

**EVALUATIVE STUDY OF CHANDRASHURADI CHURNA IN
RAJONIVRITTI"*****Dr. Surekha Dewaikar M. D., PhD.**

HOD and Professor, Streeroga & Prasutitantra Department, R.A. Podar Medical (ayu)
College, Worli, Mumbai-18.

Article Received on
19 February 2021,

Revised on 09 March 2021,
Accepted on 29 March 2021

DOI: 10.20959/wjpr20214-20038

Corresponding Author*Dr. Surekha Dewaikar M.
D., PhD.**

HOD and Professor,
Streeroga & Prasutitantra
Department, R.A. Podar
Medical (ayu) College,
Worli, Mumbai-18.

ABSTRACT

Menopause,^[6] represents a natural biological phenomenon and a stage of life when women experience multiple endocrine somatic and psychological changes. In modern science, Hormone Replacement Therapy (HRT) is one and only alternative for this health hazard by which one can get spectacular achievement in combating the disease, but it has a wider range of secondary health complications like vaginal bleeding, breast cancer, endometrial cancer, gallbladder diseases etc. Alternative approaches are now viewed as safer and more individualized. There is substantial interest in natural alternatives to HRT. Chandrashuradi churna contains phyto- oestrogens which act through oestrogen receptor dependant mechanisms. The phyto-oestrogens present in Chandrashuradi churna bind to oestrogen receptor

and produce oestrogenic effects. Chandrashuradi Churna may be more beneficial to relieve the lakshanas of Rajanivritti,^[5] i.e. menopausal syndrome. Follow up study reveals that majority of symptoms were re appeared in Group-B within 7-15 days after completion of treatment, while in Group-A, such an early recurrence was not observed. So, it can also be concluded that Chandrashuradi churna is better as per as recurrence is concerned.

KEYWORDS: Chandrashuradi choorna, Rajonivritti, Hormonal assay.**INTRODUCTION**

Menopause represents a natural biological phenomenon and a stage of life when women experience multiple endocrine somatic and psychological changes. The symptoms of Menopause, which are related directly to the withdrawal of estrogen, compromise the quality of life for many women. The majority of women report menopause related symptoms

including hot flushes, vaginal dryness, night sweats, insomnia, mood swings, and depression. 80% women suffer from these troublesome symptoms.

There are a growing number of older women who will be facing "triple jeopardy- of being aged, being menopausal (change of life) and being dependable in the world. The studies of last two decades show that older women report more psychological distress and they are less satisfied with life than men.

So, this demographic change will undoubtedly force every field to concentrate on the significant problems of this age group in women including menopausal syndrome. Being an alarming problem, it needs an effective and safe treatment. In modern science, Hormone Replacement Therapy (HRT) is one and only alternative for this health hazard by which one can get spectacular achievement in combating the disease, but it has a wider range of secondary health complications like vaginal bleeding, breast cancer, endometrial cancer, gallbladder diseases etc. On the other hand, this therapy is not much effective in the psychological manifestations of this stage. It is well proved that this health hazard can be well managed with certain Ayurvedic therapeutics having Rasayana properties.

Alternative approaches are now viewed as safer and more individualized. There is substantial interest in natural alternatives to HRT. In particular, phytoestrogens have received attention as potential dietary sources of exogenous estrogens for postmenopausal women. Evidence has accumulated that phytoestrogens have both oestrogenic and anti oestrogenic properties, depending on where the oestrogen receptors are located in the body.^[3] Chandrashuradi churna contains phyto-oestrogens which act through oestrogen receptor dependant mechanisms.^[7,8] The phyto-oestrogens present in Chandrashuradi churna bind to oestrogen receptor and produce oestrogenic effects.^[2]

It always told that "prevention is better than cure" there by considering the preventive and curative aspect I select this subject for my Ph.D work.

AIMS AND OBJECTIVE

Aim

- To study the effect of Chandrashuradi churna on Rajonivrutti

Objectives

- To find out the effectiveness of Chandrashuradi churna on Rajonivruti
- To give maximum benefits to the Rajonivruti patients by effective ayurvedic treatment To study the effect of Chandrashuradi churna on psychological symptoms of Rajonivruti
- To evaluate the efficacy of Chandrashuradi churna on endocrine system related symptoms of
- Rajonivruti

MATERIALS AND METHODS

Study type - Open randomized controlled study.

Medium of Thesis — English supplemented by Ayurvedic terminology wherever necessary Sanskrit.

Consent — An informed written consent of all 100 patients included in study was taken in language best understood by them. Their disease and line of treatment was explained to them.

Subject Recruitment — patients were selected from OPD and IPD of our institute. **Name of the study center** — the attached hospital of the institute **Follow-up** - 15 days

Edicine pr	Eparation ^[4]			
Sr. No	Drugs	Latin Name	Parts used	Method
1	Wit Ashwaga	hania somnifera linngm	1 Pa rt = 125	All the drugs were ake fine powdered
2	lep	Idium sativumgm	m	

Hur Chandras

1 Part = 125

Allium sativum gm

1 Part = 125 asparagus racemosus gm and mixed wel Rason Shatavari

Groups of Management

Group A: - This group was termed as, 'Trial Group'.

- Number of patients: 50
 - Treatment: Chandrashuradi churna (Ashwagandha, Chandrashur, Rason, Shatawari)
 - Dose- 500 mg twice a day
 - Duration of Treatment: three months
- Group B:** - this group was termed as, 'Control Group'.

- **Number of patients:** 50
- **Treatment:** - HRT (cap. Premarin 0.625mg)
- **Dose;** - once a day
- **Duration of Treatment:** three months.

Diet- concept of pathya and apathya was taken in to consideration.

Criteria of Diagnosis

The clinical symptoms sarvanga ushnanubhuti, Arati, Avasad, Sandhishul, asthishul, Bhaar vridhhi, Nidranash, Sweda pravriti kept in consideration.^[1] Detailed physical examination of all strotasa was done. All necessary laboratory investigations were done. To maintain the record 'case record form' was prepared.

Assessment Criteria and Gradation

Objective criteria

- 1) Estradiol
- 2) LH
- 3) FSH

Subjective criteria

1) Kshudha (loss of appetite)

- 0 Takes full diet and also presence of proper appetite at the next meal hour
- 1 Presence of moderate appetite and promote Appearance of appetite in next mealhour
- 2 Presence of moderate appetite but delayed Appearance of appetite in next mealhour
- 3 Presence of low appetite and delayed appearance of Appetite in next meal hour

2) Arati (irritability)

- 0 No irritability
- 1 Can control and recognize irritable situation
- 2 Uncontrollable irritation with specific cause
- 3 Uncontrollable irritation without specific cause Throwing of things here and there, behaving

3) Avasad (depression)

- 0 No depression
- 1 Occasional depression

- 2 Mild presence of depressed mood every day but able to carry out routine work
- 3 Marked depression whole day, lost the interest in most things and carry out the routine work and even Personal activities (like bathing, combing etc) without any interest.

4) Sarwanga Ushnanubhuti (Hot Flushes)

0- No hot flushes

1. Occasional hot flushes Daily 1-2 times and increased, but do not disturb the routine work
2. daily more than 5 - 6 times even without any stress and feeling disturbance in routine work
3. appearances of hot flushes every 1 - 3 hourly, feeling of marked discomfort due to it, and patient asks for medical help

5) Sandhishool (pain in joints)

0 No pain in joints

- 1 Pain in any one joints
- 2 Pain in two major joints of either legs or hands, relief with time
- 3 Pain in all smaller as well as major joints, relief with painkillers

6) Asthishool (pain in bones)

0- no pain in bones

- 1 Pain in any one bone
- 2 Pain in two major bones of either legs or hands, relief with time
- 3 Pain in all smaller as well as major bones, relief with painkillers

7) Bharavrudhi (weight gain)

0 - No weight gain

- 1- Weight gain up to 1-2 kg
- 2- Weight gain up to 3-4 kg
- 3 - Weight gain up to 5-6 kg

8) Nidranasha (sleep disturbances)

0 Normal satisfying sleeps

- 1 Occasional delayed sleep without waking episodes
- 2 Frequent delayed sleep with 1 -2 waking episodes

- 3 Daily delayed sleep with frequent waking episodes Followed by delayed re-appearance of sleep.

9) Swedapravrutti (excessive sweating)

- 0 No sweating
- 1- Occurs only at working in hot or doing hard work
- 2- More in day time and when associated or following hot flushes only
- 3- Occurs even in night, following hot flushes and disturbances the sleep at night

10) Malavashtambha (constipation)

- 0- Daily calls and motions are satisfactory
- 1- Daily call but stools are hard, and motions are unsatisfactory feeling of incomplete evacuation
- 2- Motions every alternative day with hard stools and feeling of incomplete evacuations
- 3- Regular medicine or strong purgative is required to pass the motions. At times not even passing motion with medicines

11) Yonishushkata (dryness of vagina)

- 0 No dryness of vagina
- 1 Subjective feeling of dryness due to lack of mucoid secretion
- 2 On examination also one may find decrease in local secretions and painful examination
- 3 Patient requires some lubricants for symptomatic relief.

Criteria for the Assessment Of Overall Effect Of Therapy

The data generated from the above parameters before and after the therapy were utilized for the purpose of overall effect of therapy.

Marked improvement: 75% - 100% relief

Moderate improvement: 50% - 75% relief

Mild improvement: 25% - 50 % relief

No improvement: < 25% relief

Criteria for selection of patients:

- The patients having age between 40 to 60 years
- Married, unmarried, Widows patients.
- The patient undergone pan hysterectomy.

Criteria for rejection of the patients

- Age below 40 years and above 60 years.
- Patients having carcinomatous changes.
- Patients having severe debilitating condition.
- Patients with endometrial pathology.
- Patients having D. M., Cardiac disease and renal disorders.
- Patients of thyroid dysfunction.

OBSERVATION AND RESULTS

Sr. No	Symptom	Group A	Group B
1	Kshudha	5.58<0.001	6.15<0.001
2	Arati	5.37<0.001	5.37<0.001
3	Avasad Sarvang	6.09<0.001	5.30<0.001
4	Ushnanubhuti	5.58<0.001	6.09<0.001
5	AstiShul	5.64<0.001	6.09<0.001
6	Sandhishul	6.15<0.001	6.15<0.001
7	Bharvrubhi	6.15<0.001	6.15<0.001
8	Nidranash	5.90<0.001	5.90<0.001
9	Swedpravruti	6.15<0.001	6.15<0.001
10	Malavshambha	6.15<0.001	6.15<0.001

Wilcoxon test

Sarvang- 4 Ushnanubhuti 11		Yonishushkta 6.15<0.0016. of 100			15<0.001				
Effect on Symptoms Score		patients of Rajonivru							
Sr. No		A - Trial			B- Control			Group	
1	Kshudha	129	76	53	41.08	128	73	55	42.96
2	Arati	119	40	76	63.86	120	53	68	56.66
3	Avasad	121	41	80	66.11	11	740	77	65.81
4	AstiShul	126	86	49	38.88	121	76	45	37.19
5	Sandhishul	132	80	52	39.39	131	83	48	38.64
6	Bharvrubhi	116	81	35	30.17	123	82	41	33.33
7	Nidranash	128	58	67	52.34	126	73	52	41.26
8	Swedpravruti	131	86	45	34.3	131	85	46	35.11
9	Malavshambha	111	71	40	36.03	118	79	39	33.05
10	Yonishushkta	132	70	62	46.96	126	66	60	47.61
	Avg %	124.8	69.3	55.8	64.74	136.9	70.9	48.9	59.1

Statistical analysis of the effect of therapy on symptoms of 'Rajonivitti' of trial and control Both group by Wilcoxon Matched pairs signed ranks test. Kshudha, Atari, Avasad, Sarvang ushnanubhuti, Astishul, Sandhishul, Bharvrudhi, Nidranash, Swadappravruti, Malavashtambh, yonishushkta, in this all $p < 0.001$ which is highly significant.

Statistical analysis of the effect of therapy on symptoms of 'Rajonivitti' of trial and control both group by **Man Whitney U test**. Kshudha, Atari, Avasad, Sarvang ushnanubhuti, Astishul, Sandhishul, Bharvrudhi, Nidranash, Swadapravruti, Malavashtambh, yonishushkta, all symptoms shows p value > 0.1 this is statistically insignificant showing that both the groups are equally effective in curing this symptom.

1	Marked improvement	0	0	0	0	0	0
2	Moderate improvement	17	34	12	24	29	29
3	Mild irnproverment	28	56	35	70	63	63
4	No improvement	5	10	3	6	8	8

Effect of therapy on symptoms score

It was observed that over all percentage of relief was more in trial group (64.74%) than control group (59.10%). The symptoms such as kshudha, Arati, Avsad, sarvangushnanubhuti, asthishul, sandhishul etc were studied in the series; percentage of relief for avasad in trial group was more.

Effect of therapy on Investigation

❖ Paired t- test

1. Estradiol (E2):- Effect on Estradiol (E2) was evaluated with the help of paired t test. In Group A, before starting the treatment average Estradiol(E2) was 18.84 ± 7.52 and after the treatment it was 28.98 ± 5.44 where, $t = 23.83$, $P < 0.001$, which is statistically significant. In Group B, before starting the treatment Estradiol (E2) was 12.2 ± 9.09 and after the treatment it was 31.22 ± 8.64 , where $t = 23.83$, $P < 0.001$, which is statistically significant.

2. FSH:- Effect on FSH count in Group A before starting the treatment FSH was 54.19 ± 25.32 and after the treatment it was 49.04 ± 23.30 where $t = 1.05$, $P < 0.001$, which is statistically significant. In Group B, before starting the treatment FSH was 64.4 ± 59.7 and after the treatment it was 29.9 ± 37.59 where $t = 3.46$, $P < 0.001$, which is statistically insignificant

3. LH:- Effect on LH in Group A before starting treatment was 64.40 ± 59.7 and after treatment was 39.90 ± 37.59 where $t = 2.45$, $P < 0.001$ which is statistically insignificant. Effect on LH in Group B before starting treatment was 59.76 ± 39.42 and after treatment was 19.46 ± 18.71 where $t = 6.38$, $P < 0.001$, which is statistically insignificant.

❖ Unpaired t-test

1. In the unpaired t value is 3.66, $P < 0.001$ which is highly significant showing that group

with greater mean difference is good as compared to the other. Here, mean difference of Group B is larger than that of Group A showing that Group S has significant effect on Estradiol (E2), of the patients.

2. FSH, the unpaired t value is 1.56, $P > 0.1$ which is not significant showing that both the groups have equal effect on this parameter. Group A and Group B, both equally effective on FSH There is no difference between both the groups.
3. In LH, the unpaired t value is 1.35, $P > 0.1$ which is not significant showing that both the groups have equal effect on this parameter. Group A and Group B, both are equally effective on FSH There is no difference between both the groups.

Total effect of therapy:- In case of trial group 17 pts(34%) were moderately improved and 28pts(56%) were mildly improved. 5 pts(10%) showed no improvement. In case of control Group 12pts (24%) were moderately improved and 35pts (70%) were mildly improved 3pts (6%) noimprovements.

Comparison between two groups by chi-square test

A	Moderateimprovement improvement
0-33	0-17 50
0-38	0-12 50

Comparison between two groups was statistically evaluated by chi-square test the value is 0.3430 $P > 0.05$ which was statistically insignificant which suggested that there is no significant differencebetween two groups with respect to total effect of therapy.

DISCUSSION

Mode of Action

The drug Chandrashuradi Churna is having mainly Madhura, Tikta, Kasaya, Katu rasa, Sheeta virya, Madhura Vipaka, Laghu guna and Tridoshashamaka property. The ingredients are also having Rasayana, Vayahsthapana, Balya, Medhya, Manasdosahara, Vedanasthapana etc. properties. So, the drug Chandrashuradi vati, when administered to the patients through oral route, due to its Laghu guna, Katu rasa and Ushna vinya, acts as Deepana and Pachana and regulates the Agni.

On the other hand, the same drug due to its Madhurarasa & Vipaka. Snigha guna and Sheetvirya acts as Rasayana, Balya, vayahsthapana, Medhya and Vatashamaka, So, That, the process of formation of Dhatu is benefited and ultimately resulting into delay aging process,

As a result, the symptoms of Rajonivntti are also subsided. In Jaravastha. as the vatadosha is dominant, majority of symptoms occur due to vatavrudhi. Chandrashuradi vati by its Guru and Snigdha guna acts against Laghu and Ruksha guna of Vatadosha and pacify it. So, the majority of symptoms of Rajonivritti may subside. Moreover, Agnimandhya is also, being the common manifestation of Rajonivritti. The drug Chandrashuradi Churna by its Deepana - Pachana action, acts on Jatharagni and relieves the symptom of GIT effectively like Dyspepsia, Decreased appetite, Flatulence, Constipation etc.

CONCLUSION

- Chandrashuradi Churna may be more beneficial to relieve the lakshanas of Rajanivritti i.e. Menopausal syndrome.
- Effect of therapy Both the drugs have shown good results, but in Somatic Complaints, Dhatukshayajanya Lakshanas and where as in Psychological complaints Chandrashuradi Churnais better, therapy might be more beneficial.
- Chandrashuradi Churna has shown better results in Fatigue, Palpitations, Vaginal dryness, Sleepdisturbances and GIT - related symptoms.
- Total effect of therapy has shown Chandrashuradi Churna as more stable drug as 17 patients of this group are moderately improved, while by HRT, 1 2 patients were moderately improved.
- B within 7-15 days after completion of treatment, while in Group-A, such an early recurrence was not observed.
- So, it can also be concluded that Chandrashuradi churna is better as per as recurrence is conce.

REFERENCES

1. Sushruta samhita with nibandhsangrah commentry of shri dalhanacharya and nyayachandrika panjika of shri gayadasacharya chapter by yadavji trikamji acharya, reprint, varanasi, chaukhamba surbharti prakashan, in sharirsthan, 2009; 1/12.
2. Bhava prakash with vidyotini vyakhya(hindi) chaukhamba sanskrit sansthan, varanasi, 7thedition, haritkyadi varg, 1990; 34,38.
3. Lepidium sativum linn:An ethnobotany and phytopharmacological by prasad v. kadam, kavita n. ydav, rakesh s. shivatare. Nupura s. narappanawar, ashish s. pande, manohar patil, thargaon, pune, at international journal of drug formulation and research, may-june 2012; 3(3).

4. Sharangdhara samhita with Hindi commentary chaukhamba prakashan sanskrit samsthan, varanasi, madhyamkhand, 1966; 6/1.
5. Sushruta samhita with nibandhsangrah commentry of shri dalhanacharya and nyayachandrika panjika of shri gayadasacharya chapter by yadavji trikamji acharya, reprint, varanasi, chaukhamba surbharti prakashan, in sharirsthan, 2009; 1/24.
6. A textbook of gynacology, culcutta scientific book agency, 2nd edition, by Brewer and Decosta, 1967; 3: 134.
7. Astang sangraha, sisilekha sanskriy commentary by indu, dr shivprasad sharma, chaukhambasanskrit series office, varanasi, 3rd edition, sharistahn, chapter1, shlok, 2012; 23: 268.
8. Sushruta samhita by anant ram sharma, chaunkhamba prakashan, varanasi, volume2, edition, sutrasthan, chapter no -15 shlok, 2013; 16: 120.