



A CLINICAL STUDY OF ERANDA PATRA KSHARADI MANDA (AAHARIYA KALPANA) IN THE MANAGEMENT OF ATISTHOULYA W.S.R. OBESITY

Dr Ghanghav Shradha

P G Scholar, Swasthavritta dept , R A Podar Ayu medical college, worli, mumbai18,Maharashtra,India.

Dr. Dalvi Prachi

Associate professor, Swasthavritta dept, R A Podar Ayu medical college, worli, mumbai18,Maharashtra,India.

ABSTRACT

Ayurveda has its own basic concept regarding the health and disease. Sthaulya is excessive production of meda. To break down samprapti of sthoullya, Drug should have a formulation having properties like kaphaghna, Deepak, Pachak, Medoghna, Lekhana, Ruksha, and Laghu Guna. Eranda patra ksharadi manda As per reference in Bhavprakash possesses all these properties. Taking all these points into consideration, I thought to evaluate the effect of Eranda patra ksharadi manda in the management of Sthoullya. In present study 60 patients of Sthaulya were selected from OPD and IPD of M.A. Podar hospital, Mumbai. These patients were undergone through laboratory investigations. They were treated with *Eranda Ksharadi Manda* given orally, duration of treatment was 1 month and follow up was done with parameters like Height, weight, BMI, Waist circumference, Waist Hip ratio and symptoms of Sthaulya. Symptoms are reduced significantly. It shows relief in weight, BMI, Waist Circumference and Waist Hip ratio.

KEYWORDS

obesity, sthaulya, manda, Erandpatra Kshar

Introduction

Sthaulya (obesity) is discouraged by the society for social as well as medical reason. Obesity is the most common nutritional disorder in affluent societies. The incidence of Diabetes mellitus, hypertension, angina pectoris, and myocardial infarction etc. is higher among obese individuals. Commonly obesity is due to excessive eating and lack of adequate exercise.

According to Acharya Charaka- In the case of fatty person, other Dhatus doesn't grow to the extent. In today's fast life incongruous food habit and relatively less exercise can be taken as major cause of Obesity. Acharya Charaka was the first to present a detailed account of Sthaulya. Atisthula is one among the Ashtanindita Purusha described by him.

In the pathogenesis of sthaulya, all the three doshas are vitiated, especially Kledaka Kapha, Pachaka Pitta, Samana and Vyana Vayu are the Doshika factors responsible for the samprapti of sthaulya. Aama annarasa traveling in the body channels gets obstructed in the Medovaha Srotas owing to the khavaigunya due to bijasvabhava or sharir shailthilya and combines with kapha and meda, decreasing the medo dhatvagni which in turn gives rise to augmentation of meda. Vitiated Vyana Vayu propels this augmented meda dhatu to its sites viz. udara (abdomen), sphika (hip region), stana (breast), gala (neck) etc. resulting in sthaulya or ati Sthula. Manifestations of these Rupas are associated with either excessive accumulation of meda dhatu or diminished nourishment of other dhatus or obstruction in various Srotas (channels) by medojanya margavarodha or the aama or vitiation of vata and slesma Dosa, so excessive accumulation of Medo Dhatu produces various signs and symptoms in Sthaulya patient.

Keeping in view, this burning problem of the present era and its associated devastating disease, it has been decided to do research on Sthaulya with certain Ayurvedic Classical remedies. This research work is a paradigm in the pathway of solution of the disease Sthaulya. Taking all the above mentioned facts in consideration, as described in Bhavaprakasha, Eranda Patra Ksharadi Manda was formulated for the present study. *Eranda (Ricinus communis Linn) Patra Kshara* was added in Manda kalpana, which is reported to have *KaphaNashaka, Medohara, Dipana* and *Pachana* actions. It acts as fat reducing with digestion & metabolism stimulating action. Manda pathya kalpana is Dipana, Pachana, and Sthaulyahara. Hingu has Tikshna, Ushna, Dipana,

Pachana action.

AIM

To study the efficacy of Erand patra ksharadi Manda in the management of Atisthoullya w.s.r. to Obesity

MATERIALS AND METHODS

Study type: open clinical trial. Patients fulfilling criteria and attending OPD and IPD of M.A. Podar Hospital, Mumbai were selected for present study. Ethical clearance from R.A. Podar Ayurved College, Mumbai. An informed written consent of all 60 patients was taken in language best understood by them.

TIME : twice a day i.e. early morning (prataha kala) and at night (nisha kala)

STUDY DURATION: 1 Month.

DOSE: Manda - 80 ml
Erandpatra kshara - 250 mg
Hingu - 125 mg

PREPARATION OF ERANDA PATRA KSHARADI MANDA

The patients included in the study had given rakta shali, eranda patra kshara and hingu in a divided dosage required for one time to prepare. Then patient was taught how to prepare manda through video clip. After preparation of manda patient was asked to add the provided eranda patra kshara and hingu in it as a prakashp.

Diet: According to the pathya apatya mentioned in ayurvedic text diet was prescribed in all selected patients of sthaulya

Parameters of assessment:-

Assessment of the patients were done subjectively as well as objectively

1. Subjective parameters
2. Objective parameter

Subjective parameters:

Different symptoms were graded into four grade scale (0-3) on the basis of severity to assess the changes in the clinical symptoms of obesity. Study in the changes of gradation of each symptom was done in each follow up.

SCORING OF SUBJECTIVE CRITERIA:**1. Swedaatipravrutti: (excessive sweating)**

- | | |
|--|----------|
| 1) Grade 0-No sweating | 2) Grade |
| 2) Grade 1-Sweating on more exertion | 3) Grade |
| 3) Grade 2-Sweating on little exertion | 4) Grade |
| 4) Grade 3-Sweating at rest | |

2. Swaskashtata: (dyspnea)

- 1) Grade 0-Absence of dyspnea
- 2) Grade 1-Dyspnea after heavy work & relived by rest
- 3) Grade 2-Dyspnea on slight exertion
- 4) Grade 3-Dyspnea even at rest

3. Gaurav (feeling of heaviness)

- 1) Grade 0-No feeling of heaviness
- 2) Grade 1-Feeling of heaviness but no effect on routine work
- 3) Grade 2-Feeling of heaviness with slight affect on routinework
- 4) Grade 3-Feeling of heaviness more affecting the routine work

4. Nidra (excessive sleep)

- 1) Grade 0- Normal sleep
- 2) Grade 1- Sleep more than 8 hours
- 3) Grade 2-Sleep more than 10 hours
- 4) Grade 3-Feeling of sleepiness throughout the day -

Objective parameter**1. Weight****2. Body mass index(BMI)**

1. <18.5 -- Underweight
2. 18.5 - 24.9 -- normal weight
3. >=25 -- overweight
4. 25 - 29.9 -- pre obese
5. 30 - 34.9 -- obese class 1
6. 35 - 39.9 -- obese class2
7. >40 -- obese class 3

3. Waist hip ratio (WHR):

In male >1 and in female >0.85 considered as obese

Waist measurement WC: midpoint of lower border of rib cage & iliac crest

Hip measurement HC: largest part of buttocks. WC/HC=WHR

All above parameter were noted prior to start of treatment. After completion of treatment assessment were carried out.

ANALYSIS OF DATA

Data collected from CRF were then subjected to demographic and statistical analysis. Student t-test was applied to objective data generated and significance of improvement was studied. However subjective data of symptoms, as they are generated by ranking, they did not follow normal distribution, hence forth evaluated by Wilcoxon Sum Rank signed test.

OBSERVATIONS AND RESULTS

Clinical study observed on 60 patients by sorting patients as per sex, age, occupation, diet, Prakruti, Koshtha and Agni.

- 40% of patients included in the trial were male and remaining 60% patients were female. It can be inferred that Sthoulya occurs more commonly in females.
- It was observed that only 8(13.33%) patients was found in 20-25 age group, 19 (31.66%) were there in 26-30 age group, 17 (28.33%) belonged to 31-35 age group and 16 (26.66%) were there in 36-40 age group.
- Maximum patients 52 (86.66%) were Hindu, 3 (5%) patients were Muslim, 3 (5%) were Baudhist, 2(3.33%) was Christian.
- 2(3.33%) patients were from poor-income group. However 52(86.66%) patients were noted from Middle class. only 6(10%) patient from upper middle group. .
- there were 15(25%) patients were Housewives. 31 (51.66%) were doing job, 5(8.33%) were Business class & 9(15%) were students.
- 39 (65%)were married,20(33.33%) unmarried,1 (1.66%) widow female.
- 23(38.33%) were vegetarian and 37(61.66%) were

consuming mixed diet.

- 40 (66.66%) were doing adhyashana, 8 (13.33%) were doing samashana, 11(18.33%) were doing vishamashana and 1(1.66%) were doing anashana.
- 23 (38.33%) individuals were found with Kapha-Pitta prakruti. 15 (25%) patients were of Kapha-Vata prakruti. Individuals having Pitta-Kapha predominance were 5(8.33%) in number. 10(16.66%) patients were with Vata-Kapha Predominance, 5 (8.33%) were Vata-pitta prakruti, 2(3.33%) patient were with pitta-vata prakruti
- 9 (15%) patients had mrudu koshttha, 45 (75%) had madhyama koshttha and (10%) had krura koshttha
- 8 (13.33%) were found with manda agni, vishama agni was found in 20(33.33%) individuals and there were 32 (53.33%) individuals had tikshna agni.

Assessment of Subjective Parameters *Eranda Ksharadi manda* reduces *swedaatipravrutti* by 49.5%, *swas kashtata* by 51.02%, *gaurav* by 48%, *nidra* by 45.63%,

Assessment of Objective Parameters *Eranda Kshara* shows remarkable difference in weight by 3.033 ±1.371 , BMI by 1.197 ±0.5356 , Waist circumference by 4.283 ±2.366, difference in Waist hip ratio by 0.01185 ±0.01752 .

Total Effect of Therapy

No one patient has found completely relived and markedly improved. 41 patients (68.33%) of *Sthaulya* treated with *Eranda Kshara* were improved. 19 (31.66%) patients have show very miner improvement.

DISCUSSION

Acharya Bhavprakash has described *Eranda Ksharadi manda* for treatment of *Sthaulya*. It shows better results in Subjective Parameters. It also reduces Weight, BMI, Waist Circumference, Mid Arm Circumference and Waist Hip ratio.41 patients were Improved and 19 shows minor improvement.

Mode of Action of Eranda Ksharadi Manda

Eranda Kshara with its *Katu, Tikta, Kashaya rasa, Ushna Virya, ruksha, Ushna, Lekhan, Medoghana Guna Katu Vipak causes Dipan, Pachana* and digest *Ama* thus removes the *Margavarodha* of *Medovahastrotas*. Due to above character it alleviates *Kapha* and *Vata*. Thus brings these two *Doshas* to normal and *Medohar* property clears excess of *Meda*. *Manda* pathya kalpana is *Dipana, Pachana, and Sthaulyahara*. *Hingu* has *Tikshna, Ushna, Dipana, Pachana* action.

Table Showing Statistical Analysis Of Symptoms Of Patients Of Sthoulya Wilcoxon –rank sum test:

Sr No	Symptoms	Mean			SD			Sed	P
		BT	AT	DIFF	BT	AT	DIFF		
1	Swedaatipravrutti	1.767	0.900	0.87	0.7673	0.6298	0.137	0.01775	<0.001
2	Swaskashtata	1.633	0.8167	0.817	0.8018	0.6763	0.125	0.01619	<0.001
3	Gaurav	1.75	0.9	0.85	0.7507	0.6023	0.148	0.01918	<0.001
4	Nidra	1.71667	0.93333	0.783	0.7612	0.6069	0.155	0.01992	<0.001

BT-before treatment AT-after treatment SD-standard deviation

Table 2showing Assesment of objective parameters: paired t test

Sr No.	Parameter	Mean±S.D. BT	Mean±S.D. AT	Difference of Mean±S.D.	SEd	T Value	P Value
1	Weight	82.5 ±6.218	79.467 ±5.882	3.033 ±1.371	0.1770	17.135	<0.0001
2	Body Mass Index	32.587 ±1.426	31.390 ±1.447	1.197 ±0.5356	0.06915	17.309	<0.0001

3	Waist Circumference	89.276 ±9.620	84.983 ±8.877	4.283 ±2.366	0.03 54	14.02 5	<0.00 01
4	Waist Hip Ratio	0.9158 ±0.054 27	0.9039 ±0.0554 7	0.01185 ±0.01752	0.00 2262	5.239	<0.00 01

DISCUSSION

All the drugs used in Eranda patra ksharadi manda are Tikshna, ushna, katu ras tikta rasatmak, havings lekhan, medoghna, kaphahar properties. Whole combination acts to break vicious cycle of samprapti of sthoulya. Hingu digests the amasadushta annarasa. Eranda patra kshara are having scraping like action on meda, lekhan. For strotoshodhana requirement is sukshma guna fulfilled by hingu, manda. Hingu also shreshtha in vatashaman. Manda is agnipradipaka. Medadhataavagni is corrected by tiktarasatmaka dravya Hingu. Hence the above combination of drugs are effective in breaking the samprapti of Sthoulya.

CONCLUSION

This clinical study shows that females are more prone towards obesity. Age group 30-40 years should be conscious towards obesity. People having mixed diet, doing job, and people having *kaphapitta prakruti* and *tikshagni* have more chances of getting obesity. It was observed that symptoms are reduce significantly. It shows relief in weight, BMI, Waist Circumference, Mid Arm Circumference and Waist Hip ratio. From this we can conclude that the Eranda patra ksharadi manda can be used in the regular treatment of obesity.

REFERENCES

1. Bhavaprakash Samhita – Vidyotini commentary, Shri. Harihar Prasad Pandey, 11th Edition 2009, Chaukhamba Sanskrit Bhawan, Varanasi
2. Charak Samhita I & II Part, Pt. Kashinath Shastri, Dr.G.N.Chaturvedi, Reprinted 1998, ChaukhambaVisvabharti Varanasi
3. Bhisajya Kalpana Vigyana, Acharya Siddhi Nandana Mishra, 1999, Chaukhamba Vidhya Bhavana Varanasi
4. Bhavaprakash Nighantu, Krishna Chandra Chuneekar &Ganga Sahay Pandey, 8th Edition 1988, Chaukamba Bharati Academy, Varanasi