize the intensity of problems occurring this degenerative phases of one's life. Here, *Rasa* words denote incinerated mercury and metal-mineral. It is the demand of the hour to develop an effective holistic protocol for geriatric care. The so-called geriatric giants are the major categories of impairment that appear in elderly people, especially as they begin to fail. These include immobility, instability, incontinence and impaired intellect/memory, osteoarthritis and osteoporosis, diabetes mellitus, benign prostatic hypertrophy, respiratory disease and many more. **Aim:** To compile literary works

from *Rasagrantha* and available research works of *Rasa Bhasma* used in geriatrics disorders.

Materials and methods: All the references related to *Rasa Bhasma* in *Rasoddharatantra* additionally in other *Rasa* texts such as *Rasaratnasamuccya* and *Rasatarangini* were screened by their therapeutics utilities as preventive and curatives aspects in geriatrics disorders.

Results and discussions: From the above facts and findings, it becomes clear that, *Rasatarangini* and *Rasaratnasamuccya* have mentioned *Parada*, *Maharasa* (*Abhraka*, *Vaikranta*, *Makshika*, *Shilajatu*, *Sasyaka*), *Uparasa* (*Gandhaka*, *Haratala*, *Manashila*, *Nilanjana*), *Sadharana Rasa* (*Hingula*), *Dhatu* (*Swarna*, *Rajata*, *Lauha*, *Naga*) and all *Ratna* are indicated as *Rasayana* and elements of *Sudhavarga* in diseases related to degenerative changes in geriatrics. **Conclusions:** This review makes clear idea about *Rasa Bhasma* with its therapeutic utilities in geriatrics care.

KEYWORDS: *Rasa Bhasma*, Rasaratnasamuccya, Rasatarangini, Rasoddharatantra, Geriatrics.

Introduction

mātain laehain rsīÉviNt in×iNt yu´ain mhamya<í,
A_yasyaegad! †QdehisiĪ< kuvRiNt éGjNmjraivnazm!^[1]

It means that if metals/minerals are properly incinerated/calcinated into fine powder form, on internal use they get absorbed and assimilated into the biological system like *Adya Rasa Dhatu*: primary physiological fluids essential for survival of human. They get converted into targeted drug form and their proper use may eradicate all types of ailments and their prolonged use provides good strength and immunity power to the life with ultimate delayed ageing process.

Ageing is not a disease however; the risk of developing disease is increased. Ageing may be considered to be the loss of adaptability of an individual with time. Geriatrics syndromes refer to a symptoms presentation that is common in older adults. Geriatric giants are immobility, instability, incontinence and intellectual impairment.

Jarachikitsa and *Rasayana* methodologically delay *Vruddhavastha* (ageing) and reduce geriatric degeneration. *Rasa Bhasma*, an organo-metallic compound is one such compound described in Rasashastra for treating geriatric problems are best confronted by *Rasayana* drugs.

Rasayana means the therapy which produces the best quality of *Rasa*, *Rakta Dhatu* and other *Dhatu*.^[2] By using *Rasayana*, person achieves long life, sharp memory, intelligence, optimum health, youth, luster and better color complexion of skin, better voice, optimum strength of the body and sense organs, *Vaaksiddhi* (what he says becomes true), popularity, brilliance and many more.^[3]

Rasa Bhasma is a unique therapeutic methodology to delay ageing and to minimize the intensity of problems occurring this degenerative phases of one's life. Here, *Rasa* words denote incinerated mercury and metal-mineral. It is the demand of the hour to develop an effective holistic protocol for geriatric care. The so-called geriatric giants are the major categories of impairment that appear in elderly people, especially as they begin to fail. These include immobility, instability, incontinence and impaired intellect/memory, osteoarthritis

and osteoporosis, diabetes mellitus, benign prostatic hypertrophy, respiratory disease and many more. So, this review paper is aimed to compile literary works from *Rasagrantha* and available research works of *Rasa Bhasma* used in geriatrics disorders.

MATERIALS AND METHODS

A review of three *Rasagrantha* i.e. *Rasaratnasamuccya*, *Rasatarangini* and *Rasoddharatantra* has been made for *Rasa Dravya* and *Bhasma* indicated as *Rasayana* and depicted as table no.1.

Table no. 1: Showing *Rasa Dravya* and *Bhasma* indicated as *rasayana* in below mentioned three *rasagrantha*.

<i>Rasa Dravya</i> and <i>Bhasma</i> as <i>Rasayana</i>	<i>Rasagrantha</i>		
	RRS	RT	RD <i>Bhasma Pishti Prakarana</i>
<i>Rasa</i>		7/85	
<i>Maharasa</i>			
<i>Abharka</i>	2/9	10/12	Verse 9. P.414
<i>Vaikranta</i>	2/56	23/167	Verse 275, p. 441
<i>Makshika</i>	2/80	21/26	Verse 321, P. 446
<i>Shilajeeta</i>	2/116	22/84	-
<i>Sasyaka</i>	2/128		-
<i>Uparasa</i>			
<i>Gandhaka</i>	3/16	8/37	-
<i>Kasisa</i>	3/58		-
<i>Haratala</i>	3/66	11/55	Verse 333, p. 447
<i>Manashila</i>	3/91	11/116	-
<i>Nilanjana</i>	3/104	-	-
<i>Kankustha</i>	3/112	-	-
<i>Sadharana Rasa</i>			
<i>Hingula</i>	3/140	-	-
<i>Dhatu</i>			
<i>Swarna</i>	5/8	13/69	Verse 314, p. 445
<i>Rajata</i>	5/24	16/15	-
<i>Lauha</i>	5/88	-	-
<i>Vanga</i>	-	18/39	-
<i>Ratna</i>			
<i>Hiraka</i>	-	23/24	Verse 270, p.270
<i>Manikya</i>	-	23/57	-
<i>Gomeda</i>	-	-	Verse 71, p. 422
<i>Neelama</i>	-	-	Verse 126, p. 126
<i>Panna</i>	-	-	Verse 142, p. 429
<i>Vaidurya</i>	-	-	Verse 283, p. 442
<i>Suryakanta</i>	-	23/184	-
<i>Rajavarta</i>	4/6		-

Visha			
Vatsanabha	-	24/26	-
RRS-Rasaratnasamuccya RT-Rasatarangini RDT-Rasoddharatantra			

Correlation between biological response and health benefits of *Rasayana* drugs were also screened and the gathered information is presented in table no. 2.

Table no. 2: Showing correlation between biological Response and Health benefits of *Rasayana* drugs.

Sr. No.	Biological response of <i>Rasayana</i> drugs	Related health benefits
1	Potentiating <i>Rasa Dhatu</i>	Skin rigidity & hair pigmentation
2	Potentiating <i>Rakta Dhatu</i>	Beauty, circulation & elasticity
3	Potentiating <i>Mamsa Dhatu</i>	Physical strength and compact body tone.
4	Control <i>Medha Dhatu</i>	Numbness reduces & enhanced alertness

The research works regarding the proven activity of *Rasa Bhasma* were screened to revalidate the classical concepts of utilization of *Rasa Bhasma* in geriatric disorders and illustrated in table no. 3.

Table no. 3: Properties of *rasa bhasma* given in classical Text and Research work done on *rasa bhasma* as its *rasayana* activity.

<i>Rasa Bhasma</i>	Properties as per Classical text	Proven activity in research work
<i>Abhraka Bhasma</i>	<i>Mahavyadhihara, Dehasiddhikara, Jaranashaka, Vairupyanashaka</i> ^[4]	Inhibits yeast cell growth No antibacterial action ^[5]
<i>Vikranta Bhasma</i>	<i>Agnideepana, Medhya, Yogavahi, Jarashoshadinashana, Dantardhyakara, Swasakasahara, Rasayana</i> ^[6]	Yet no such kind of research work has been carried out.
<i>Makshika Bhasma</i>	<i>Rasayana</i> and Prevents <i>Jara</i> and <i>Vyadhi</i> ^[7]	-do-
<i>Shilajeeta</i>	<i>Yogavahi, Rasayana</i> ^[8]	Anti-ulcerogenic, antioxidant, cognitive and memory enhancer, anti-diabetic, anxiolytic, anti-allergic and immunomodulator, anti-inflammatory, analgesic, antifungal properties ^[9]
<i>Sasyaka Bhasma</i>	<i>Tridosha-Visha-Hridaroga, Gudaroga nashaka, Shula, Kustha, Amlapitta, Vibandha nashaka, Rasayana</i> ^[10]	Better antifungal properties than anti-bacterial properties ^[11]
<i>Gandhaka</i>	<i>Deepana, Pachana, Krimighna, Amashoshaka, Visharpa, Dadru, Kushtahara and Rasyana</i> ^[12]	Anti-infective, antibacterial, bactericidal, antimicrobial <i>Rasayana</i> and immunomodulator

		Used in skin and urinary tract disorders ^[13]
<i>Kasisa Bhasma</i>	<i>Deepana, Amashoshana, Vali-Palinashaka, Switraghna and Rasayana</i> ^[14]	Anti-anemic and hepato-protective activity ^[15]
<i>Harataala Bhasma</i>	<i>Rasayana</i> ^[16]	Acute promyelocytic leukemia (APL) ^[17]
<i>Manashila Bhasma</i>	<i>Kustha, Swasa, Kasa, Kshaya Roga, Rasayana</i> ^[18]	Anti-inflammatory activity ^[19]
<i>Nilanjana</i>	<i>Tridoshahara and Rasayana</i> ^[20]	-
<i>Kankustha</i>	Useful in <i>Rasakarma and Rasayana</i> ^[21]	-
<i>Hingula</i>	<i>Sarvadoshaghna, Sarvarogahara, Deepana, Vrishya and Rasayana</i> ^[22]	Cures spermatorrhoea, leprosy, skin diseases. ^[23]
<i>Swarna Bhasma</i>	<i>Vrishya, Hrdya, Netrya, Smriti prada, Medhya Rasayana, Punsavanopypgi, Vishhar, Kantikara, Varnya, Visama Jwarahar, Antra Shosha Kshayaghnama.</i> ^[24]	Neurological/glandular conditions, B-chronic Lymphocytic Leukemia (BCLL), arthritis, cancer detection, and Testicular Steroidogenic and Gametogenic Functions improvement, Free-radical scavenging activity and Immunomodulatory activity. ^[25]
<i>Rajata Bhasma</i>	<i>Shukramehanashana, Ayushya, Vayasthapaka, Vrishya, Medhya and Vatapittanashaka.</i> ^[26]	Antimicrobial study. ^[27] and Free – radical Scavenging activity ^[28]
<i>Lauha Bhasma</i>	<i>Kustha, Jathara, Kapha-Pitta, Panduhara, Deepana, Rasayana and Balakara</i> ^[29]	-
<i>Vanga Bhasma</i>	<i>Medhya, Rasayana, Chakshushya, Sarvapramehahara, Swasa-kasahara, Vrishya, Balya and Shukravardhana</i> ^[30]	Genitor-urinary disorders <i>Madhumeha, Anaemia, Asthama</i> and gastric ulcers ^[31]
<i>Ratna Bhasma</i>	<i>Rasayana</i> ^[32]	-

From the above facts and findings some of the common diseases faced in old age and useful *Rasaushadhi* is tabulated in table no.4.

Table no. 4: Diseases faced in old Age and Useful *Rasaushadhi*.

Sr. No.	Disease	<i>Rasaushadhi</i>
1	Respiratory system	<i>Abhraka, Parada, Gandhaka, Manashila</i>
2	Cardio vascular diseases, hypertension	<i>Abhraka, Swarna, Tamra, Loha</i>
3	Diabetes	<i>Shilajeeta, Naga, Vanga,</i>
4	Musculo skeletal system	<i>Swarna, Rajata, Loha,</i>
5	Eye and Hearing problems	<i>Swarna, Rajata, Loha,</i>
6	Digestive problems	<i>Parada, Gandhaka</i>
7	Nervous system	<i>Swarna, Rajata,</i>
8	Skin problems	<i>Gandhaka, Tutha</i>

DISCUSSION

In today's era, newly emerging infections and metabolic disorders has posed challenges to health-care systems due to hazardous diet and lifestyle. To meet this challenge, awareness among mass regarding preventive use of *Rasayana* as prophylactic can be introduced. Some *Rasayana* are also disease specific and are used in specific disease states as they induce specific immunity and bio-strength to combat a particular disease. Such *Rasayana* is called as *Naimittika Rasayana*.

The disease specific *Rasayana* drugs can be administered along with the treatment of the underlying disease to enhance the tissue strength and disease-combating power so that faster and better relief may be provided and recurrences may be prevented. Few researches in the past have proved their immunomodulating actions. Clinical trials have shown that the use of appropriate *Rasayana* drugs to the treatment of allergic disorders such as eczema, urticaria, allergic rhinitis, and bronchial asthma helps for better and faster relief and prevents recurrences. Similarly to combat autoimmune disorders such as rheumatoid arthritis or cancer or pulmonary tuberculosis, advocating *Rasayana* drug as adjuvant to on-going medicines can also provide encouraging result and improve quality of life of patients. Furthermore, in stress-induced conditions such as anxiety and insomnia or neurodegenerative conditions such as Parkinson's disease, Alzheimer's disease, and senile dementia, administration of *Medhya Rasayana* (nootropics) provides marked improvement in the quality of life of patients and for all the drugs in *Sudha Varga* have calcium in compound form, as salt. Calcium has very essential role in physiology related to bone structure as well as regulation of Gastro intestinal secretions. As these having *Sheet Veerya* in all the *Sudha Vargiya Dravya* the acid neutralizing capacity is present due to higher pH value.^[33]

The findings of all these studies indicate that *Rasayana* has a definite role to play in the maintenance and preservation of health and appropriate use of *Rasayana* can help to bring down the prevalence of many diseases, ultimately reducing health-care burden. Time has come when more focus shall be done on preventive aspects of diseases, and thus, the present policy of health-care system shall deal with awareness among the mass about *Rasayana* utility. Quality of life is important for an individual, and thus, researches in Ayurveda shall also focus on identifying key areas of application of *Rasayana* and sufficient evidence shall be generated with guidelines so that *Rasayana* therapy can be included in the National health policy and Ayurveda can contribute for the betterment of humanity.

CONCLUSION

Though *Rasa Bhasma* having *Rasayana* properties acts as rejuvenating and diseases free conditions in the healthy person. On scientific basis, *Rasayana Karma* can be analogous with Anti-oxidant, Anti-ageing, Adaptogenic, Nootropic and cognitive, immunomodulatory activities. Considering this a meticulous screening was done through three *Rasagrantha* to analyze *Rasa Bhasma* for its *Rasayana Guna* and avail oneself of geriatric disorder.

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