

EVALUATION OF THE EFFICACY OF VACHADI GANA YOGA VASTI IN STHAULYA W S R TO OBESITY

Amiya Bhonsle¹, Shrinivasa Reddy CM², Uttam Kumar³, Rajesh Urmale⁴

¹PG Scholar, ²Reader, Panchkarma Deptt., SJG Ayurvedic Medical College Koppal,
Karnataka, Inida

³Lecturer, Shalya Tantra, ⁴Reader, Rasa Shastra & Bhaisjya Kalpana, RLAMC, Chandkhuri,
Durg, Chhattisgarh, India

ABSTRACT

Obesity is one among the major diseases of modern era, increasing in prevalence. The World Health report of W.H.O. listed Obesity under 10 top selected risks to the health. *Sthaulya* (Obesity) is well known from the *Samhita* period and is considered to be one of the eight undesirable conditions (*Ashta Nindita*). It can be caused due to *Mandagni* as *Agni* is considered to be responsible for metabolism. Thus, *Ama* formed moves within body, further causing *Medovruddhi*, which produces excessive stoutness. According to modern science, one of the causes for obesity is sedentary lifestyle, where there is more intake of junk food and less physical activity. This also signifies in increased BMI, further leading to obesity. The study is a prospective clinical trial in a single group of 30 patients where all the patients received *Vachadi gana vasti* for 8 days in *yoga vasti krama* and as component of *yoga vasti* schedule *Anuvasana vasti* with *Vachadi taila* is used. And follow up was on 24th day. Subjective parameters are the chief complaints of *sthoulya*. And objective parameters are BMI and Waist hip circumference. Assessments are done before and after the treatment.

Keywords: *sthoulya*; *Ashtanidhita Vachadi gana yoga vasti* ; BMI ; obesity ; *meda doshja*

INTRODUCTION

Ayurveda is set to be the most ancient of medical sciences. *Ayurveda* stands apart from the rest of medical fraternity with its holistic approach to disease management on basis of five elements (*Panchamahabhutas*) and then we constitute the *Tridoshas* that governs our health. *Sthaulya* (Obesity) is one among the major diseases of Modern era. In Modern era with continuous changing life styles and environment, changed dietary habits, man has become the victim of many disease caused by unwholesome dietary habits and Obesity is one of them. Obesity is the only one disease, which is gaining more and more attention of scientists at global level. Many institutions and Medical schools are

making efforts to find a perfect remedy for this burning problem. The Obesity is such a physical state where Hypertension, Osteoarthritis, Diabetes Mellitus, Cardio Vascular accidents impotency and many other grave complications are invited. *Ajirna* and *Agnimandya* are considered to be the main causes that are responsible for the occurrence of digestive problems that further lead to disturbed metabolic rate. *Mandagni* could be at the level of *Jathragni* or *Dhatwagni* *Janya*. According to *Sushruta Ama Rasa* is produced due to *Kaphavardhakaahara*, *Adhysana*, *Avyayama*, and *Divaswapana*. The *Madhura Bhava Ama Rasa* moves within the body, *Snigdhanasha* of this *Anna Rasa*

causes *Medovruddhi* and make the person obese¹. *Sthaulya* is considered to be caused due to *Meda Dhatu-Dushti*². *Sthaulya* has been mentioned under '*AshtaninditaPuru-sha*'³

So in order to treat *Sthaulya*, *lekhan* and *vaat kapha nashan* is required and it is an attempt to do so with *vachadi gana vasti*. *vachadi gana* contains *devdaru*, *Shunthi*, *vacha*, *haritaki*, *ativisha*, *nagarmotha*, is indicated in *vata kaphaja vikara* like *sthoulya* in *shodhanadi gana adhyaya* in *asthanga hridaya* ⁴.

AIMS AND OBJECTIVES OF STUDY:

- Evaluation of efficacy of *vastikarma* in *Sthoulya*.
- Evaluation of efficacy of *Vachadi gana yoga vasti* in *Sthoulya*

MATERIALS & METHODS:

Patient attending O.P.D & I.P.D of S.J.G. Ayurvedic Medical College & Research Center, Koppal, will be randomly selected for study.

EXCLUSION CRITERIA:

1. Patients below the age of 15 years and above 60 years.
2. Patients with Endocrinal disorder & other systemic diseases.
3. Patients with long term Steroid treatment.
4. Pregnant & lactating mother.
5. The patient having B.M.I. >40 will also be excluded.

INCLUSION CRITERIA:

1. The patients age between 15-60 years irrespective of their caste, race, and sex etc.
2. The patients having clinical signs and symptoms of *Sthaulya*.
3. B.M.I in between 25- 39.5.

COMPOSITION OF TRIAL DURG:

1) Drugs for Vachadigana taila:

The drugs *Atiushna*, *Teekshna*, *Ugrah* & *Visha* properties will be taken 1/2part and as *Ativisha* is toxic in nature and hence given through rectal route it is taken only 1/4 parts.

S.No	INGREDIENTS	BOTANICAL NAME	QUANTITY
1	<i>Vacha</i>	<i>Acarus calamus</i>	1/2 part
2	<i>Devadaru</i>	<i>Cedrus deodara</i>	1 part
3	<i>Musta</i>	<i>Cyperus rotundus</i>	1 part
4	<i>Shunthi</i>	<i>Zingiber officinale</i>	1/2 part
5	<i>Haritaki</i>	<i>Terminalia chebula</i>	1 part
6	<i>Ativisha</i>	<i>Aconitum heteropphyllum</i>	1/4 part

ASSESSMENT OF RESULT:

Subjective & objective parameters of base line data and after treatment data are compared to assess the result with paired T test by using SPSS software.

SUBJECTIVE PARAMETER:

1. *Kshudati matra*⁵
2. *Dourbalya*⁵
3. *Javoparodha*⁵
4. *Pipasati*⁵
5. *Chala sphika*⁶
6. *Chala stana*⁶
7. *Chala udara*⁶

8. *Udarevidhi*⁷

OBJECTIVE PARAMETER:

1. Body Mass Index (k.g/m²).
2. W.H.R. i.e. waist hip circumference ratio.
3. Skin fold thickness by using Harpenden Calipers.

METHOD OF COLLECTION OF DATA:

A) Study design: Simple Randomized open clinical trial.

B) Sample size: A minimum of 30 patients will be taken for the Vachadi gana yoga vasti in a single group

CRITERIA OF DIAGNOSIS:

The symptoms mentioned in classics and modern texts will be the base of diagnosis.

STUDY DURATION:

➤ 8 days Vachadi gana yoga vasti + 16 days parihara kala = Total 24 days.

FOLLOW-UP: Follow-up for 8 days after treatment.

POSOLOGY:

1. Niruha Vasti Dravya Dose -576 ml (3 kudava)⁸

Saindhavam- 1/2 aksha, Makshika- 1 prasruti, Sneha- 1^{1/2} prasruti, Kwatha- 2

prasruti, kalka- 1/2 prasruti, Gomutra-1 prasruti

2. Anuvasana Vasti Taila Dose 72 ml (1^{1/2} Pala)⁹

Saindhavam & Satahava- 2 masha

INVESTIGATIONS:

1. C.B.C
2. R.B.S
3. Lipid profile
4. Urine routine

RESULT: TableNo.1: Showing Individual study of the parameters to show significance effect before and after the treatment

	Mean		Reduction %	±SD	±SE	T	P	
	B.T.	A.T.						
<i>Sthana chalatwa</i>	2.07	1.13	45.16	0.52	0.10	9.82	<0.001	H.S.
<i>Udara chalatwa</i>	2.23	1.13	49.25	0.40	0.07	14.97	<0.001	H.S.
<i>Sphik chalatwa</i>	2.27	1.43	36.76	0.38	0.07	12.04	<0.001	H.S.
<i>Udarevridhi</i>	2.13	0.97	54.69	0.59	0.11	10.79	<0.001	H.S.
<i>Dourbalya</i>	2.07	0.90	56.45	0.59	0.11	10.79	<0.001	H.S.
<i>Kshudatimatra</i>	1.43	0.60	58.14	0.65	0.12	7.05	<0.001	H.S.
<i>Pipasati</i>	1.07	0.50	53.13	0.63	0.11	4.96	<0.001	H.S.
<i>Javoprodha</i>	1.10	0.67	39.39	0.50	0.09	4.71	<0.001	H.S.
BMI	18.3	15.7	14.55	0.45	0.08	3.25	<0.01	S.
WAIST:HIP RATIO	1.93	1.83	5.17	0.40	0.07	1.36	>0.05	I.S.

In 30 patients, before administration of vasti, the mean score of B.M.I was 18.3 before treatment, which was brought down to 15.7 kg/m² after administration of drug with 14.55 % relief reported with the statistically significant (P<0.01) result. The change in B.M.I was statistically significant with “t” value being 3.25 at 1% level of significance. Here p<0.01 which indicate that the drug has significant role on B.M.I.

In 30 patients, before administration of vasti, the mean score of weight: Hip ratio

was 1.93, which was brought down to 1.83 after the treatment with 5.17 % of relief showed statistically Insignificant (P>0.05) result. The change in weight was statistically Insignificant with “t” value being 1.36. Here p>0.05 which indicate that the drug has insignificant role on weight: Hip Ratio.

TableNo.2: Showing Individual study of the Lipid Profile to show significance effect before and after the treatment

	Mean		Change in %	±SD	±SE	T	P	
	B.T.	A.T.						
S.cholesterol	198.02	183.26	7.46	15.69	2.86	5.15	<0.001	H.S.
S.TRIGLY	137.78	133.97	2.76	8.88	1.62	2.35	<0.05	M.S.
HDL	41.01	43.31	-5.62	6.65	1.21	-1.90	>0.05	I.S.
LDL	130.04	113.28	12.89	16.39	2.99	5.60	<0.001	H.S.

In 30 patients, before administration of *Vasti*, the mean of S. Cholesterol was 198.02 before treatment, which was brought down to 183.26 with 7.76 % relief reported with the statistically highly significant ($P<0.001$) result. S.Triglycerides was 137.78 before treatment, which was brought down to 133.97 after *vasti* with 2.76 % relief reported with the statistically Mild significant ($P<0.05$) result. HDL was 41.01 before treatment, which was brought up to 43.31 after *vasti* with 5.62 % relief reported with the statistically Insignificant ($P>0.05$) result. LDL was 130.04 before treatment, which was brought down to 113.28 after *vasti* with 12.89 % relief reported with the statistically highly significant ($P<0.001$) result.

DISCUSSION

Stoulya is a *kapha-vata pradhana Tridoshaj vyadhi* and *Acharyas* has recommended *vataghna* and *Kaphaghna anapana* and *aushadhi* for this disease. So we have selected *vachadi gana vasti* as it has formost action on *vata* and for proper *lekhan karma*, we have selected *vachadi gana vasti*. We have selected *vachadi vasti* for *Sthoulya* as it has less risk, safe and easy for *Sthoulya* as it has less risk, safe and easy for administration in comparison to *Vamana* and *virechana*.

Probable action of *lekhan basti*:

Lekhan Basti was prepared by the combination of the *taila*, *madhu*, *gomutra*, *lavana*, which consist *ushana* and *tikhna guna*. *Taila* has *anupravana bhava*. Due to that it passes through illiocecal valve and

reaches up to *Grahani*, where it absorbed. *Basti* inhibits the fat absorption by reaching upto *grahani*. Hence it pacify *Saman vayu* and brought *Jatharagni* to its normal level and activate the *vyana vayu* to break the *Sroto sang* and synergize the action of *Lekhan* therapy at the cellular level. The *basti* drug consists of *kasaya*, *tikta* and *katu rasa*, so that properties potentiate the action of *lekhan* therapy.

CONCLUSION

In *Ayurvedic* treatise, the pathology of *Sthaulya* goes in a way that it is caused due to the manifestation of *Ama* and *Ama* is caused because of *Jatharagni Daubalya*⁵, hence here we can conclude that *Sthaulya* is the outcome of *Ama* which is caused due to *Mandagni*, so hence it is a *vata kaphaja type of santarpanjanya vyadhi*. Treatment modalities like *Shodhana* therapy with *Vachadi gana vasti* shows good efficacy in relieving both subjective and objective parameters. This can be attributed to fact that most of the drugs of this formulation are mainly *Ushna Viryatamaka* with *Katu Vipaka* and predominantly *Ushna* and *Tikta Gunas* and possessing *Lekhana*, *Karshana*, and *Bhedana* properties. Amongst the biochemical values, besides the HDL, all other values showed reasonable decrease in their respective values. This proves the action of the drug on the lipid profile.

Sthoulya is a *vata kaphaja type of vyadi* due to *santarpanjanya*.

Sthaulya is a *Dushya Dominant Vyadhi*.

*Nidan*s of *Sthaulya* mentioned in classics are now changing. Increasing stress, faulty

dietary habits and decreased awareness regarding exercise are becoming the prominent causative factors for *Sthoulya*.

Thus remaining in the *Kostha Vata* causes *Atikshudha*, this increases gravity of the disease and make the *Sthoulya Krrichhr-sadhaya*.

Obesity occurs more in female than male and specially increases after marriage, light nature of work, use of IUCD, contraceptive pills, after delivery and in menopausal period etc.

The plus point observed in case of *Ayurvedic* management is absence of any hazardous effect, which is really a great benefit to the patients and is of vital importance in view of the global acceptance of *Ayurveda*.

- *Vasti karma* plays a major role among the *shodhana karmas*, as it is praised as *Ardhachikitsa*.
- Treatment modality like *shodhana* in the form of *Vachadi gana yoga Vasti* shows better efficacy in reliving subjective features as well as objective features. *Karshana* and *lekhana* property of this *vasti* probably responsible for the *karshana* of *medadhatu*, leading to *srotoshodhana* thus reliving the *avarana*.
- Most of the *laxanas* mentioned in the *sthoulya* in *Ayurveda* are subjective symptoms but some of the objective features mentioned in *Ayurveda* and allied sciences together can help to diagnose its severity.
- It is common misbelief that all hyperlipidaemic (like hypercholesteraemia etc) are commonly associated with *sthoulya*. But factually it is not true only less proportion of obese may present with hyperlipidaemia.
- *Sthoulya* can be undoubtedly compared with that of obesity on its etiopathogenesis and symptomatology. And the

samprapti and *laxana* can be understood with the help of modern pathophysiology of obesity.

- Objective parameters like weight, BMI, and body circumference in the trial cases have reduced considerably. The *vasti* schedule tried was *yoga vasti krama*, if the same is tried with *kala* or *karma vasti* schedule results may be still encouraging.
- In the biochemical values also there was some mild reduction in lipid values were observed. This shows the action of this *vasti* over lipid values.
- In modern methods the procedure known as bariatric surgery has been recently introduced but it has many complications like vomiting, diarrhea, abdominal hernia, infections, pneumonia etc.
- Women's are having higher incidence of obesity and they need more medical care than the man.
- By keeping above things *ayurveda* teaches us and safety less cost remedies in the management of *sthoulya* where the complications arises out of these treatments are minimal.
- By keeping the ideology of *ayurveda* in the diet principles and applying the *shodhana* therapies like *vamana*, *virechana*, and *vasti* etc the desired effect can be achieved in *sthoulya rogi*.
- By extensive literary research, it can be concluded that *sthoulya chikitsa* includes *Satatha karshana*, *shodhana*, and also *shamana aushadhis*. In addition to this following *Pathyapathya* are also plays an important role.

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CORRESPONDING AUTHOR

Dr. Uttam Kumar

Email: druk01508@gmail.com

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