



## Research Article

**RASAYANA - AN ADVANCE THERAPY FOR THE MANAGEMENT OF MENOPAUSAL SYNDROME****Chaudhari Krutika<sup>1\*</sup>, Dei Laxmipriya<sup>2</sup>, Thakar Anup<sup>3</sup>**<sup>1</sup>Ph.D. Student, <sup>2</sup>Professor and HOD, Dept. of Prasutitantra and Streeroga, I.P.G.T. & R.A., Jamnagar, India.<sup>3</sup>Professor and HOD, Panchakarma Department, I.P.G.T. & R.A., Jamnagar, India.**KEYWORDS:** Menopausal syndrome, *Rajonivritti janya lakshana, Rasayana, Vayasthapana Gana.***ABSTRACT**

Menopause is referring to end of reproductive period and starting of aging problems due to lack of ovarian hormones. There is no direct reference found in *Ayurveda* regarding menopause but *Jaravastha* can be correlated as *Rajonivrittijanya Lakshanas*. *Rasayana* drugs promote the regeneration of *Dhatu*, intelligence, mental wellbeing, immunity and longevity. So, *Rasayana* drugs are helpful to decrease aging related problems. **Aim:** Present study has been planned to evaluate the efficacy of *Vayasthapana Gana* having *Rasayana* effect on menopausal syndrome. **Materials and methods:** Total 18 known cases of menopausal syndrome patients in the age group between 45-55 years, minimum one year after cessation of menses were selected for the study, out of which 16 patients completed the treatment. *Vayasthapana Gana Ghanavati* 2 tablets (500mg each) were administered twice a day with milk for duration of two months with follow up period of one month. Improvement was monitored as per Menopausal Rating Scale. **Result:** 13 (81.25%) patients showed mild improvement and 3 (18.75%) patients had moderate improvement. No any significant changes were observed in serum follicle stimulating hormone and serum oestradiol and other laboratory findings. The score of menopausal rating scale was decreased from 27.50 to 14.75 after the treatment. **Conclusion:** *Vayasthapana Gana Ghanavati* is safe and effective in the management of menopausal syndrome.

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[chaudhari\\_krutika88@yahoo.com](mailto:chaudhari_krutika88@yahoo.com)**INTRODUCTION**

Menopause means permanent cessation of menstruation and ending of young age due to deficiency of hormone i.e., oestrogen which is denoted as female hormone. Menopause is the time when last and final menstruation occurs<sup>[1]</sup>. Though menopause is a physiological phenomenon many psychological changes occur those are not considered as disease condition, affecting multisystem and manifested with various symptomatology known as menopausal syndrome. This period usually occurs after 40 years<sup>[2]</sup> in most of the women.

Menopause is an estrogen deficient phase of women's life which accelerates the ageing process resulting greater vulnerability to psychosomatic problems and make her life dependent. Characteristic features are hot flushes, bouts of rapid heartbeat, sleep disturbances, mood swings, night sweating, disturbing memory lapses, developing senile vaginitis due to dry vagina, loss of libido and osteoporosis etc. Variation in premenopausal phase leads to mood swing, depression, anxiety, obesity, hypertension, diabetes mellitus and cancer are more prone in menopausal women that need medical help. So in order to bring the women back in their independent routine life, this physiological stage invites attention of physicians to think over it. In India,

menopausal population is increasing day by day and women suffering from menopausal syndrome are also increasing because of fast and stressful life in modern era. Menopausal symptoms increased more in this era because of empty nest syndrome<sup>[3]</sup> i.e. feeling of loneliness due to marriage of their children. Traditionally Indian women worked within family so, stress found only at emotional level, severity of menopausal symptoms may not found, but now in modern era, women need to perform both familial as well as professional life as severity of symptoms found more. There is no direct reference regarding menopause in *Ayurveda* but we can correlate with "*Jarapakvavastha*" mentioned by *Sushruta*. *Jarapakvavastha*<sup>[4]</sup> in female is widely known as *Rajonivrittikala* (menopausal stage). *Rasayana Chikitsa* (Rejuvenation therapy) is the unique therapy contributed by *Ayurveda* particularly effective in reducing the aggravating clinical features and problems during old age. *Rasayana*<sup>[5]</sup> nourishes and increases the immunity, keeps the body young and helps to promote healthy long life. *Rasayana* endowed with psychic excellence like sharp memory. All the drugs in *Vayasthapana Gana*<sup>[6]</sup> are having *Rasayana* properties and is indicated to restore the *Vaya* (youngness). So *Vayasthapana Gana* was selected for the present study to

evaluate the efficacy of *Vayasthapana Gana Ghanavati* on various features of menopausal syndrome.

**Materials and Methods**

Total 18 patients fulfilling the selection criteria were selected from the O.P.D. of *Prasuti Tantra* and *Stree Roga* Department. Two patients were dropped out due to their personal reasons.

**Table 1: Total registration of patients**

Registered	Completed	Dropped out
18	16	2

- 1) Study was started after obtaining Ethical clearance from the Institutional Ethics Committee. (7/-A/Ethics/2013-2014/1767, 10/09/2013).
- 2) Study has been registered in CTRI (CTRI Reg. No: CTRI/2015/07/006044).

**Inclusion criteria**

- 1) Age group between 40-55 years suffering from menopausal syndrome.
- 2) Amenorrhea at least for 12 months or more.
- 3) FSH ≥ 20 IU/L
- 4) Endometrial thickness ≤ 5 mm by USG finding.

**Table 2: Ingredients of *Vayasthapana Gana Ghanavati***

No	Name of Drug	Botanical name (Latin name)	Part used	Part
1.	<i>Guduchi</i>	<i>Tinospora cordifolia</i> Willd.	Stem	1
2.	<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	Dried Fruit	1
3.	<i>Amlaki</i>	<i>Emblica officinalis</i> Gaertn.	Dried Fruit	1
4.	<i>Rasna</i>	<i>Pluchea lanceolata</i> C.B.Clarke	Root	1
5.	<i>Aparajita</i>	<i>Clitoria ternetia</i> Linn.	Whole plant	1
6.	<i>Jeevanti</i>	<i>Leptadenia reticulata</i> W&A.	Stem and leaves	1
7.	<i>Shatavari</i>	<i>Asparagus racemosus</i> Willd.	Root	1
8.	<i>Mandukparni</i>	<i>Centella asiatica</i> Linn.	Whole plant	1
9.	<i>Shalparni</i>	<i>Desmodium gangeticum</i> D.C.	Whole plant	1
10.	<i>Punarnava</i>	<i>Boerhaavia diffusa</i> Linn.	Whole plant	1

**Criteria of assessment**

**1) Subjective criteria**

The result was assessed on as per Menopausal Rating Scale (MRS).

In MRS, there are 11 characteristic features of menopausal syndrome and are divided into three subscales: (1) Somatic scale includes hot flushes, palpitation, sleeping problems and muscle and joint problems; (2) Psychological scale includes depressive mood, irritability, anxiety and physical and mental exhaustion and (3) Urogenital scale includes sexual problems, bladder problems and dryness of vagina. Grading pattern is taken i.e. 0= No symptoms, 1= Mild, 2= Moderate, 3= Severe, 4= Very Severe.

**2) Objective criteria**

S. Cholesterol, S. Triglyceride, HDL, S. Cholesterol /HDL  
 S. Creatinine  
 S.FSH, S. Oestrodiol

**Criteria for assessment of therapy**

The overall effect of therapy was assessed as follows:

1. Complete cured - 100% relief.
2. Marked improvement - 76% - 99% relief.

**Exclusion criteria**

- 1) Age below 40 years and age more than 55 years.
- 2) Women with uncontrolled medical conditions e.g. hypertension, heart disease, diabetes mellitus, cancer.
- 3) Patients having the h/o hormone replacement therapy (HRT).
- 4) Established case of mental illness.

**Investigations: (before and after treatment)**

- Fasting blood sugar, S.Creatinine, S. Cholesterol, S.Triglyceride, High-density lipoprotein (HDL), S.Cholesterol/ HDL ratio.
- S. Oestradiol and S. Follicle stimulating hormone.
- Ultra Sonography - TVS (Transvaginal sonography) (before treatment).

**Study type and duration**

**Open level clinical trial**

*Vayasthapana Gana Ghanavati* 2 tablets (500mg each) twice a day was administered for two months with milk before meal with follow up of one month.

3. Moderate improvement - 51% - 75% relief.
4. Mild improvement - 26% - 50% relief.
5. Unchanged - Up to 25% relief.

**Statistical analysis**

The values were expressed as percentage of relief and mean, SEM (Standard Error Mean). MRS and both subjective and objective parameters were analyzed by applying students paired 't' test in sigma stat software.

**Result and Discussion**

**General Observations (n=18)**

In the present study, maximum 50 % of patients were from the age group between 46-50 years, 77.77% of patients had menopause for last 1- 5 years, 94.44% were married, 61.11% were from nuclear family, 44.44% patients were complaining of constipation, *Vatapitta Prakriti* was observed in 83.33% of patients, 81.25% of patients were having increased BMI (>25), While asking for *Nidana Sevana* (predisposing/aggravating factors) i.e. *Ratrijagarana* (Awaking at night), *Divaswapna* (Day sleep), *Alasya* (Laziness) and *Katu-Amla Rasa Aharas Sevana* (Use of excessive hot and sour diet) were

observed in maximum patients i.e. 72.22%, 33.33%, of exercise) was observed in 66.66 %  
55.55% and 77.77% respectively; while *Avyayama* (Lack

### Observations on MRS

**Table 3: Observations on Somatic sub score**

Symptoms	n=18	No. of Patients	%
<b>Hot flushes</b>	None	1	5.56
	Mild	0	00
	Moderate	5	27.78
	Severe	6	33.33
	Very Severe	6	33.33
<b>Palpitation</b>	None	2	11.11
	Mild	3	16.66
	Moderate	12	66.66
	Severe	0	00
	Very Severe	1	5.56
<b>Sleep Problems</b>	None	3	16.66
	Mild	1	5.56
	Moderate	2	11.11
	Severe	7	38.88
	Very Severe	5	27.78

**Table 4: Observations on Psychological sub score**

<b>Depressive Moods</b>	None	2	11.11
	Mild	1	5.56
	Moderate	6	33.33
	Severe	8	44.44
	Very Severe	1	5.56
<b>Irritability</b>	None	0	00
	Mild	0	00
	Moderate	10	55.55
	Severe	7	38.89
	Very Severe	1	5.56
<b>Anxiety</b>	None	1	5.56
	Mild	1	5.56
	Moderate	6	33.33
	Severe	9	50
	Very Severe	1	5.56

**Table 5: observation on Urogenital sub score**

<b>Physical &amp; Mental Exhaustion</b>	None	0	00
	Mild	0	00
	Moderate	1	5.56
	Severe	14	77.77
	Very Severe	3	16.67
<b>Sexual Problems</b>	None	3	16.67
	Mild	1	5.56
	Moderate	3	16.67

	Severe	10	55.55
	Very Severe	1	5.56
<b>Bladder Problems</b>	None	1	5.56
	Mild	1	5.56
	Moderate	2	11.11
	Severe	9	50
	Very Severe	5	27.78
<b>Vaginal Dryness</b>	None	3	16.67
	Mild	1	5.56
	Moderate	5	27.78
	Severe	8	44.44
	Very Severe	1	5.56
<b>Joint &amp; Muscular discomfort</b>	None	0	00
	Mild	0	00
	Moderate	4	22.22
	Severe	12	66.67
	Very Severe	2	11.11

**Table 6: Effect of Vayasthapana Gana Ghanavati on Menopausal Rating Scale**

Symptoms	n	Mean ± SEM		Mean Diff	% relief	't'	'P'
		BT	AT				
Hot flushes, Sweating	15	3.133±0.215	1.067±0.118	2.067	↓53.957	11.374	<0.001
Palpitation	15	1.933±0.182	1.067±0.067	0.867	↓44.827	6.5	<0.001
Sleep Problems	14	2.857±0.312	1.429±0.173	1.429	↓50	7.071	<0.001
Depressive Mood	14	2.571±0.646	1.357±0.133	0.214	↓47.222	5.667	<0.001
Irritability	16	2.438±0.128	1.125±0.085	1.313	↓53.846	8.720	<0.001
Anxiety	14	2.571±0.173	1.286±0.125	1.286	↓50	5.264	<0.001
Physical & Mental Exhaustion	16	3.063±0.111	1.438±0.128	1.625	↓53.061	10.498	<0.001
Sexual problems	13	2.769±0.201	2.154±0.296	0.615	↓22.222	3.411	<0.01
Bladder problems	15	3±0.218	1.4±0.19	1.6	↓53.333	8.411	<0.001
Vaginal Dryness	13	2.692±0.208	2±0.277	0.692	↓25.714	3.323	<0.01
Joint and muscular discomfort	16	3±0.129	1.938±0.143	1.063	↓35.416	5.506	<0.001
Total	16	27.5±1.336	14.75±0.977	12.75	↓46.363	13.053	<0.001

**Table 7: Result on subscales**

Sub score	n	Mean ± SEM		Mean Diff	% relief	't'	'P'
		BT	AT				
Somatic sub score	16	10.25±0.602	5.188±0.277	↓5.063	49.390	10.989	<0.001
Psychological sub Score	16	10±0.612	4.875±0.375	↓5.125	51.25	9.373	<0.001
Urogenital sub score	15	7.333±0.613	5±0.625	↓2.733	35.345	5.909	<0.001

**Table 8: Effect of therapy on laboratory investigations**

Investigations	n	Mean		Mean Diff.	% Change	S.E.	T	P
		B.T.	A.T.					
S. Cholesterol	16	179.88	189.44	-9.563	↑5.32	4.625	-2.068	>0.05

S. Triglyceride	16	155.69	143.63	-27.94	↓ 24.15	32.30	-0.865	>0.05
HDL	16	55.81	57.5	-1.987	↑ 5.85	1.829	-1.629	>0.05
S. Cholesterol /HDL	16	3.253	3.325	-0.073	↑ 2.229	0.109	-0.663	>0.05
S. Creatinine	16	0.94	0.86	0.075	↓ 8	0.035	2.158	<0.05
S.FSH	16	67.15	67.668	-0.519	↑ 0.77	11.337	-0.046	>0.05
S. Oestrodial	16	106.9	103.67	3.235	↓ 3.026	6.671	0.485	>0.05

After treatment, no significant changes were observed in the biochemical and hormonal values.

Menopause is a part of aging process of women's life. The majority of the symptoms of menopause are due to *Mandagni*, *Dhatukshayavastha*, *Vata Vriddhi* and *Manovaha Srotasduhti* (channels that connect the mind to the senses). *Rasayana* therapy seems to be line of treatment, to nourish the *Dhatu*s. However *Rasayana* is not a complete cure for *Rajonivritti Janya Lakshanas*/menopausal syndrome. It can only delay the process of aging and symptomatically relieve the menopausal discomforts for some time and also prevent the adverse effects in the post menopausal period.

#### Probable mode of action of *Vayasthapana Gana Ghanavati*

Most of the drugs have *Tikta*, *Madhura* and *Kashaya Rasa Pradhana* and having *Madhura Vipaka*, *Tikta*, *Kashaya Rasa* are *Pittashamaka* and also balance *Kapha Dosha*. *Madhura Rasa* having soothing effect promotes strength and pacifies *Pitta* and *Vata Dosha*. So, *Vayasthapana Gana Ghanavati* works as *Tridosha Shamaka* and reduce the *Rajonivrittijanya Lakshanas* by balancing *Tridoshosha*. *Tikta Rasa* has direct action on promotion of *Medha* (Memory). Most of the drugs in *Vayasthapana Gana Ghanavati* have *Deepana*, *Pachana* property which improves the status of *Agni*. *Vayasthapana Gana Ghanavati* has properties of *Vayasthapana*, *Balya* (Tonic) and *Rasayana* which promote proper formation of *Rasa Dhatu*. Besides these properties, most of the ingredients helps in delaying the aging process and reduce the somatic symptoms of menopause. *Amalaki*, *Shatavari*, *Jatamansi*, *Mandukparni*, *Guduchi*, *Shalparni* and *Punarnava* have *Hridya* property and *Amalaki*, *Shatavari*, *Jatamansi*, *Mandukparni*, *Haritaki*, *Jivanti* have *Medhya* (promote intellect) property which help to reduce psychological symptoms of menopause. *Punarnava*, *Jivanti* and *Satavari* have *Mutrala* (Diuretic) properties which reduce the bladder problems. Antioxidant property of *Guduchi*<sup>[8]</sup>, *Haritaki*<sup>[9]</sup>, *Amalaki*<sup>[10]</sup>, *Aparajita*<sup>[11]</sup> and *Mandukparni*<sup>[12]</sup> which helps to block or slow down a variety of neurodegenerative processes. Anti stress, adoptogenic activity of *Punarnava*<sup>[13]</sup>, anti-anxiety and anti-depressant activity of *Mandukparni* and cardio protective activity of *Amalaki* and *Guduchi* helps to reduce psychological symptoms of menopause. Phytoestrogenic activity of *Shatavari*<sup>[14]</sup> also works on hot flushes and other menopausal symptoms.

**Table 9: Overall effect of therapy (n= 16)**

Effect of therapy	No. of patients	%
Unchanged - ≤ 25 % relief	0	00
Mild Improvement -26-50% relief	13	81.25
Moderate improvement - 51-75%	3	18.75
Marked improvement - 76-99% relief	0	00
Complete cure -100% relief	0	00

#### CONCLUSION

*Vayasthapana Gana Ghanavati* proving encouraging results in somatic complaints i.e. hot flushes, physical and mental exhaustion, bladder problems, joint and muscular discomfort and psychological complaints i.e. palpitation, sleep problems, depressive mood, irritability, anxiety. *Vayasthapana Gana Ghanavati* is administered for 60 days significantly decreased the severity of menopausal symptoms. The score of menopausal rating scale was decreased from 27.50 to 14.75 after the treatment. Hence, *Vayasthapana Gana Ghanavati* can be recommended in the menopausal syndrome.

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