



EFFECT OF ATIVISHA CHOORNA AND ATIVISHA VISHOSHI KASHAYA IN OBESITY: A COMPARATIVE STUDY

Lakshmi Hulkund¹, Shivaling Bendikai², Anand Katti³, Jagadeesh MS⁴

¹Asst. Professor, Sri Paripooma Sanathana Ayurveda Medical College Hospital and Research Centre, Bangalore, India

²Asst. Registrar, Rajiv Gandhi University of Health Sciences, Bangalore, India

³Associate Professor, Govt. Ayurvedic Medical College, Bangalore, India

⁴Head, PG Dept of Dravya guna, Govt. Ayurvedic Medical College, Bangalore, India

*Corresponding Author Email: ayurvedananda@gmail.com

DOI: 10.7897/2277-4572.081120

Received on: 31/12/18 Revised on: 20/01/19 Accepted on: 26/01/19

ABSTRACT

Introduction: Obesity is one among the major diseases of Modern era. In the present era with continuous changing life styles and environment, changed diet habits, man has become the victim of many diseases caused by unwholesome dietary habits and Obesity is one of them. In Ayurveda, Lekhana activity is advocated in the management of Sthoulya. Lekhana is defined as dravya reduces or scrapes away the unwanted tissues & metabolic wastes. Ativisha is a lekhana dravya included in lekhaneeya mahakashaya of Charaka Samhita. Vishoshi kashaya shoshana karma, Hence the trial was conducted to compare the efficacy of Ativisha in Vishoshi kashaya form in sthoulya. **Methodology:** It was a randomized, parallel group, single centre, controlled clinical study. Subjects were randomly assigned in three groups as A, B and C with 15 patients each. Ativisha choorna, Ativisha Vishoshi choorna and Placebo were given to patients of group A, B and C for 45 days. **Results and Discussion:** It was observed that Group B subjects weight reduction was highly significant when compared to Group A and Group C. the group B subjects. It was observed that vishoshi kashaya yielded better results than choorna. The tikta, katu rasa of ativisha acts as Lekhana & Rukshana respectively. The laghu, ruksha gunas counteract the guru, snigdha, picchila guna of Kapha & meda. **Conclusion:** In this clinical research ativisha vishoshi kashaya proved more effective than the ativisha choorna.

Key words: Obesity, Sthoulya, Ativisha choorna, Vishoshi kashaya.

INTRODUCTION

With the present-day food habits and lifestyle of the people, obesity has become a global problem. Obesity is prevalent both in developed and developing countries affecting both children as well as adults. It is a predisposing factor for many of the diseases like cardiovascular diseases, diabetes mellitus etc thus becoming a prime cause for morbidity and mortality. In conventional system of medicine there are drugs which act indirectly on obesity, they reduce the appetite and have adverse effects. Hence, it is essential to find out the suitable remedy to tackle this problem.

In Ayurveda, Lekhana activity is advocated in the management of Sthoulya. Lekhana is defined as dravya reduces or scrapes away the unwanted tissues & metabolic wastes¹. Ativisha is a lekhana dravya included in lekhaneeya mahakashaya of Charaka Samhita². Vishoshi kashaya mentioned by Hareeta Samhita does shoshana karma³. Hence, in this study an attempt was made to establish the efficacy of Ativisha in Vishoshi kashaya form in sthoulya.

MATERIALS AND METHODS

It was a randomized, parallel group, single centre, controlled clinical study. Written informed consent was taken before conducting the study related procedures. A total of 45 subjects completed the trial out of 55 subjects registered for the trial. Subjects were randomly assigned in three groups in a 1:1:1 ratio comprising 15 in each group. The study is carried out as per International conference of Harmonization-Good Clinical

Practices Guidelines (ICH-GCP) or as per Declaration of Helsinki guidelines after taking Institutional ethical clearance.

Inclusion criteria

- The subjects with moderate physical activity
- Willing to follow customized diet pattern (Approx 1200kcal per day)
- The patients in the age group between 18 - 60 years of either sex.
- Obesity due to excess calories.

Exclusion criteria

- Patients having complications of obesity such as diabetes mellitus, thromb-embolism, cardiovascular disorders and renal disorder.
- Obesity due to endocrine disturbances.
- Obesity due to malignant disorders.

Examination: The registered patients were subjected to a detailed examination according to the format framed for the purpose, which included Clinical examination, Lakshanas of Sthoulya, Body Mass Index, Skinfold thickness over Triceps, Assessment of chest, hip abdomen circumference, Left arm circumference, Assessment of physical stress, Lipid profile.

Intervention: All the subjects were instructed to do their routine work (moderate physical work), considering their food preferences, the diet pattern was customized for approximate 1200k cal per day⁴. Patients of Group A received 3gram of Ativisha choorna, Group B received 3ml of Ativisha Vishoshi kashaya and Group C received Placebo (wheat husk). Ativisha

choorna (shodhita) and placebo were filled in soft gelatin capsules and 6 capsules were given each day. Vishoshi kashaya was prepared according to the reference found in Harita samhita. To one part of the drug 16 parts of water is added, boiled on low flame and reduced to 1/16th & then it is filtered⁵. Assessment was based on Reduction in weight, SFT mid arm, hip circumference.

OBSERVATIONS AND RESULTS

Out of 45 subjects 32 were females, 33 belonged to middle socio-economic state, 22 were housewives and 13 were students, 32 were married, 24 had the family history of obesity. Chronicity was noted as 11 with less than 5 yr chronicity, 18 were having 5 to 10 year chronicity and 16 were having 10 to 15 year chronicity. 7 were alcoholics where as 2 were smoking along with alcoholism and 21 were vegetarian. 34 subjects had kaphavataja prakruti and 11 had kapha pittaja prakruti, 8 had mrudu koshta, 29 madhyama and 8 had krura koshta, 37 had teekshna agni, 5 had vishama and 3 had mandagni.

Table 1: Comparison of weight in Kgs in all groups at different intervals

Groups	0th day	15 th day	30 th day	45 th day	F value	P value
Group A	76.66 ± 5.18	74.46 ± 5.60	72.66 ± 5.41	71.4 ± 5.18	2.743	0.052
Group B	77 ± 2.85	73.8 ± 3.31	71.86 ± 3.57	71.4 ± 5.75	5.992	0.001
Group C	74.86 ± 5.51	73.93 ± 5.57	73.63 ± 5.49	73.33 ± 5.44	0.220	0.882#

Table 2: Comparison of mid arm Skin Fold Thickness in millimeters in all groups at different interval

Group	0th day	15 th day	30 th day	45 th day	F value	P value
Group A	31.73 ± 4.02	30.46 ± 4.30	29.93 ± 4.18	29.2 ± 4.50	0.943	0.426
Group B	33.8 ± 3.44	32.33 ± 3.71	30.53 ± 3.61	29.53 ± 3.66	4.149	0.010
Group C	32.53 ± 3.59	31.93 ± 3.83	31.8 ± 3.85	31.73 ± 3.76	0.141	0.935

Table 3: Comparison of Hip measurements in centimeters before & after the treatment in all groups

Groups	Treatment	Mean	SD	t-value	P-value
Group A	Before	107.6	7.63	0.8316	0.419
	After	105.26	7.78		
Group B	Before	111.06	6.32	1.6539	0.120
	After	106.93	7.32		
Group C	Before	108.86	5.58	0.1274	0.900
	After	108.6	5.59		

DISCUSSION

Lekhana is a karma attributed to many dravyas. Lekhana is defined as Dhatoonmalaanva dehasya vishoshyollekha yeccha yat, lekhanam i.e lekhanam dravya reduces or scrapes away the unwanted tissues & metabolic wastes. Lekhana karma is interpreted as medohara, scraping of medo dhatu. This effect can be best appreciated in the subjects suffering from sthouya vis obesity. Moreover, the incidence rate of obesity is on the rise and is a global problem. Hence this study was undertaken. Ativisha is a lekhanam dravya included in lekhaneeeya mahakashaya of Charaka Samhita. Vishoshi kashaya mentioned by Hareeta Samhita does shoshana karma i.e Vishoshi shoshamadhate. Vishosha refer to drying up of medodhatu which is implied in the definition of lekhanam also. Hence, the study was conducted to compare effect of ativishachoorana with ativisha vishoshi kashaya. To have a fair comparison a placebo-controlled group was added and hence the study was carried out on three groups. The dosage was fixed based on a pilot study. According to Sharangadhara samhita, for lekhanam, medicines are to be given in the morning⁶ (Lekhanam cha bhaishajyam prabhate.) hence medicine was given in the morning in empty stomach. Since one among the important management step is dietary management, hence all subjects received a customized individual food pattern amounting to approximately 1200kcal per day. The diet consisted of relatively large volumes of low energy complex carbohydrates that would require more than average time in digestion with the intent to displace more energetically dense items. This is nothing but 'Guru cha Apatarpana'⁷. Vyayama is mentioned as pathya in Sthoulya⁸. Hence patients were prescribed daily morning walk of their maximum capacity.

Highly significant results in weight reduction and statistically significant results in skin fold thickness were observed in the

group that received Ativisha vishoshi kashaya and the group that received ativisha choorna showed statistically significant result in reducing body weight. It was observed that vishoshi kashaya yielded better results than choorna. The tikta, katu rasa of ativisha acts as Lekhana & Rukshana respectively⁹. The laghu, ruksha gunas counteract the guru, snigdha, picchila guna of Kapha & meda. Ushna veerya also pacifies kapha. In Sthoulya there will be dhatu vruddhi (medodhatu) due to dhatvagni mandya; this can be tackled upon by deepana, pachana, medohara karma of Ativisha. This can be substantiated by the presence of Triterpenoids, saponins, proteins which have stimulatory effect on the digestion. Among these proteins is specifically considered for enzymatic activity. Vishoshi kashaya does shoshana karma. Ativisha itself is a lekhanam dravya, when a lekhanam dravya is administered in vishoshi kashaya form it enhances the activity. Hence the mean difference of all parameters in Group B.

CONCLUSION

As per the observations made in current study conducted on 45 subjects, the 15 subjects who received vishoshi kashaya of Ativisha showed better results than choorna in reducing weight and features of Sthoulya.

REFERENCES

1. Sharangadhara. Sharangadhara Samhitha (Dipika and Gudartham dipika Commentary), 2nd Edition. Bombay; Panduranga Jawaji Publications, 1931:398
2. Yadavaji Trikamji Acharya. Charaka Samhita (revised by Charaka and Dridhabala) with Commentary of Chakrapanidatta, 5th Edition. Varanasi; Chaukambha Sanskrit Sansthan, 2001:31

3. Pandit Hariprasad Tripathi. Harita Samhita 'Hari' Hindi Vyakhya Sahit, 1st Edition. Varanasi; Chaukhambha Krishnadas Academy. 2005:524
4. Siddharth N Shah. API Textbook of medicine, 7th Edition. The Association of Physicians of India. 2006:1533.
5. Pandit Hariprasad Tripathi. Harita Samhita 'Hari' Hindi Vyakhya Sahit, 1st Edition. Varanasi; Chaukhambha Krishnadas Academy. 2005:525
6. Sharanghadhara. Sharanghadhara Samhitha (Dipika and Gudartha dipika Commentary), 2nd Edition. Bombay; Panduranga Jawaji Publications,1931:398
7. Yadavaji Trikamji Acharya. Charaka Samhita (revised by Charaka and Dridhabala) with Commentary of Chakrapanidatta, 5th Edition. Varanasi; Chaukhambha Sanskrit Sansthan, 2001:117
8. Yadavaji Trikamji Acharya. Charaka Samhita (revised by Charaka and Dridhabala) with Commentary of Chakrapanidatta, 5th Edition. Varanasi; Chaukhambha Sanskrit Sansthan, 2001:118
9. Yadavaji Trikamji Acharya. Charaka Samhita (revised by Charaka and Dridhabala) with Commentary of Chakrapanidatta, 5th Edition. Varanasi; Chaukhambha Sanskrit Sansthan, 2001:135

How to cite this article:

Lakshmi Hulkund *et al.* Effect of ativisha choorna and ativisha vishoshi kashaya in obesity: A comparative study. J Pharm Sci Innov. 2019;8(1): 19-21.

<http://dx.doi.org/10.7897/2277-4572.081120>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: JPSI is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. JPSI cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of JPSI editor or editorial board members.