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A ROLE OF DISTURBED MANASABHAVA IN AKALAJA JARA (PREMATURE AGEING) AND ITS MANAGEMENT BY AMALAKI RASAYANA AND MEDHYA RASAYANA

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ABSTRACT

Man, the most developed and sophisticated living being on the earth, is a step ahead in the sense, desires not only to live but to live a long, happy and disease free life. But the continuous improvement in the life expectancy with technological advancement, urbanization, economic growth, increasing competition in every field of life etc., has leads to stressful society. In Ayurveda, Jara (ageing) is described in two types-Kalaja and Akalaja (premature ageing). Kalaja is a natural phenomenon, which stems from inherited potential, but Akalaj (premature ageing) may be triggered due to physical and mental stress. Rasayana is one of the important branches of Astang Ayurveda, to promote and preserve the health of healthy person as well as to treat the diseases. Here in the study Amalaki recommended by Acharya Charaka as Vayasthapana Rasayana has been selected, as a principle drug for the management of AkalajaJara. Medhya Rasayana drugs are also recommended for mental wellbeing for its Medhya effect. They also helps to alleviate disturbed Manasabhava (emotions) like Chinta (anxiety), Krodha (anger), Shoka (grief), Bhaya (fear) etc. and disintegrate the patho-psychology by re-establishing the functional entity between Manasa Guna-Satva, Raja and Tama. The present study undertaken is designed with the hypothesis that stress and disturbed Manasabhava have found major impacts on AkalajaJara and how Rasayana drugs and Medhya Rasayana drugs help in the management of AkalajaJara.

KEYWORDS: AkalajJara, Amalaki Rasayan, MedhyaRasayan, Manasbhava.

INTRODUCTION

Sushruta in AdhidaivikaVyadhi mentioned SvabhavabalapravrittaVyadhis, which include Kshudha (hunger), Pipasa (thirst), Nindra (sleep), Jara (ageing) and Mrityu (death)¹. Ageing is a deleterious, progressive and universal. Constant efforts have been made to understand the process of ageing and try to slow the process. Various stressors leads to disturbance in Manasabhava (emotions)² described in Ayurveda, are root cause of many diseases including premature ageing. The lust (Kama), anger (Krodha), greed (Lobha), delusion (Moha), jealousy (Irsha), grief (Shoka), anxiety (Chinta), fear (Bhaya) etc. are different Manasabhava. When these Manasabhava crosses the physiological limits, disturbs the homeostasis of body and mind by vitiating Manasa and Sharira dosha and causes Asarata of dhatu³. The stressful environment and disturbance in Manasabhava adversely affects the health which may leads to the ageing before the time i.e., AkalajaJara (premature ageing)⁴. Ageing is characterized by the decline inability to respond to stress, increased homeostatic imbalance, and increased risk of aging-associated diseases. Death is the ultimate consequence of ageing⁵.

According to Charaka the age above 60 years may be taken as old age⁶, but Sushruta increases this limit to 70 years⁷. In case of ageing the phenomenon generally progresses slowly and starts at the age of about 60 and its effects are quite visible at the age of 70 years. Charaka being a physician might have appreciated the changes of ageing at their starting point and therefore he has taken 60 years and above as the old age. On the other hand

Sushruta might have thought it safer to take the limit of ageing as 70 years when most of the symptoms of ageing are quite visible⁸. Hence premature ageing is that which occurs before the age 60 years. Now a day, because of stressors is increasing in all the field of life, ageing starts very early. Some of the symptoms of ageing are also seen at before 30 years.

Factors which initiate the process of disease are broadly classified as –Asatmendriyarthasamyoga (unwholesome contact with objects of senses), Pragnaparadh (Intellectual blasphemy), Parinama (Sazonar vagareis)⁹. Various disturbed Manasabhava is said to be “Mithya Yoga” of Mana. Irsha, Bhaya, shoka etc Manasabhava are due to Pragnaparadh¹⁰. To remain healthy, Charaka has counted the Manasabhava like: Lobha, Shoka, Bhaya, Krodha, Mana, Irshya, etc under the title- ‘DharaniyaVega’¹¹. Kama, Shoka, Bhaya etc. cause Vata Prakopa, Krodhaetc cause PittaPrakopa¹². Vayu is the cause of enlivenment (Utsaha) and excitement (Harsha). When Vayu becomes abnormal in the body it detects the mind¹³.

On the basis of forgoing, the signs and symptoms of ageing can be divided into two parts viz. physical and mental. Physical Sign & Symptoms includes Vali (wrinkles), Palitya (grey hair), Khalitya (hair fall), SukraApravartanam (loss of libido), Ojakshaya, Mansa Saithilya, AsamarthaChesta, Analpmeda, Raktavidah. Mental Sign & Symptoms include Medhahani (Loss of Grasping power), Avasannata & Nairasya (Depression), Smritihani (Loss of Recall power), Utsahahani (Decreased Enthusiasm), Buddhihani (Deterioration in Wisdom).

Rasayana is the therapy, which provides the optimum quality of the bodily tissues and the promotion of both physical and mental health, and prevents the ageing and diseases. This therapy enables the person to live for a longer youthful life.

Acharyas mentioned that the therapy which provides intelligence (Medha), strength (Bala), prevents disease (Vyadhikshmatva), promote life span (Ayushkara), by stabilizing age (Vyasthapana) is called Rasayana¹⁴⁻¹⁵. Sharangdhara has written 'Rasayana is that medicine which destroys the old age and disease'¹⁶.

Aims and objectives

- To evaluate the Mental State of the patient by determination of positive and negative Manasabhava and its role in etio-pathogenesis in AkalajaJara (premature ageing).
- To access the effect of Amalaki Rasayana in the management of AkalajaJara (premature ageing) induced due to disturbed Manasabhava.
- To access any augmented the effect of Medhya Rasayana administered along with Amalaki Rasayana in the management of AkalajaJara (premature ageing) induced due to disturbed Manasabhava.

MATERIALS AND METHOD

For the clinical study, patients fulfilling the inclusion criteria of AkalajaJara (especially stress induced) were selected from O.P.D. & I.P.D., Department of Kayachikitsa & Panchakarma of Govt. Akhandanand Ayurved Hospital and from the Shreemati M.A.S. Government Ayurveda hospital, Ahmedabad.

Inclusion Criteria

- Patients between ages of 30 to 60 years.
- Patients presenting with clinical features of Jara.

Exclusion Criteria

- Patients <30 & >60 years of age.
- Patients with any type of major psychiatric illness like Alzheimer's disease, Parkinsonism etc.
- Patients with any major diseases like carcinoma, AIDS etc.
- Patients with any chronic disease or Dhatukshayatva involved in the patho- physiology of disease like Madhumeha (DM), Rajyakshama (TB) etc.

Investigations

1. Blood for Hb%, T.L.C, D.L.C, E.S.R.
2. Urine for routine and microscopic examination.
3. Biochemical investigations like RBS, Lipid Profile and Immunoglobulin.

Ethical Clearance

The present study has been cleared by Institutional Ethics Committee (IEC No. GAAC/3-2014/15, dated 07/02/2014). Written consent of the patient was taken before starting the treatment. Basic information of the disease and treatment was given to the patients.

Criteria for diagnosis

The patients having signs and symptoms of premature ageing were included for the study undertaken.

Physical Sign & Symptoms: Vali, Palitya, Khalitya, SukraApravartanam, Ojakshaya, Mansa Saithilya, AsamarthaChesta, Analpmeda, Raktavidaha.

Mental Sign & Symptoms: Medhahani (Loss of Recall Power), Avasannata & Nairasya (Depression), Smritihani (Loss of

Memory), Utsahahani (Decreased Enthusiasm), Buddhihani (Deterioration in Wisdom)

Treatment Groups

The selected patients were randomly distributed in following two therapeutic groups.

Group- A: Amalaki Rasayana

15 patient of the Group A, Amalaki Churna was administered in the following dose and duration.

Dose: 5 gm. empty stomach in the morning as a single dose.

Anupan: Ushnodaka

Duration: 8 weeks

Group-B: Amalaki Rasayana with Medhya Rasayana

(Table 1)

15 patients Amalaki Rasayana were administered in same dose and duration as described Group-A along with Medhya Rasayana.

Dose: 15 ml. empty stomach in the morning as a single dose.

Anupan: Ushnodaka

Duration: 8 weeks

The Ghrita was prepared with below given drugs as per the classical method of GhritaKalpana described in Sharangdhara Samhita (Table 1).

As per the Ayurvedic principals Shodana is prior before Rasayana therapy. Hence, in patients of both the groups were given a powder of Haritaki, Saindhava, Guda, Vacha, Vidanga, Rajani, Pippali, Sunthi each in equal proportion in the dose of 3gm with luke warm water in the early morning for a day with the purpose of Koshttha and SrotasShuddhi before starting medication¹⁷.

Criteria for Assessment

- Assessment was done clinically on the basis of decrease in complaints and improvement in health parameters.
- Influence of disturbed psychological factors affecting the ageing process was access on standard Ayurvedic parameters-Manasabhava before and after the treatment.
- Mental health of the patient was evaluated on the basis of Hamilton Anxiety Rating Scale (HARS), Hamilton Depression Rating Scale (HDRS) and Mini Mental State (MMS) Examination before and after the treatment.
- Results were assessed for the relief in mental and physical sign and symptoms that was graded and statistically analyzed.

RESULTS

Group A provided highly significant results in Khalitya (61.8%), and significant relief in Vali (39.4%), Palitya (22.2%), AsamarthaChesta (25.9%) [Table 2]. While Group B provided highly significant results in Khalitya (70%), Palitya (38.2%) and Vali (50%). Significant improvement was observed in AsamarthaChesta (50%) [Table 2].

For mental symptoms significant relief was observed in Utsahahani (53.6%) and Buddhihani (37.5%) in Group A [Table 3]. Where highly significant relief was found in Medhahani (51.72%), Smritihani (64.71%) and Utsahahani (66.6%). Significant relief was found in Avasannata & Nairasya (44.4%) in Group B [Table 3].

On MMSE was seen that, significant improvement was observed in disturbed Registration (21.4%), improper Attention and calculation (12.9%) and delayed Recall (18.2%) [Table 4].

While highly significant relief was observed in-disturbed Registration (35.4%). Significant improvement was observed in improper Attention and calculation (16%) [Table 4].

On parameters of HARS, highly significant relief was observed in- Insomnia (71.4%), Intellectual (cognitive) (38.7%). Significant improvement was observed in Anxious (34.5%), Tension (28%), GI Symptoms (52.6%) in Group A [Table 5]. While highly significant relief was observed in- Anxious (53.57%), Tension (36.11%), Insomnia (58.6%), Intellectual (cognitive) (43.7%). Significant improvement was observed in Fears (31.8%), Depressed Mood (37.5%), Somatic (Muscular)

(31.58%), Genito-Urinary Symptoms (65.2%) in Group B [Table 5].

In Group A for HDRS, significant improvement was obtained in Work Interest (44.4%), Anxiety (Psyche) (34.8%)[Table 6]. On various parameters of HDRS in Group B highly significant relief was observed in- Anxiety (Psyche) (65.52%), Work Interest (70%). Significant improvement was observed in Insomnia Early (76.92%), Depressed Mood (55%), Feeling of Guilt (46.67%), Insomnia Middle (88.89%), Insomnia Late (66.67%), Retardation (50%), Somatic Symptoms GI (83.33%) and Somatic General (58.33%).

Table 1: Contents of MedhyaRasayanGhrita (per 100 ml)

Sr.No.	Drug	Latin name	Proportion	gm/ml
1.	Mandukparni	<i>Centella asiatica</i>	1 part	6.25 gm
2.	Yastimadhu	<i>Glycyrrhiza glebra</i>	1 part	6.25 gm
3.	Shankhpushpi	<i>Convolvulus pluricaulis</i>	1 part	6.25 gm
4.	Guduchi	<i>Tinospora cordifolia</i>	1 part	6.25 gm
5.	Ghrita		4 parts	100 ml

Gm= Gram, ml= Mililitre

Table 2: Effect of Therapy on Physical Symptoms

Sr. No.	Complaints	Gr.	'n'	Mean score			%	W	P
				BT	AT	Diff.			
1	Vali	A	14	2.5	1.4	1.1	39.4	46.0	0.042
		B	14	1.71	0.85	0.86	50	78.0	<0.001
2	Palitya	A	14	2.5	2.0	0.5	22.2	36.0	0.008
		B	14	2.50	1.50	1.00	38.23	78.0	<0.001
3	Khalitya	A	15	2.2	0.8	1.4	61.8	60.6	<0.001
		B	14	2.14	0.6	1.4	70	91	<0.001
4	ShukraApravartana	A	2	2.0	1.5	0.07	25	0.00	1.0
		B	3	3.0	0.67	0.47	77.77	0.00	1.0
5	Ojakshaya	A	1	1	1	0.0	0.0	0.00	1.0
		B	3	1.67	0.67	0.20	60	6.0	0.250
6	Mansa Shaithilya	A	7	1.4	0.8	0.2	40	10.0	0.125
		B	3	1.33	0.33	0.20	75	6.0	0.250
7	AsamarthaChesta	A	11	2.4	1.8	0.4	25.9	28.0	0.016
		B	11	2.18	1.09	0.80	50	55.0	0.002
8	Analpameda	A	1	1.0	1.0	0.0	0.0	0.00	1.0
		B	3	2.00	1.00	0.20	50	6.0	0.250
9	Raktavidaha	A	2	1.0	0.5	0.07	50	0.00	1.0
		B	3	1.33	0.33	0.20	75	0.00	1.0

Gr. = Group, n= No. of Patients, BT= Before treatment, At= After treatment, Diff.=Difference, W= Wilcoxon's signed-rank test, P= Calculated probability

Table 3: Effect of Therapy on Mental Symptoms

Sr. No.	Complaints	Gr.	'n'	Mean score			%	W	P
				BT	AT	Diff.			
1	Medhahani	A	8	2.0	1.25	0.4	37.5	15.0	0.063
		B	13	2.23	1.08	1.00	51.72	78.0	<0.001
2	Avasannata & Nairasya	A	6	1.3	0.8	0.2	50	6.0	0.25
		B	8	2.25	1.25	0.53	44.44	28.0	0.016
3	Smritihani	A	11	2.1	1.5	0.4	29.2	0.00	1.0
		B	13	2.62	0.92	1.47	64.71	91.0	<0.001
4	Utsahahani	A	13	2.1	1.0	1.0	53.6	51.9	0.002
		B	12	2.75	0.92	1.47	66.66	78.0	<0.001
5	Buddhihani	A	11	1.4	0.9	0.4	37.5	21.0	0.031
		B	3	2.33	1.67	0.13	28.57	0.00	1.0

Gr. = Group, n= No. of Patients, BT= Before treatment, At= After treatment, Diff.=Difference, W= Wilcoxon's signed-rank test, P= Calculated probability

Table 4: Effect of Therapy on MMSE

Sr. No.	Complaints	Gr.	'n'	Mean score			%	W	P
				BT	AT	Diff.			
1	Orientation	A	-	-	-	-	-	-	-
		B	1	8.0	7.0	0.07	12.5	1.0	1.0
2	Registration	A	11	2.55	2.0	0.4	21.4	21	0.031
		B	12	2.58	1.67	0.73	35.4	66	<0.001
3	Attention & calculation	A	15	4.13	3.6	0.53	12.9	28	0.016
		B	14	4.0	3.36	0.6	16.0	45	0.004
4	Recall	A	14	2.36	1.93	0.4	18.2	21	0.031
		B	12	2.33	1.92	0.33	17.82	15	0.063
5	Language	A	-	-	-	-	-	-	-
		B	2	8.0	7.0	0.13	12.5	3	0.50

Gr. = Group, n= No. of Patients, BT= Before treatment, At= After treatment, Diff.=Difference, W= Wilcoxon's signed-rank test, P= Calculated probability

Table 5: Effect of Therapy on HARS

Sr. No.	Complaints	Gr.	'n'	Mean score			%	W	P
				BT	AT	Diff.			
1	Anxious	A	13	2.23	1.4	0.6	34.5	45.0	0.004
		B	12	2.33	1.08	1.00	53.57	66.0	<0.001
2	Tension	A	12	2.08	1.5	0.4	28	21.0	0.031
		B	13	2.77	1.77	0.87	36.11	66.0	<0.001
3	Fears	A	7	1.7	1.1	0.2	33.3	10.0	0.125
		B	9	2.44	1.67	0.47	31.82	28.0	0.016
4	Insomnia	A	12	2.33	0.67	1.33	71.4	78.0	<0.001
		B	12	2.42	1.00	1.13	58.62	66.0	<0.001
5	Intellectual (cognitive)	A	13	2.38	1.46	0.8	38.7	66.0	<0.001
		B	14	2.29	1.29	0.93	43.75	66.0	<0.001
6	Depressed Mood	A	9	2	1.22	0.47	38.9	15.0	0.063
		B	11	2.91	1.82	0.80	37.5	45.0	0.004
7	Somatic (Muscular)	A	5	1.8	1.2	0.2	33.3	6.00	0.250
		B	9	2.11	1.44	0.40	31.58	21.0	0.031
8	Somatic (Sensory)	A	-	-	-	-	-	-	-
		B	6	1.33	0.50	0.33	62.5	15.0	0.063
9	Cardiovascular Symptoms	A	-	-	-	-	-	-	-
		B	2	1.50	1.00	0.07	33.33	0.00	1.0
10	Respiratory Symptoms	A	1	3	1	0.13	66.7	1.0	1.0
		B	2.00	1.00	0.07	50	1.0	1.0	2.00
11	Gastro-intestinal Symptoms	A	10	1.9	0.9	0.6	52.6	45.0	0.004
		B	5	2.40	1.20	0.40	50	15.0	0.063
12	Genito-Urinary Symptoms	A	-	-	-	-	-	-	-
		B	10	2.30	0.80	1.00	65.22	45	0.004
13	Autonomic Symptoms	A	-	-	-	-	-	-	-
		B	3	2.00	1.67	0.07	16.67	0.00	1.0
14	Behavior at Interview	A	-	-	-	-	-	-	-
		B	3	2.00	1.33	0.13	33.33	0.00	1.0

Gr. = Group, n= No. of Patients, BT= Before treatment, At= After treatment, Diff.=Difference, W= Wilcoxon's signed-rank test, P= Calculated probability

Table 6: Effect of Therapy on HDRS

Sr. No.	Complaints	Gr.	'n'	Mean score			%	W	P
				BT	AT	Diff.			
1	Depressed Mood	A	9	1.89	1.22	0.4	35.3	0.00	1.00
		B	9	2.22	1.00	0.73	55	45.0	0.004
2	Feeling of Guilt	A	3	1.33	0.6	0.13	50	0.00	1.00
		B	7	2.14	1.14	0.47	46.67	21.0	0.031
3	Suicide	A	1	1	0	0.07	100	1.0	1.00
		B	5	2.00	1.20	0.27	40	0.00	1.00
4	Insomnia Early	A	6	1.0	0.67	0.13	33.3	3.0	0.50
		B	9	1.44	0.33	0.67	76.92	36.0	0.008
5	Insomnia Middle	A	8	1.13	0.63	0.27	44.4	10.0	0.125
		B	8	1.13	0.13	0.53	88.89	28.0	0.016
6	Insomnia late	A	7	1.29	0.57	0.33	55.6	15.0	0.063
		B	7	1.29	0.43	0.40	66.67	21.0	0.031
7	Work Interest	A	11	1.64	0.91	0.53	44.4	28.0	0.016
		B	14	2.14	0.64	1.40	70	105	<0.001
8	Retardation	A	6	1.33	0.67	0.27	50	10.0	0.125
		B	9	1.56	0.78	0.47	50	28.0	0.016
9	Agitation	A	2	1.0	0.5	0.07	50	0.00	1.00

		B	4	1.00	0.25	0.20	75	6.00	0.250
10	Anxiety (Psyche)	A	12	1.92	1.25	0.53	34.8	28.0	0.016
		B	12	2.42	0.83	1.27	65.52	66.0	<0.001
11	Anxiety (Somatic)	A	2	1.0	1.0	0.0	0.0	0.00	1.00
		B	5	1.40	0.60	0.27	57.14	10.0	0.125
12	Somatic Sym. GI	A	9	1.44	0.89	0.33	38.5	15.0	0.063
		B	7	1.71	0.29	0.67	83.33	28.0	0.016
13	Somatic General	A	10	1.0	0.6	0.27	40	10.0	0.125
		B	8	1.50	0.63	0.47	58.33	28.0	0.016
14	Genital	A	-	-	-	-	-	-	-
		B	5	1.80	0.60	0.40	66.67	15.0	0.063
15	Hypochondriacs	A	-	-	-	-	-	-	-
		B	3	2.67	1.33	0.27	50	0.00	1.0
16	Insight	A	2	1.0	0.5	0.07	50	0.00	1.00
		B	4	1.00	0.50	0.13	50	0.00	1.0
17	Loss of Weight	A	-	-	-	-	-	-	-
		B	1	1.00	0.0	0.07	100	0.00	1.0

Gr. = Group, n= No. of Patients, BT= Before treatment, At= After treatment, Diff.=Difference, W= Wilcoxon's signed-rank test, P= Calculated probability

Table 7: Overall effect of therapy

Effects	Group A		Group B	
	No. of Patients	%	No. of Patients	%
Marked Improvement (>75%)	-	-	-	-
Good Improvement (51-75%)	4	26.66%	13	86.66%
Moderate Improvement (26-50%)	11	73.33%	2	13.33%
Mild Improvement (<25%)	-	-	-	-

DISCUSSION

Rasayana is treatment for AkalajaJara. TarunaVaya (younger looking) is benefit of Rasayana means Jara before the time-AkalajaJara can counteract by Rasayana. Main Symptoms of premature ageing like Vali, Palitya etc. are accrues due to improper quality of Rasa Dhatu. Nirukti of Rasayana itself describe that Rasayana are drugs which produce proper quality of Rasa and other Dhatu.

Amalaki is Rasayana, Deepana, Tridosha Shamaka, Vrishya, Balya, Sarvadoshaghna, Vayasthapana. With the help of above properties Amalaki counteracts directly to AkalajaJara. Acharya Charaka has given due importance to Amalaki as Vayasthapana Rasayana best amongst all. So we have selected Amalaki as a principal drug for the management of AkalajaJara.

In group B Medhya Rasayana had been selected for treatment along with Amalaki Rasayana. It contains Mandukparni, Yastimadhu, Shankhpushpi, Guduchi which are Medhya drugs are recommended for mental wellbeing. Medhya drugs disintegrate the patho-psychology of AkalajaJara-stress by re-establishment the functional entity between Manasa Guna-Satva, Raja and Tama. Therefore mental health promoting Medhya Rasayana has been selected to be administrated along with the principal drug for the management of AkalajaJara (premature ageing).

Shankhpushpi is Rasayana, Medhya, AgniVardhaka. Shankhpushpi is best Medhya drug amongst all according to Acharya Charaka.

Overall effect of therapy

Overall effect of therapy in Group-A showed that 11 patients i.e. 73.33% were moderately improved, good improvement were seen in 4 patients i.e. 26.66%. No one was marked improved or unimproved [Table 7].

Overall effect of therapy in Group-B showed that 13 patients i.e. 86.66% were good improved, moderate improvement were seen in 2 patients i.e. 13.33% [Table 7].

CONCLUSION

In the present stressful environment, disturbed Manasabhava like Shoka, Bhaya, Krodha etc. were observed to be played a vital role in etio-pathogenesis and exacerbation of AkalajaJara or premature ageing. Amalaki is Vayasthapana Rasayana which directly effects on AkalajaJara, with properties like Deepan, Vata Pitta Shamaka, Balya, Sroto Shodhana. When Medhya drug like Medhya Rasayana was administrated along with Amalaki Rasayana, the improvement rate was increased remarkably because of its mental health promoting effect. Both drugs are free from any hazardous side effects.

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