Review Article

Review of clinical studies on rajonivruti avastha with special reference to menopausal syndrome

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ABSTRACT

Menopausal symptoms are alarming call to more sincere attention to elderly women’s health. As lifespan is increased with developed medical facilities, women are living around 30 years in postmenopausal state with all the complaints of menopause and geriasis. In Ayurveda, menopause is depicted as “jarapakwa avastha” and rajonivruti. Rajonivruti janya laksana is a group of symptoms produced by degenerative changes in the body. Degenerative changes are dhatukshaya lakshana in Ayurveda. Vata dosha is dominant in the vridhha stage of life. Symptoms in menopausal phase like insomnia, anxiety, urinary symptoms, and osteoporotic changes are due to dominance of vata dosha. Along with that pitta dosha symptoms like hot flushes, irritability, etc are seen, during this phase. Thus, review and compilation of the work done at institute for post graduate teaching and research in ayurveda, Jamnagar on the topic was done to help future researchers to fulfill the lacunae and develop standard ayurvedic treatment protocol. The research work conducted on rajonivruti avastha and its vyapada were collected and reviewed from Ayurvedic research data base, Jamnagar, Jamnagar Central Library and Department of Prasuti tantra and Stree roga, Jamnagar. Total 15 research works were conducted. Drugs having rasayana, deepana, pachana, medhya, balya, vayasthapana properties help in dhatukshaya janya lakshana pacification, vata- pitta doshhar, shrotoshodhana, and the process of formation of dhatu is benefited and ultimately resulting into delay aging process and related compilations. Menopausal syndrome can be well managed by ayurvedic treatment.

Keywords: Menopause, Rajonivritti, Rasayana, Thesis review, Jamnagar, IPGT and RA

INTRODUCTION

Despite the fact that menopause is a physiological process in women, it is transforming into a significant medical issue lately in all over world. Each lady faces fluctuated physiological and psychological, sexual changes during this “phase of life” coming about because of hormonal unsettling. Now and then such unsettling influences, achieve the phase of illness or condition called as “menopausal syndrome” which is joined by different vasomotor, mental, and genital, locomotors and GIT related manifestations and subsequently require treatment. As the life span of population is increasing due to developed medical facilities there is increased cases of reporting of this issue. Ayurvedic literatures has seen menopause as characteristic wonder in life of ladies as Rajonivritti. Ladies having menopause are assigned as "Nishphala", "Gatartava" and it have been perceived as beginning of old age.1 The age between 40-49 years in ladies can be named as "midlife transformation", when there are intense physical and mental changes. This is the age when her body starts to get ready for confronting the scars of maturing and menopause. The changes in women's body at any stage are credited to hormonal levels.
Thus, this review is made with the aim to compile research works done on menopause, menopausal syndrome, rajonivrutti at institute for post graduate teaching and research in ayurveda, Jamnagar, extract standard ayurvedic treatment protocol for menopausal syndrome & to help future researcher’s to add, find lacunae, fill the lacunae and explore deep in the disease.

METHODS
The theses were collected from the Ayurvedic research data base, Jamnagar, Jamnagar Central Library and Department of Prasuti tantra and Stree roga, Jamnagar.

Hand search – The procured theses were studied in detail and scientific review was done.

Following research works have been carried out in IPGT & RA, GAU, Jamnagar on related topic-


RESULTS
Out of 15 works done, 13 studies were reviewed as 2 studies were not available anywhere and Dr. Akhila’s Phd work has not been submitted yet.

Dr. Kirtidevi Gohil (1993-1995)2
The study was conducted on 30 patients of age group 38-52 years having menopausal symptoms and dhatukshaya lakshana. There were two study groups. All the patients were given Haritaki churna 3 gm at night with warm water for 3 days for koshtha shuddhi. 20 patients of Group D were given Rasayan vati 2.5gm BD with lake warm milk and 10 patients of Group P were given 2 placebo capsules BD. Total interventional duration was 1 month and follow up of 15 days was taken. It was observed that 46.67% patients had menopause between 38-42 years, 36.67% had vatapitta pradhan prakriti. The pattern of cycle before menopause, 66.68% patients had irregular cycle, 53.38% had scanty menses and 60% had decreased interval. In Group D 100% relief in sleep disturbances & palpitation was seen, 90% relief in hot flush, headache, flatulence, irritability, constipation and 80% relief in excessive sweating, joint pain and bodyache were observed. Rasa, rakta, pureesh dhatu kshaya janya lakshana were treated well by Rasayana Vati. In placebo group no significant effect on any symptoms were seen. So, it was concluded that Rasayana Vati possess deepana, pachana, balya, agniivardhaka, vayasthapaka property. It also significantly decreases dhatukshaya lakshana.

Dr. Kirtidevi Gohil (1996-1998)3
The study included 100 women of 35-55 years with clinical features of menopausal syndrome, dhatukshaya lakshana and divided into three groups. All the patients were given koshashodhana with haritaki choorna 3gm at night with lake warm water for 3 days. 28 registered patients in group R were given rasayan vati 2.5gm bd with lake warm milk for one month, 30 patients of group U were given urjaskalpa vati 2.5gm bd with lake warm milk for one month & 42 patients of group P were given placebo capsules 2 bd with with lake warm milk for one month. Follow up was of 30 days. Observation found that 39% patients were of 40-45 years having climacteric menopausal symptoms. 100% relief in headache, irritability & dyspepsia while 90% relief in hot flush, excessive sweating, sleep disturbance, fatigue, depression, palpitation, constipation was seen also serum FSH level was found decreased after treatment in group R. In group U, 92.44% relief in headache, 68.75% relief in irritability, 75.18% relief in sleep disturbance, 76.62 % relief in palpitation, 83.50% relief in sensation of pins and needle pricks, statistically significant fall in sr, albumin, sr globulin and sr total protein was seen. There was no change in sr FSH level in the group showing that it has no
oestrogenic property. In group P 46.80% relief in headache, 46.58% relief in flatulence and constipation were seen, behavioural therapy with deep breathing exercise found to reduce hot flush frequency to some extent.

Thus, it was concluded that rasayana kalpa vati provided maximum results in all symptoms comparatively. Placebo therapy showed relief in psychosomatic symptoms and no relief in dhatukshaya lakshana.

**Dr. Ajay Sood (1998-2000)**

The study included 50 women of 35-50 years with clinical features of menopausal syndrome and divided into two groups. All the patients were given krosthashodhana with haritaki choorna 3 gm at night with luke warm water for 3 days. Out of 23 patients registered in Group A, 13 completed the study, while in Group B, out of 27 registered patients 14 completed the study. Follow up was of 15 days. group a was given Rasayan kalpa vati 3 gm Bd with luke warm milk for one month and group B were given Shankhpshpi Vati 2 gm tds with luke warm milk for one month. The criteria of assessment were symptomatic relief and shifting of maturation index of vaginal cytology. Observation included that 44% patients were of 41 to 45 years age. 86.91 % patients in group A had relief in palpitation, 75% had relief in excessive sweating, depression, headache, and 70% had relief in hotflush & sleep disturbance. In group B 87.5% relief in palpitation, 75% had relief in excessive sweating, depression, headache, and 70% had relief in hotflush & palpitation, 75% had relief in excessive sweating, depression, headache, and 70% had relief in hotflush & fatigue (100%). The somatic symptoms included palpitation (90%), tingling sensation (70%), decrease libido (85%), joint pain (95%), backache (95%), dyspepsia (85%), flatulence (60%), constipation (90%), hot flushes (70%), headache (95%), muscular ache (75%), excessive sweating (80%) and increased frequency of urination (70%). The Manasbhavas showed better results in loss of appetite, pain in joints and fatigue, whereas in Medhya Rasayana group 90% patients had moderate improvement and 10% patients had improvement in somatic symptoms.

**Dr. Ami. Modi (2002)**

This was a pharmaco-clinical comparative study. In the study there were two groups Rasayanakalpvati and Manshhyadi vati, 15 patients were treated in each. Drugs were given in dose of 2.5 gm TDS with Ushnoda for 1 month. In pharmacological study, both the drugs were lacking anti-anxiety, anti-depression and adaptogenic activities while possessed sedative and mild to moderate oestrogenic and uterine stimulant effects which may be beneficial in menopause related apprehension. Clinically, it was observed that the disease was most common in the age group 35 to 40 years (46.67%). Most common presenting symptoms were hot flushes, followed by vasomotor and psychological symptoms and then digestive symptoms. Rasayanakalpvati showed better results in hot flushes, depression, and fatigue. While Manshhyadi vati showed better results in loss of appetite, pain in joints and backache. Both drugs showed better results in Dhathukshayavastha but compared to Manshhyadi vati, Rasayanakalpvati showed better results clinically. Both drugs showed positive results on vaginal cytology suggesting oestrogenic effect of the drugs. In the total effect of therapy, 80 % patients in group A (Rasayanakalpvati) got marked improvement. While 66.67 % of patients in group B (Manshyadi vati) got marked improvement.

**Dr. Manju Pateria (2002)**

Total 20 patients of menopausal syndrome divided into two groups were managed by (1) Medhya Rasayana Yoga (Shankhwapshi, Mandukaparni , Yashitamadhu, Gaduchi, Ashoka),3 gm thrice a day for 3 weeks. (2) Shirodhara with Dashmoola kwath at body temperature for 30 min. daily for 21 days. All patients were given Haritaki choorna 5 gm at bed time with luke warm water for koshtha shodhana. They were evaluated for their mental health (Manasbhavas) as in Ayurvedic literature along with Hamilton Depression rating scale before and after a course of therapy. Observation from the study were vata-pitta prakriti (60%), rajasika-tamasika manas prakriti (80%) and avara satva (55%) were more prone to develop psychological disturbance during climacteric. The psychological symptoms observed were anxiety (100%), irritability (85%), depression (80%), disturbed sleep (100%), vertigo (95%) and fatigue (100%). The somatic symptoms included palpitation (90%), tingling sensation (70%), decrease libido (85%), joint pain (95%), backache (95%), dyspepsia (85%), flatulence (60%), constipation (90%), hot flushes (70%), headache (95%), muscular ache (75%), excessive sweating (80%) and increased frequency of urination (70%). The Manasbhavas included Negative emotions – Moha (75%), Krodha (85%), Shoka (80%), Bhaya (65%). Positive emotions – Medha (80%) and Smriti (85%).

Overall effect of therapy on Manasbhavas (positive and negative emotions): In Shirodhara group 22.22% patients each had complete remission, 44.44% had moderate improvement whereas in Medhya Rasayana group 30% patients each had marked improvement and moderate improvement and. In psychic and somatic symptom: Shirodhara group showed marked improvement in 11.11% patients and moderate improvement in 77.78% patient, whereas in Medhya Rasayana group 90% patients had moderate improvement and 10% patients had improvement in somatic symptoms.

It was concluded that the patients of Menopausal syndrome are highly prone to stress with disturbed Manasbhava: – Krodha, Moha, Shoka, Bhaya, Medha, Smriti. All these patients responded favorably to - Shirodhara and Medhya Rasayana Vati.

**Dr. Devangi Patel (2004)**

Total 31 women aged between 40 - 55 years, having clinical features of menopausal syndrome along with psychological disturbances were registered, out of which 24 patients (i.e. 12 in each group) completed the course. All the patients were given 'Haritaki churana 3 gm” at night with luke warm water for Kosthashuddhi. The group S was given Rasayanakalpa Vati (500 mg each tablets) 2
fort was found in 88.46% of levels of urine calcium. This is highly significant decrease in the levels of urine calcium, decreases bone resorption. Group C showed significant decrease in the marker of biochemical bone markers: Group A exhibited highly significant increase in serum calcium and highly significant decrease in levels of urine calcium. Thus, it showed insignificant results in levels of serum calcium and serum alkaline phosphatase.

All these results indicate that Shatavari showed overall improvement in subjective as well as objective criteria over placebo and Kukkutanda twak bhasma.

Dr. Khyati Santavani (2009)9

Women aged 40-55 years with no menses since 6 months were selected in the study. A total 48 patients were selected for the study, out of which 43 patients completed the study. The patients were randomly divided into three groups. Group A were given conjugated estrogens 0.625mg, od for 45days, group B were given Saraswatarishta, 20ml with water before meal twice a day for a duration of 45 days & group C were given shirodhara with bala tailed, 30 mins per sitting for 45 days with 3-3 days gap in between. Follow up was taken after one month. Specialized Ayurvedic rating scales like Manasa Pariksha Bhavas as well as the Hamilton Anxiety rating scale, Hamilton depression rating scale, and menopause rating scale were adopted to assess the effect of therapy. It was observed that 68.75% were from the age group 40-45 years. Patients undergoing Shirodhara had better relief in the disturbances of Manasa Bhavas and psychic symptoms of menopause as compared to the other two groups. Saraswatarishta also showed encouraging results in managing the associated somatic symptoms and the psychic symptoms. Hence, concluded that it can be used as an alternative therapy to HRT.

Dr. Mansi Modi (2012)10

The study was directed by central council for research in Ayurvedic Sciences as randomized open clinical trial. Total 52 patients were registered in the study, out of which 51 patients completed the study. All the selected patients were given Ashokarishta (25 ml twice daily with equal quantity of water, after food), Ashwagandha (3 g twice daily with milk, half an hour before food, orally) and Placebo (1 capsule of 250 mg twice daily with milk, half an hour before food, orally) for 3 months. Specialized rating scales like Kupperman Index Score as well as menopause rating scale and menopause specific quality of life (MENQOL) questionnaires were adopted for diagnostic as well as assessment criteria. Follow up was of 1 month. Observation showed that 61.53% of patients were from the age group of 50-55 years; 73.08% had disturbed sleep; 76.92% had irregular bowel habit followed by 61.54% had constipation, while 82.69% had frequent urination; 86.54% were suffering from Chinta. In K.I. melancholia was found in 94.23% of patients; In MRS, joint and muscular discomfort was found in 88.46% of patients; 55.77% of patients were having past irregular menstrual history. The effect of therapy on MRS showed statistically highly significant decrease in hot flushes, heart discomfort, sleep problems, depressive mood, irritability, anxiety, physical and mental exhaustion, bladder problems, dryness of the vagina & joint and muscular
discomfort. The effect of therapy on MENQOL showed statistically highly significant decrease on vasomotor, psychosocial, physical and sexual sub scales.

It was concluded that a combined treatment would give better result in both somatic as well as psychological complaints.

**Dr. Dipika Gupta (2013)**

In the study, 34 patients aged between 35-55 years having cessation of menses since 12 month & symptoms as per menopausal rating scale MRS and MENQOL were registered. They were randomly divided into two groups 17 patients in each, group-A: Ashwaganda-Arjuna Ksheerapaka & group-B: Soya seeds granules was prescribed for 3months. All the patients were given "Amapachana vati" 2 tablets T.D.S with luke warm water for 7 days. Follow up was of 2 months. 26 patients (i.e. 15 in group - A and 11 in group - B) completed the course with follow-up and 8 patients left the treatment. The effect of Ashwagandha- Arjuna Ksheerapaka on "Vata predominant symptoms" group-A: showed, 85.19% relief in Shiruhshoola, 52 % relief in Balakshaya, 64% relief in Anidra/Alpanidra 65.22% relief in Bhrama, 66.67% relief in Anavasthitachitatvatam, 68.18% relief in Vaichitya, 60% relief in Chinta, 62.50% relief in Asthivedana, 62.50% relief in Sandhi vedana, 75% relief in Yoni Shushkta,70% relief in Mutarakrichhrata. In group B, Soya seeds granules showed highly significant results i.e. 60% relief in Shiruhshoola, 57.15% relief in Hasta-Pada Supti, 55% relief in Bhrama, 55.56 % relief in SandhiVedana.

It was concluded that in mild to moderate symptoms, Ashwagandha- Arjuna Ksheerapaka and Soya seeds proved as rejuvenating drugs as well as Aajasrika Rasayanas which supplement Rasadi Dhatu. Thus pacifying the provoked Vata, but due to Vishtambhi nature of Soya seeds, a Shimbi Dhanya it produces flatus and indigestion so it must be cooked with "wet" heat to destroy the trypsin inhibitors (serine protease inhibitors) for better absorption.

**Dr. Shravan Kamble (2014)**

In the study, 35 patients of menopausal syndrome aged between 40- 55 years were registered, out of which 32 patients (i.e. 14 in group – A, 08 in group – B and 10 in group C) completed the course with follow-up and 3 patients discontinued the treatment. Patients having Pitta predominant symptoms were selected for the management. group A was given Shaman Drug for 1 month. In group B, Deepana – Pachana for 3 to 5 days by Trikatu Churna 1 gm 2times/day with luke warm water then Snehapana for 3 to 5 days by Go- Ghrita and Sarvanga Abhyanga and Swedana by Bala Taila followed by Virechana & Shanm Drug 3.5 gm Bd with honey and ghrita for 1 month. Group C was given Shirodhara with half liters water plus half litres milk for 7 days followed by shaman drug. All the patients in group A and C were given Amapachana Vati 1 tablets T.D.S with luke warm water for 3 to 5 days before treatment. Observations found that 85.71% of patients were suffering from Chinta, Krodha, 100% had Svedaadiyata, 97.14% had Mutradaha, 94.28% had Santapa, 91.42% had Ushnaamubhuti, Daha, Yonidaha 97.14 % had hot flushes, 97.14% of patients had night sweats and sweating. 94.28% patients had problem of dryness during intercourse, 97.14% had anxious or nervous, and 91.42% had experiencing poor memory. All the three treatment protocols showed highly significant relief in the subjective parameters, pitta dominant lakshanas & psychological disturbances.

Hence, it can be concluded that in women with mild to moderate symptoms, Shamaan Yoga (Anubhuta), Virechana Karma and Shirodhara fulfil the requirement of body at this particular phase of life by supplementing Rasadi Dhatu.

**Dr. Krutika Choudhary (2015)**

In the present study, total diagnosed 34 menopausal syndrome patients were registered, out of which 30 patients (i.e. 16 in group – A, 14 in group – B) completed the course with follow-up and 4 patients (i.e. 2 in group – A, 2 in group – B) discontinued the treatment. Group A were given Vayasthapana Gana Ghanavati 2-tab (500 mg each) B.D. orally with milk for 60 Days. Group B were given Rasayanakalpa Vati 5-tab (500 mg each) B.D. orally with milk for 60 Days. Follow up was of 30 days. Observations found showed that. 47.65 % patients belonged to age group between 46-50 years, 64.71% patients were having frequent urination 67.64% patients were having burning micturition, 50 % patients were having disturbed sleep, 55.88 % of patients not doing exercise, Chinta was observed in 91.17% patients, while Krodha was observed in 82.35% patients. Group-A (Vayasthapana Gana Ghanavati) showed statistically highly significant result in all symptoms of MRS scale. Group- B (Rasayanakalpa Vati) showed statistically highly significant result in all symptoms of MRS scale except palpitation. On vasomotor symptoms of MENQOL, group B had shown better result than group A, on psychological symptoms of MENQOL, group A had shown slightly better result than group B, on physiological symptoms of MENQOL, both groups shown almost similar result, on sexual Symptoms of MENQOL, both groups shown almost similar result.

So, it was concluded that in women with mild to moderate features of menopausal syndrome, both drugs Vayasthapana Gana Ghanavati and Rasayanakalpa Vati were effective in both somatic and psychological complaints.

**DISCUSSION**

After reviewing previous works, the following points can be understood. Dr. Kirtidevi concluded that Rasayana Vati possess deepana, pachana, balya, agnivardhaka,
vayasthapaka property. It also significantly decreases dhatukshaya lakshana, in her M.D. work and rasayana kalpa vati provided maximum results in all symptoms comparatively while placebo therapy showed relief in psycchosomatic symptoms and no relief in dhatukshaya lakshana in her PhD work. Dr. Ajay explained rajonivritti can be effectively treated with rasayana therapy by rasayana kalpa vati and shankhpushpi vati. Dr. Ami writes that Manshyadi vati and rasayana kalpa vati has mild to moderate oestrogenic and uterine stimulatory effect in experimental study while clinically rasayana kalpa vati was more effective. Dr. Manju showed the effect of stress and disturbed Manashbava in menopausal women. All patients responded well to - Shirodhara and Medhya Rasayana Vati. Dr. Devangi found that in women with moderate symptoms of menopausal syndrome, a combined treatment with rasayana kalpa vati and medhya ghir nasya would give better result in somatic and psychological complaints. Dr. Jasmine found in her study that shatavari enhances bone formation as well as decreases bone resorption while Kukkutanda twak bhasma effects bone turnover by minimizing bone resorption but it has no role in bone formation. Dr. Khyati writes Shirodhara is good for Manasa Bhavas and psychic symptoms of menopause while Sarvaswatariyata showed encouraging results in associated somatic symptoms and the psychic symptoms. Hence, both can be used as an alternative therapy to HRT. Dr. Mansi concluded that combined treatment (Ashokarishita, Ashwagandha and Praval pishiti) gives better result in both somatic as well as psychological complaints. Dr. Dipika concluded that Ashwagandha-Arjuna Ksheerapaka and Soya seeds behaved as Aajasri Rasayan by supplementing Rasadi Dhatus and pacified the provoked Vata. Dr. Shrawan N. Kamble explains the benefit of Shodhana therapy followed by shaman therapy and Shirodhara with Shamana therapy in the management of Pitta predominant Menopausal syndrome. Dr. Krutika Chaudhary confirms the effect of Vayasthapan gana Ghana vati and Rasayana kalpa vati on menopausal syndrome in her study.

While compiling this thesis it was found that there is a shift of menopausal age group toward forty years while climacteric changes start after 35-38 years in today’s women, suggesting that in this particular age group, hormonal imbalance takes place, which alter the body physiology. This being the Sandhi kala where the already aggravated Pitta is gradually decreasing while Vata is gradually on increase due to the slow and gradual Dhatu Kshaya. This suggests that in this particular age group climacteric changes are gradually developing.

Koshtashodhana or pachana drugs were given prior to treatment in all studies except in Dr. Mansi, Dr. Ami, Dr. Krutika & Dr. Khyati.

The drugs under the studies had rasayana, deepana, pachana, medhya, balya, vayasthapan properties which help in dhatukshaya janya lakshana pacification, vata-pitta doshhar, shrotshodhana, the process of formation of Dhatu is benefitted and ultimately resulting into delay aging process. As a result, the symptoms of Rajonivritti are also subsided. Due to Deepana - Pachana action on Jatharagni and relieves the symptom of GIT effectively like Dyspepsia, Decreased appetite, Flatulence, Constipation etc. Medhya drugs act as Manasa & Indriya Tarpa, which decrease Chinta, Shoka and sleep disturbances and ultimately lead to Lakshanopshamana. Drugs like Ashoka tones up the uterus and uterine walls along with the proximal organs thus alleviating the discomforts. The drugs were also found to have oestrogenic properties.

**CONCLUSION**

Like other stages of women’s life, menopause is also a very important natural biological event. Practically it’s the time when a woman can enjoy life more freely with other responsibilities. About one third of life span has to be spent without menstruation with increased life expectancy. For so long period a woman needs a treatment protocol with no complications and that boost her body and mind. Ayurveda provides an effective management with Rasayana Chikitsa, herbal drugs, Panchkarma therapies, and diet and lifestyle changes having good impact on the body anatomically, physiologically and psychologically.

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**REFERENCES**

6. Pateria M. A clinical study on Manas Bhavas in Menopausal syndrome and its management by