



The Role Of Rasāyana Churna To Improve Health In Middle Age Group- A Clinical Study

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Abstract:

With the advance technology, 21st Century gave man many health disturbances due to changed life style and fast food habit. The longevity of life as compared to ancient time decreased significantly. Patients suffering from diseases have lower immunity. Āyurveda have described Rasāyana chikitsa for the sake of qualitative and quantitative life span of human. Rasāyana churna is one of the Rasāyana explained by Vāgabhaṭācārya for betterment of health of an individual. Thus the present clinical study was under taken with the aim to evaluate clinically the effect of Rasāyana churna to improve health in middle age group.

In this present research work 30 patients were treated with Rasāyana churna for 1month and placebo group of 30 patients treated with Capsule contained Wheat flour. It was found that the therapeutic efficacy of trial drug was very much encouraging and all the patients responded well and improvement was statistically significant in patients.

Keywords: Rasāyana, life Span, Rasāyana churna, Rejuvenative therapy.

Introduction:

Āyurveda the oldest health science has eight branches. Rasāyana (rejuvenation) is one of them. In therapeutic process Rasāyana is concerned with the conservation, transformation and revitalization at energy. Rasāyana nourishes our body, boosts immunity and helps to keep the body and mind in the best of health^[1]. Rasāyanas are the herbo-mineral preparation which promote a youthful state of physical and mental health and expand happiness. Rasāyana have high levels of both safety for daily use and effectiveness. They are given to small children as tonics and are also taken by the middle aged and elderly to increase longevity.^[1,2]

Today's changing life style, bad food habits and decreased immunity in man had made them prone to variety of diseases. Thus it has become mandatory to use Rasāyana as a boost for extra immunity and health improvement. Rasāyana prevents the early ageing process^[1]. It also helps in early recovery from various diseases and their further complications are avoided.

Āyurvedic texts have described many Rasāyana formulations, e.g. 'Aṣṭāṅga hridaya' mentioned Rasāyana churna-

cūrṇa śvadamṣṭrāmālakāmṛtānām | lihansa sarpirmadhubhāgamiśram |

vṛṣaḥ sthiraḥ śāntavikāra dukhaḥ| samaḥ śataṁ jīvati kṛṣṇakeśaḥ ||

- aṣṭāṅgahṛdaya uttarasthāna 39/159

So, here in this study we were trying to see the use of Rasāyana churna (Gokṣura 1part + Āmalakī 1 part + Guḍūcī 1 part) in health improvement.

Aims & objectives:

1. To give rejuvenation therapy in middle age group related common health problems.
2. To provide Rasāyana Chikitsa for improving general health.

Materials and methods:

Inclusion criteria:

1. The patients between 30-60 years age irrespective of sign and symptoms, sex, education and occupation.
2. The patients having sign and symptoms of common health related problems like: *Amlapitta(hyperacidity)*, *Daurbalya(general debility)*, *Gaurav(heaviness)*, *Śramaśvāsa(breathlessness)*, *Aruchi(tastelessness)*, *Samdhi śūla (joint pain)*, *Bhrama(giddiness)* etc.

Exclusion criteria:

1. Patients which not giving regular follow-up and not following the investigator advice were excluded.
2. Patients with age less than 30 years and above 60 years.
3. Patients with major complication like: Hypertension, Cardiopathy, Neuropathy, Diabetes Mellitus and any other major diseases etc.
4. Pregnant women.
5. Those who do not want to participate.

A) Objective Criteria :

Biophysical parameters like- pulse rate, Blood Pressure, Body weight & laboratory investigations like- Hb%, BSL-Fasting and Lipid profile. etc. were recorded before and after the treatment to assess the effect of the therapy on these parameters.

B) Subjective Criteria:

The subjective criteria for the assessment of patients included the assessment of the minor signs and symptoms related to common health problems in middle age group.

In the present study patients irrespective of their signs and symptoms were selected from Govt. ayurvedic Hospital, Nanded(M.S.). These patients were subjected to detailed clinical examinations.

After screening them as per Ayurvedic and Modern criteria for middle age group disease, selection were carried out according to relevant history, sign, symptoms including laboratory investigations and the patients were given written informed consent to participate in the clinical trial selected for the Clinical study.

Clinical study:

Patients were treated under two groups:

Group :A] Trial group: 30 patients were treated with Rasāyana churna.

Dose: 5 gm of Rasāyana churna, early morning, empty stomach (Rasāyana kala)⁶

Anupana: Luke warm water.

Duration: 1 month.

Group : B] Control group: 30 patients on placebo treatment of Capsule contained Wheat flour.

Dose: 2capsule early morning, empty stomach (Rasāyana kala)⁶

Anupana:

Luke warm water.

Duration: 1 month.

The responses to the treatment were recorded with pathological investigation like: Hb%, BSL-Fasting and Lipid profile.

Symptomatic relief in symptoms like Daurbalya(general debility), Samdhi śūla(joint pain), Amlapitta(hyperacidity), Bhrama(giddiness), Aruchi(tastelessness), Śramaśvāsa(breathlessness) and Gaurav(heaviness) were evaluated.

The Scoring pattern adopted was as follows:-

Gradation of symptoms:

Daurbalya (general debility):

Grade 0- Able to carry daily activities without any exertion.

Grade I- Able to carry routine activity with mild exertion.

Grade II- Patient is exhausted while doing routine activity.

Grade III- Unable to carry out routine activity.

Samdhi śūla(joint pain):

Grade 0- No pain.

Grade I- Tenderness in joint

Grade II- Patient winces

Grade III- Patient winces and withdraw part

Grade IV- Patient will not allow to touch joint.

Amlapitta(hyperacidity):

Gradation for Amlapitta were done using symptoms like burning sensation, Nausea, Vomiting and their frequency.

Grade 0- No complain.

Grade I- Frequency of complains ones a month.

Grade II- Frequency of complains twice in month.

Grade III- Frequency of complains ones in 8 days.

Grade IV- Daily

Bhrama(giddiness):

Grade 0- Absent

Grade I- Occasional giddiness

Grade II- Frequently attacks of giddiness

Grade III- Regular attacks of giddiness

Aruchi(tastelessness):

Grade 0- Normal taste in food, feeling to eat food in time
 Grade I- Aruchi – feeling to take food but not having taste
 Grade II- Anannabhilasha – not feeling to take food even if hungry
 Grade III- Bhktadvesha – aversion to food.
 Grade IV- Abhaktachchanda.

Śramaśvāsa(breathlessness):

Grade 0- Dyspnoea after heavy work and walking
 Grade I- Dyspnoea after moderate work and walking
 Grade II- Dyspnoea after mild work
 Grade III- Dyspnoea even at resting condition

Gaurav(heaviness):

Grade 0- Absent
 Grade I- Occasional gaurava
 Grade II- Frequently
 Grade III-Regular

Preparation of drug:

Reference: Aṣṭāṅgahr̥daya uttarasthāna - Rasāyana Adhyāya¹.

Sr. No.	Raw material	Latin name	Rasa	Vīrya (potency)	Vipāka	Prabhāva
1.	Gokṣura ⁴	<i>Tribullus terrestris</i>	Madhur	Śīta	Madhur	-
2.	Āmalakī ⁵	<i>Embelica officinalis</i>	Pancharasa (except lavaṇa)	Śīta	Madhur	-
3.	Guḍūcī ⁴	<i>Tinospora cardifolia</i>	Tiktā, kaṣāya	Uṣṇa	Madhur	Tridoṣaghna

Above churnas were purchased from local market at Nanded and mixed properly. Packets were prepared, each containing 150 gm of Rasāyana churna.

Observation and result:

Table no.: 1] Division of patients according to Age:

Age (Yrs.)	Trial Group	%	Control Group	%	Total	%
30-40	07	23.33	08	26.68	15	25.00
40-50	13	43.34	11	36.66	24	40.00
50-60	10	33.33	11	36.66	21	35.00

It was observed that maximum numbers of patients were from group 40-50 years (40%) and 50-60 years. i.e.(35%).

Table no.: 2] Division of patients according to Sex:

Sex	Trial Group	%	Control Group	%	Total	%
Male	21	70%	23	76.66%	44	73.33
Female	09	30%	07	23.33%	16	26.66

The present study shows that 73% patients were male and 27% patients were female.

Table no.: 3] Statistical Analysis of the effect of Rasāyana churna (Group:A) on physical parameter:

Physical Parameter Grp.-A n=30	Observation	Statistical Analysis						
	Mean B.T. ±SD	Mean A.T. ±SD	Mean Diff. ±SD	Mean %	SD	SE	t	P
Pulse	76.80 ±5.75	74.40 ±3.50	2.40 ±3.98	3.13%	3.98	1.26	1.91	<0.1
Systolic BP	127.20 ±7.32	125.20 ±5.75	2.00 ±3.89	1.57%	3.89	1.23	1.63	>0.1
Diastolic BP	77.00 ±5.44	75.00 ±3.68	2.00 ±3.13	2.60%	3.13	0.99	2.02	<0.1
Body wt.	55.70 ±3.16	54.00 ±2.71	1.70 ±1.16	3.05%	1.16	0.37	4.64	<0.001

The effect of Rasāyana churna (Group:A) on physical parameters (i.e. BP, Pulse) were non significant, where decrease in body weight was statistically highly significant.

Table no.: 4] Statistical Analysis of the effect of Placebo (Group:B) on physical parameter:

Physical Parameter Grp.-B n=30	Observation	Statistical Analysis						
	Mean B.T. ±SD	Mean A.T. ±SD	Mean Diff. ±SD	Mean %	SD	SE	t	P
Pulse	76.00 ±3.65	74.80 ±2.86	1.20 ±3.29	1.58%	3.29	1.04	1.15	>0.1
Systolic BP	129.20 ±6.61	129.80 ±6.56	-0.60 ±3.66	-0.46%	3.66	1.16	-0.52	>0.1
Diastolic BP	79.60 ±4.88	78.80 ±4.92	0.80 ±3.29	1.01%	3.29	1.04	0.77	>0.1
Body wt.	63.00 ±6.63	63.56 ±5.98	-0.22 ±1.48	-0.35%	1.48	0.49	-0.45	>0.1

The effect of Placebo (Group-B) on physical parameters were statistically non significant.

Table no.: 5] Statistical Analysis of the effect of Rasāyana churna (Group:A) and Placebo (Group:B) on Hb% and BSL-Fasting:

Hb%	MeanB.T. ±SD	MeanA.T. ±SD	MeanDiff. ±SD	Mean %	SD	SE	T	P
Grp.:A	13.27 ±1.53	13.67 ±1.72	-0.40 ±1.48	-3.01%	1.48	0.47	-0.85	>0.1
Grp.:B	14.16 ±1.41	14.31 ±1.55	-0.15 ±0.69	-1.06%	0.69	0.22	-0.69	<0.1
BSL-Fasting								
Grp.:A	73.90 ±6.43	70.69 ±5.20	3.21 ±3.64	4.34%	3.64	1.15	2.79	<0.025
Grp.:B	68.67 ±8.08	67.70 ±6.15	0.97 ±2.76	1.41%	2.76	0.87	1.11	>0.1

Above table shows that increasing in Hb% on group:A 3.01%(p>0.1) & in group:B (p<0.1) were statistically not significant.

The effect of Rasāyana churna (Group:A) on reduction of Fasting Blood Sugar was found to be statistically significant(p<0.025) and in placebo (Group:B) was not statistically significant(>0.1).

Table no.: 6] Statistical Analysis of the effect of Rasāyana churna (Group:A) and Placebo (Group:B) on Triglyceride level and Cholesterol level:

Triglycerides Level(TG)	MeanB.T. ±SD	MeanA.T. ±SD	MeanDiff. ±SD	Mean %	SD	SE	T	P
Grp.:A	137.42 ±63.08	107.69 ±47.13	29.73 ±27.33	21.63%	27.33	8.64	3.44	<0.01
Grp.:B	107.82 ±34.23	106.73 ±30.16	1.09 ±6.96	1.01%	6.96	2.20	0.50	>0.1
Cholesterol level:								
Grp.:A	177.28 ±24.67	162.64 ±21.24	14.64 ±10.89	8.26%	10.89	3.44	4.25	<0.005
Grp.:B	161.28 ±19.68	160.84 ±17.91	0.44 ±4.68	0.27%	4.68	1.48	0.30	>0.1

On the reduction of triglycerides level in group:A (21.63%) was significant (p<0.01) but in Group:B (1.01%) was statistically non-significant. Also reduction of cholesterol level in group:A was highly significant and in group:B was non-significant.

Table no.: 7] Statistical Analysis of the effect of Rasāyana churna (Group:A) and Placebo (Group:B) on HDL level, VLDL and LDL:

HDL Level (n=30)	MeanB.T. ±SD	MeanA.T. ±SD	MeanDiff. ±SD	Mean %	SD	SE	T	P
Group.:A	44.09 ±8.55	50.27 ±5.14	-6.18 ±5.39	-14.02%	5.39	1.70	-3.63	<0.01
Group.:B	56.32 ±15.55	50.15 ±6.28	6.17 ±17.95	10.96%	17.95	5.68	1.09	>0.1
VLDL:								
Grp.:A	27.48 ±12.62	21.54 ±9.43	5.95 ±5.47	21.63%	5.47	1.73	3.44	<0.01
Grp.:B	21.56 ±6.85	21.35 ±6.03	0.22 ±1.39	1.01%	1.39	0.44	0.50	>0.1
LDL:								
Grp.:A	105.71 ±20.04	90.83 ±20.61	14.87 ±11.57	14.07%	11.57	3.66	4.07	<0.005
Grp.:B	83.40 ±16.65	89.35 ±15.41	-5.95 ±17.72	-7.14%	17.72	5.60	-1.06	>0.1

On increasing HDL in group:A(-14.02%) was statistically significant and group:B(10.96%) was statistically non-significant. Also on decreasing VLDL level in group:A (21.63%) was statistically significant (p<0.01), and in group:B (1.01%) was statistically non-significant(p>0.1).

On reduction of LDL level in group:A was statistically highly significant ($p < 0.005$) and in group:B was statistically non-significant ($p > 0.1$)

Table no.: 8] Assessment of symptoms in Trial group(Rasāyana churna) (group:A) :

S. No	Signs/Symptoms	n	Mean score		M.D.	± SD	±SE	t	P
			BT	AT					
1.	Daurbalya(generaldebility)	22	1.40	0.30	1.10	0.31	0.09	12.22	<0.001
2.	Samdhi śūla (joint pain)	17	1.50	0.20	1.30	0.48	0.15	8.66	<0.001
3.	Amlapitta(hyperacidity)	11	1.45	0.36	1.09	0.30	0.09	12.11	<0.001
4.	Bhrama(giddiness)	10	0.91	0.17	0.74	0.26	0.07	10.71	<0.001
5.	Aruchi(tastelessness)	10	1.30	0.20	1.10	0.31	0.09	12.22	<0.001
6.	Śramaśvāsa(breathlessness)	11	1.72	0.45	1.27	0.46	0.13	9.76	<0.001
7.	Gaurav(heaviness)	09	1.55	0.33	1.22	0.44	0.14	8.57	<0.001

It was observed that symptomatic relief in Group-A were statistically significant that means Rasāyana churna has good effect in general symptoms related to middle age group.

Table no.: 9] Assessment of symptoms in Placebo group (group:B):

S. No	Signs/Symptoms	n	Mean score		M.D.	± SD	±SE	t	P
			BT	AT					
1.	Daurbalya(generaldebility)	20	1.77	1.68	0.09	0.20	0.06	1.49	>0.10
2.	Samdhi śūla (joint pain)	15	1.59	1.40	0.18	0.33	0.10	1.78	>0.01
3.	Amlapitta(hyperacidity)	9	1.96	1.65	0.30	0.43	0.12	2.55	<0.05
4.	Bhrama(giddiness)	11	2.07	1.92	0.15	0.40	0.11	1.37	>0.10
5.	Aruchi(tastelessness)	8	1.57	1.38	0.19	0.41	0.11	1.69	>0.10
6.	Śramaśvāsa(breathlessness)	13	1.88	1.73	0.15	0.40	0.11	1.37	>0.10

7.	Gaurav(heaviness)	12	1.61	1.42	0.19	0.32	0.09	2.13	>0.05
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In Group -B patients were treated with Placebo capsule has not significant relief in all symptoms except in *Amlapitta(hyperacidity)*, it may due to psychological effect of treatment in this group

Discussion:

The observed difference may be due to combined effect of the drugs. The *Āmalakī* and *Guḍūcī* are tridoṣa śāmaka and *Gokṣura* is *Vāta –Pitta* shamak. *Agnidipan* was observed in all patients due to *Agnidipan* activity of *Gokṣura* and *Guḍūcī* and ‘*Ruchikar*’ activity of *Āmalakī*⁵. This improvement in *Agni* directly enhances *Jaraṇaśakti*.

Weight reduction may be due to *Prākṛta Jaṭharāgni* which improves *dhātvagni* especially ‘*Medadhātvagni*’. There is need of clinical study according to this effect.

Relief in symptoms like- *Daurbalya* (Generalized debility), *Bhrama*(giddiness), *Hyperacidity*, *Breathlessness*, *Gaurava*(Heaviness) and *Aruchi*(tastelessness) were observed due to properties of these drugs. Over all action of above drugs can be used as *Rasāyana* to promote longevity.

Conclusion:

- 1) From above observation and analysis it may be concluded that *Rasāyana churna* (*Gokṣura* + *Āmalakī* + *Guḍūcī*) is very useful in maintaining general health by improving *Agni*, *Jaraṇaśakti*, and *Prākṛta mala-mūtrapravṛttī*.
- 2) *Rasāyana churna* is more effective in symptoms like *Daurbalya*(generalized debility), *Bhrama*(giddiness), *Breathlessness*, *Gaurava*(Heaviness) and *Aruchi*(tastelessness).
- 3) It can be concluded that ‘*Rasāyana churna*’ helps in early recovery from various disease especially in *Pittaja vyādhi* i.e. *Amlapitta*.
- 4) It produces good health of individual and improvement immunity of individual.
- 5) There is need of clinical trial on large group of patients, for long duration in obesity.

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