

## CLINICAL EVALUATION OF SHAMAN YOGA (ANUBHUT) IN THE MANAGEMENT OF MENOPAUSAL SYNDROME

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### ABSTRACT

Menopause is a gradual and natural transitional phase of adjustment between the active and inactive ovarian function and occupies several years of a women's life and involves biological and psychological changes adjustments. The present clinical trial was designed as per Ayurveda clinical trials protocol to evaluate the efficacy of *Shaman Yoga* in the management of menopausal syndrome. It was randomized open clinical trial. Total 15 patients were registered in the study, out of which 14 patients completed the study. Specialized rating scales like Menopause Rating Scale (MRS) and Menopause Specific Quality of Life (MENQOL) questionnaires were adopted for diagnostic as well as assessment criteria. The effects were examined based on MRS and MENQOL. Results were analyzed statistically using 't' test. Highly

significant ( $P < 0.01$ ) reduction was found in the symptoms of MRS as well as MENQOL. Finally, it can be stated that *Shaman Yoga* gives better result in both somatic as well as psychological complaints in women with mild to moderate symptoms of menopausal syndrome.

**KEYWORDS:** Menopausal syndrome, Rajonivrutti, Shaman yoga.

## INTRODUCTION

The menopause is a natural phenomenon and one of the life's important milestones. Menopause is generally defined as cessation of periods for 12 months or a period equivalent to 3 previous cycles or as time of cessation of ovarian function resulting in permanent amenorrhea.<sup>[1]</sup> The menopause is thus a gradual and natural transitional phase of adjustment between the active and inactive ovarian function and occupies several years of a women's life and involves biological and psychological changes adjustments. This period is usually associated with unavoidable manifestation of aging process in women.<sup>[2]</sup> Most women experience near complete loss of production of estrogen by their mid-fifties.<sup>[3]</sup> During reproductive years, women are protected by female hormones, i.e. estrogen and progesterone. With menopause, women enter an estrogen deficient phase in their lives, which accelerates the ageing process resulting into greater vulnerability to psychosomatic problems. Hot flushes, sweating, changes in mood and libido are some of the important outcomes affecting the quality of life (QoL) during climacterium in women. QoL covers physical, functional, emotional, social, and cognitive variables up to 85% of menopausal women.<sup>[4]</sup>

Though, Rajonivrutti as a diseased condition is not described separately in the classical Ayurveda texts, Rajonivrutti Kala is mentioned by almost all Acharyas without any controversy. According to Sushruta<sup>[5]</sup> and various other references too<sup>[6-8]</sup> 50 years is mentioned as the age of Rajonivrutti, when the body is fully in grip of senility.<sup>[9]</sup>

Currently, the number of menopausal women is about 43 million and projected figures in 2026 have estimated to be 103 million.<sup>[10]</sup> So, menopausal health demands even higher priority in Indian scenario.<sup>[11]</sup> In modern science, hormone replacement therapy is one and only alternative for these health hazards, but it has a wider range of secondary health complications like vaginal bleeding, breast cancer, endometrial cancer, gallbladder diseases, etc.<sup>[12-15]</sup> On the other hand, this therapy is not much effective in the psychological manifestations of this stage. Allopath manages them by the long-term use of sedative, hypnotics, and anxiolytic drugs, which may lead to various side effects like drowsiness, impaired motor function, loss of memory, allergic reactions, non-social behaviors, drug dependence, etc.

Therefore, considering it as a challengeable melody, this project has been undertaken in order to find out a safe and effective medicament in Ayurveda without creating any adverse effect and for the management of menopausal syndrome.

### **AIMS AND OBJECTIVES**

The present study was aimed to evaluate efficacy of Shaman yoga on Pitta predominant menopausal syndrome.

### **MATERIALS AND METHODS**

Patients attending the Outdoor Patients Department of Streeroga & Prasootitantra, I.P.G.T. & R.A. Jamnagar, were randomly incorporated into the study irrespective of caste, religion etc. [Table 1]. A suitable research proforma prepared for the assessment of therapy by adopting suitable grading pattern. A written and informed consent was taken from the patient before the commencement of treatment. Total 17 patients were registered, out of them 15 patients completed the course of treatment.

#### **Inclusion criteria**

1. Females of age between 40 and 55 years
2. Amenorrhea for  $\geq 12$  months
3. Follicle Stimulating Hormone (FSH)  $\geq 20$  IU/L
4. Thickness of endometrium  $\leq 5$  mm
5. Willing and able to participate for 16 weeks.
6. On the basis of Menopausal rating scale (MRS) were screened.

#### **Exclusion criteria**

1. Women with uncontrolled medical conditions e.g. Hypertension, Heart disease, Diabetes mellitus.
2. Women who were undergoing treatment for cancer or were in remission, who had the H/O Hormone replacement therapy (HRT).
3. Women having H/O excessive and/or irregular bleeding per vagina.

#### **Drugs**

Drugs used in Shaman yoga i.e. Powder of Shatavari, Amalaki, Yashtimadhu (each 1 part) and Mukta Shukti Bhasma (1/2 part) were prepared in the Pharmacy of GAU, Jamnagar.

**Investigations**

All selected patients were subjected to routine investigations, which included the following:

- Blood: Hemoglobin (Hb), Total Count (TC), Differentiate Count (DC), Erythrocyte Sedimentation Rate (ESR), Packed Cell Volume (PCV), etc.
- Biochemical examination: Fasting blood glucose, lipid profile, liver function tests, renal function tests, Serum calcium, HbA1C, etc.
- Urine – Routine and microscopic examination
- Hormonal assessment: FSH, LH (Luteinizing Hormone)
- Ultra Sonography - TVS/TAS (Trance Vaginal Sonography/Abdomen.)

**Study design**

- Study type: - Intervention
- Purpose: - Treatment
- Masking: - Randomized open labelled clinical trial
- Timing: - Prospective
- End point: - Efficacy and safety

**Ethical Clearance**

Study was started after obtaining Ethical clearance from the Institutional Ethics Committee, IPGT&RA, Jamnagar Ref.PGT/7-A/2012-2013/1964 (Dated 21/09/2012).

**CTRI registration**

Study is registered in CTRI as CTRI/2013/07/005340.

**COURSE OF TREATMENT**

In the present study, all the selected patients were given orally Shaman Yoga 3.5 gm. twice daily with Honey and Ghrita, after food, for 1 months.

**Follow-up study:** All patients were followed up for 8 weeks.

**Criteria for assessment**

Detailed history was taken thorough various physical examinations with the data being recorded in a special proforma that was specifically designed.

The result was assessed on the basis of Pittaja predominant symptoms i.e. subjective criteria's, menopause rating scale (MRS)<sup>[16]</sup> and menopause specific quality of life (MENQOL)<sup>[17]</sup> were given scoring depending upon their severity.

The obtained results were measured according to the grades given below:

1. No change or Less than 25% changes in the signs and symptoms.
2. Mild improvement: 26-50% relief in the signs and symptoms.
3. Moderate improvement: 51-75% relief in the signs and symptoms.
4. Marked improvement: 76-99% relief in the signs and symptoms.
5. Complete remission: 100% relief in the signs and symptoms.

### Statistical analysis

The information collected on the basis of observation, were subjected to statistical analysis in terms of percentage of relief, Mean, Standard Deviation (SD) and standard Error (SE) and by the use of student paired 't' test, evaluate the significances at different levels i.e. at 0.05, 0.01 and 0.001 levels.

### OBSERVATIONS AND RESULTS

In the present study, maximum 46.66% of patients were from the age group of 51-55 years; 93.33% were married; 93.33% of patients were housewives; 66.66% of patients had disturbed sleep; 80% of patients had regular bowel habit followed by 61.54% had constipation; 66.66% of the patients had menopause for 1-5 years; 86.66% of patients were having addiction of tea; 73.33% of patients were not using any contraceptive; 86.66% patients were vegetarian; 53.33% of patients had Vatapitta Prakriti; Looking to the sign and symptoms, maximum, i.e. 100% patients were having Artavavaha and 94.28% having Swedavaha Srotodushti; In MRS, 100% of patients were having Hot flushes, Heart Discomfort, Sleep Problems, Depressive mood, Irritability, Anxiety, Physical & Mental Exhaustion, Sexual problems, and Dryness of Vagina while joint and muscular discomfort was found in 93.33% of patients Rajonivritti is a representative syndrome of Praudhavastha, which lies in a Sandhikala (a mid-period between Yuvavastha and Vriddhavastha). During this period there is a peak level of Pitta, during Jarakala, Vata remains in aggravated condition along with vitiated Pitta creates hot flushes, excessive sweating, sleep disturbance, irritability, dryness of the vagina, etc., which are similar to Vataja-Pittaja symptoms. This is nothing but a Rajonivritti Avastha Janya Lakshana or menopausal syndrome.

### Effect of Therapy

Effect of therapy on Menopausal Rating Scale has shown Highly significant result i.e.  $P < 0.001$  in Sexual subscale score, Psychological subscale score, Urogenital subscale score. [Table 1].

The effect of therapy on MENQOL has shown that statistically Highly significant result i.e.  $P < 0.001$  in Hot flushes, Night sweats, Sweating, Being dissatisfied with personal life, Feeling anxious or nervous, Experiencing poor memory, Feelings of wanting to be alone, Change in sexual desire, and Vaginal dryness during intercourse. [Table 2].

Shaman Yoga has shown Highly significant result i.e.  $P < 0.001$  in Ushnaanubhuti, Daha, Santapa, Krodha, Svedaadikyata, Mutradaha, Yonidaha, Glani, where as insignificant results i.e.  $P > 0.05$  in, Trushna kshudhadikyata. [Table 3].

Shaman Yoga has shown Highly significant result i.e.  $P < 0.001$  in Shirashoola (Headache), Balakshaya (Weakness), Vibandha (Constipation), Anidra/Alpanidra (Sleeplessness), Krichchhra Vyavayata (Loss of libido), Maithuna asahishnuta (Dyspareunia), Sandhivedana (Joint pain), Yoni Shushkata (Vaginal dryness) where as insignificant results i.e.  $P > 0.05$  in Anavasthita chitatvam (Mood swing) and Chinta (Anxiety). [Table 4].

Effect on hematological/biochemical values

S. Triglycerides, HDL, S. Calcium, there was a decrease of about, 1.39% 1.40% & 0.87%, respectively but all these changes were statistically insignificant ( $p > 0.05$ ) & within the normal ranges. However, S. Cholesterol, S. Cholesterol/HDL S. FSH & S. Estrodiol was found to be increased by 3.33%, 4.81%, 10.86%, 33.52 respectively but it was statistically insignificant ( $p > 0.05$ ). No other significant change in the hematological and biochemical values after treatment was observed in any patient. [Table 5].

Total effect of therapy On the basis of criteria of assessment allotted, the total effect of therapy has been carried out, which has shown that maximum i.e. 78.57% patients reported mild improvement followed by 21.41% patients reported moderately improved, none of the patients reported unchanged, markedly improved & complete cured respectively in this group [Table 6].

**Table 1: Effect on Menopausal Rating Scale Symptoms.**

Symptoms	Total no. of patient n=14	Mean B.T.	Mean A.T.	% relief	S.D. ±	S.E. ±	't'	'P'
1. Sexual subscale score	14	6.35	4.5	27	1.29	0.34	5.37	<0.001
2. Psychological subscale score	14	6	4.14	31.08	0.86	0.23	8.03	<0.001
3. Urogenital subscale score	14	5.28	3.78	27.22	1.01	0.27	5.50	<0.001

**Table 2: Effect on Menqol Symptoms.**

Symptoms	Total no. of patient n=	Mean B.T.	Mean A.T.	S.D. ±	S.E. ±	't'	'P'
1. Hot flushes	14	2.5	0.71	0.42	0.11	15.69	<0.001
2. Night sweats	14	2.42	0.85	0.51	0.13	11.44	<0.001
3. Sweating	14	2.42	0.42	0.39	0.10	19.07	<0.001
4. Being dissatisfied with personal life	10	1.5	0.5	0.47	0.14	6.70	<0.001
5. Feeling anxious or nervous	14	2.14	0.64	0.51	0.13	10.81	<0.001
6. Experiencing poor memory	14	1.35	0.71	0.49	0.13	4.83	<0.001
7. Feelings of wanting to be alone	12	1.41	0.75	0.49	0.14	4.69	<0.001
8. Change in sexual desire	13	2.38	0.92	0.51	0.14	10.15	<0.001
9. Vaginal dryness during intercourse	12	2.75	0.91	0.57	0.16	11	<0.001
10. Avoiding intimacy	4	2	1	--	--	--	--

**Table 3: Effect on Pitta Predominant Menopausal Symptoms.**

Symptoms	Total no. of patient n=	Mean B.T.	Mean A.T.	S.D. ±	S.E. ±	't'	'P'
1. <i>Ushnaanubhuti</i>	13	2.30	1	0.75	0.20	6.27	<0.001
2. <i>Daha</i>	13	2.23	1.15	0.27	0.07	14	<0.001
3. <i>Svedaadikyata</i>	14	1.92	1	0.26	0.07	13	<0.001
4. <i>Trushna kshudhadikyata</i>	10	1.2	1	0.42	0.13	1.5	>0.05
5. <i>Mutradaha</i>	14	2.5	1.14	0.74	0.19	6.81	<0.001
6. <i>Yonidaha</i>	13	2.61	0.92	0.63	0.17	9.67	<0.001
7. <i>Glani</i>	10	1.8	0.7	0.31	0.1	11	<0.001
8. <i>Santapa</i>	13	2.30	1.07	0.43	0.12	10.11	<0.001
9. <i>Krodha</i>	13	1.84	0.69	0.37	0.10	11.07	<0.001



**Table 4: Effect on Important Vata Predominant Menopausal Symptoms.**

Symptoms	Total no. of patient n=	Mean B.T.	Mean A.T.	% relief	S.D. ±	S.E. ±	't'	'P'
Shirashoola (Headache)	13	2.30	1.15	52.56	0.37	0.10	11.07	<0.001
Bala- Kshaya (Weakness)	14	2.35	0.92	60.71	0.51	0.13	10.40	<0.001
Vibandha (Constipation)	10	2	0.9	53.33	0.56	0.17	6.12	<0.001
Anidra/Alpanidra (Sleeplessness)	14	2.78	1.28	53.57	0.51	0.13	10.81	<0.001
Anavasthita chitatvam (Mood swing)	14	2.07	1.07	48.80	--	--	--	--
Chinta (Anxiety)	14	2.07	1.07	48.80	--	--	--	--
Krichchhra Vyavayata (Loss of libido)	13	2.15	1.07	48.71	0.49	0.13	7.86	<0.001
Maithuna asahishnuta (Dyspareunia)	13	2.46	1	57.69	0.51	0.14	10.15	<0.001
Sandhivedana	14	2.21	1	51.19	0.57	0.15	7.84	<0.001
Yoni Shushkata (Vaginal dryness)	14	2.57	1.21	52.38	0.49	0.13	10.21	<0.001

**Table 5: Effect of Therapy on Biochemical Parameters.**

Investigations	Mean		Mean Diff.	% Change	S.D.±	S.E.±	t	N	P
	B.T.	A.T.							
S. Cholesterol	194.85	201.35	-6.5	3.33 ↑	22.06	5.89	-1.10	14	0.29
S. Triglyceride	112.71	111.14	1.57	1.39 ↓	34.76	9.29	0.16	14	0.86
HDL	60.85	60	0.85	1.40 ↓	12.00	3.20	0.26	14	0.79
S. Cholesterol/HDL	3.24	3.04	-0.16	4.81 ↑	0.48	0.12	1.29	14	0.21
S. Calcium	9.32	9.24	0.08	0.87 ↓	0.39	0.11	0.68	11	0.50
S.FSH	63.48	56.52	7.06	10.86↑	117.65	52.61	0.13	5	0.9
S. Estradiol	59.50	66.78	-7.28	33.52↑	47.57	21.27	-0.34	5	0.74

**Table 6: Total Effect of Therapy In Group A.**

Effect of therapy	No. of patients	%
Unchanged - □ 25% relief	0	0
Mild Improvement -26-50% relief	11	78.57
Moderate improvement -51-75%	3	21.41
Markedly improved -76-99% relief	0	0
Complete cure -100% relief	0	0

## CONCLUSION

Shaman Yoga is better in various psychological disturbances mainly include headache, irritability, depression, mood swings, sleep disturbances, etc., So, it can be concluded that in women with mild to moderate symptoms of menopausal syndrome, a Shaman Yoga gives better result in both somatic as well as psychological complaints. No any adverse effect was



noted during the study. Therefore it could be a safe alternative to the modern drugs. It is found to be an effective therapy in psychological and somatic problems related with menopausal syndrome.

## REFERENCES

1. Menopause. Howkins and Bourne Shaw's A Textbook of Gynecology. Reprinted ed.: Elsevier, 2005; 56-67.
2. Mashiloane CD, Bagratee J, Moodley J. Awareness of and attitude toward menopause and hormone replacement therapy in an African community. *Int J Gynaecol Obstet*, 2002; 76: 91-3.
3. Cobin RH, Futterweit W, Ginzburg SB, et al. for the AACE Menopause Guidelines Revision Task Force: American Association of Clinical Endocrinologists medical guidelines for clinical practice for the diagnosis and treatment of menopause. *Endocr Pract*, 2006; 12(3): 317.
4. Blumel JE, Castelo-Branco C, Binfa L, Gramegna G, Tacla X, Aracena B, et al. Quality of life after the menopause: A population study. *Maturitas*, 2000; 34: 17-23.
5. Sushruta, Sushruta Samhita, Sutra Sthana, Shonitvarnaniya Adhyaya 14/6, Ambika Dutta Shastri, 'Ayurveda-Tattva-Samdipika' Vyakhya, Reprinted 2nd ed. Chaukhamba Samskrit Samsthan, Varanasi, 2006; 48.
6. Ibidem, Sushruta Samhita, Sharira Sthana, Garbhavkranti Sharira, 3/9, 21.
7. Vagbhatta, Asthanga Hridaya, Sharira Sthana, 1/7, Commentary by Kaviraj Atridev Gupta, Reprinted. Chaukhamba Surbharti Prakashan, Varanasi, 2007; 170.
8. Vagbhatta, Ashtanga Samgraha, Sharira Sthana 1/11, Commentary by Kaviraja Atrideva Gupta, Reprinted. Chaukhamba Krishnadas Acedemy, Varanasi, 2005.
9. Bhavamishra, Bhavaprakasha, Purva Khanda 3/1, Pandit Shree B. S. Mishra, 9th ed. Chaukhamba Samskrit Samsthana, Varanasi, 2005; 204.
10. Bavadam L. HRT and older women in India. *HAI News*, 108, August 1999. Available from: <http://www.haiweb.org/pubs/hainews/aug1999.html> [Accessed on 2012 Mar 19].
11. Making menopause easier. Available from: <http://www.indiatogether.org/2006/oct/were-manopause.htm>. [Accessed on 2012 Mar 19].
12. Anklesaria BS, Soneji RM. "Risk – Benefit Balance" in Management of Menopause in Menopause Current Concepts by C.N. Purandare, federation of Obstetric and Gynaecological Society of India. Reprint ed. New Delhi: Jaypee, 2006; 194-205.

13. Ettinger B, Grady D, Tosteson AN, Pressman A, Macer JL. Effect of the Women's Health Initiative on women's decisions to discontinue postmenopausal hormone therapy. *Obstet Gynecol*, 2003; 102: 1225-32.
14. Li C, Samsioe G, Lidfelt J, Nerbrand C, Agardh CD, Women's Health in Lund Area (WHILA) Study. Important factors for use of hormone replacement therapy: A population-based study of Swedish women. The Women's Health Lund Area (WHILA) Study. *Menopause*, 2000; 7: 273-81.
15. Rossouw JE, Anderson GL, Prentice RL, LaCroix AZ, Kooperberg C, Stefanick ML, et al. Writing Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women: Principal results From the Women's Health Initiative randomized controlled trial. *JAMA*, 2002; 288: 321-33.
16. Schneider, HPG; Heinemann, LAJ; Rosemeier, HP; Potthoff, P; Behre, HM. The Menopause Rating Scale (MRS): Reliability of scores of menopausal complaints. *Climacteric*, 2000; 3: 59-64.
17. Hilditch JR, Lewis JE. Menopause-specific Quality of Life Questionnaire (MENQOL). Available from: [www.proqolid.org/instruments/menopause\\_specific\\_quality\\_of\\_life\\_questionnaire\\_menqol](http://www.proqolid.org/instruments/menopause_specific_quality_of_life_questionnaire_menqol). [Last updated 2012 Jul].