



Research Article

A COMPARATIVE CLINICAL STUDY ON THE EFFECT OF UDVARTANA AND TUMMY TRIMMER IN UDARA- LAMBANATVA W. S. R CENTRAL OBESITY

Manjunath Akki<sup>1\*</sup>, Suresh Hakkandi<sup>2</sup>, Abid Hussain<sup>3</sup>

\*<sup>1</sup>Professor & Guide, <sup>2</sup>HOD, <sup>3</sup>PG Scholar, Dept of Panchakarma, S J G Ayurvedic Medical College, Koppal, Karnataka.

ABSTRACT

Now a day's Obesity/ *Sthoulya* is a burning issue, but it is not being easy to burn it. Abdominal obesity also known as central obesity. With all kinds of foods becoming readily available at any times while humans are sedentary, intake of higher energy and less energy expenditure. *Ayurveda* describes *Medopachaya* as *Sthoulya*, it is a *Santarpanajanya vyadhi* said as one among *Asthanindita purusha*.

According to the WHO, obesity is one of the most common, yet among the most neglected, public health problems in both developed and developing countries. Globally 1 in 6 adults is obese and nearly 2.8 million individuals die each year due to overweight or obesity. India is just behind US and China in this global hazard list of top 10 countries with highest number of obese people.

The diuretic and purgatives drugs are also used to treat obesity, but the action is for shorter term and the patients again put on weight after cessation of treatment. In *Ayurveda* we offer several treatment measures to treat obesity. Here is an attempt made with safety management using principles of *Panchakarma*. 30 Patients were equally divided in 2 groups and treated *Udvarthana* with *Kolakulaththadi churna* and Tummy trimmer by Sauna shaping belt, their comparative effects in central obesity. On the other hand corporate sectors are selling commercial slimming belts and are being sold out like hotcakes. Comparing both the procedures, *Udvarthana* has given better result than Tummy trimmer.

**KEYWORDS:** *Udaralambanatva*, Central obesity, *Udvarthana*, Tummy trimmer.

INTRODUCTION

"The longer the size of the belt, the shorter the lifespan". Obesity/ *Sthoulya* is a burning issue, but it is not being easy to burn. Central obesity is a serious lifestyle disorder which predisposes to a large no of diseases. Obesity is considered as a risk factor for diabetes, hypertension and cardiovascular diseases and many other diseases which can lead to further morbidity and mortality.

*Ayurveda* had given much importance to primary and secondary preventions of diseases, which explains the prevention of diseases at different levels like *Abhyanga*<sup>[1]</sup>, *Vyayama*<sup>[2]</sup>, *Udvarthana*<sup>[3]</sup> are explained in *Dinacharya* with an aim of maintaining health. If the disease is established abundant explanation of treating it is given within six principles i.e., *Shadvidhopakrama*. Among them *Udvarthana* stands as a standard example for *Rookshana*.<sup>[4]</sup>

Considering the difficult nature of disease, obesity can be better prevented rather than treated.

The existing obesity treatment options, in modern medicine includes drugs like Fenfluramine, Dexfenfluramine and Sibutramine which acts as appetite inhibitors came with adverse effects and cannot be used for more than three months. The diuretic and purgatives drugs are also used to treat obesity, but the action is for shorter term and the patients again put on weight after cessation of treatment. Some devices like vibrators are being used for local lipolytic action. Nutritional combinations (synthetic nutritional compounds) are expensive and they too have untoward effects.

*Ayurveda* offers treatments like *Virechana*, *Udvarthana*, *Lekhana basti*, along with some internal medicines like *Navaka guggulu*, *Trayodashanga guggulu* etc. internal administration of *Guggulu* has certain limitations like gastric irritation, constipation etc. The administration of *Lekhana basti* is to be undertaken for prolonged period and administration of which requires medical supervision. The observation at our hospital-conducted studies on the

same over considerable samples shows significant reduction in body weight for a very short duration of time with no adverse effects. It is difficult to change environment, but relatively easy to change food habits and life styles. Hence intervention at this level is need of the hour. For which commercial companies producing slimming belts/tummy trimmer

## MATERIALS & METHODS

The ultimate aim of any researcher of medical science is to find suitable treatment for particular disease and promote Quality of Life (QOL). In spite of the fact that this science is still the important component of medicine in the country, its utility can be further enhanced by application of scientific methodology for standardize and Clinical study plays a very important role in the evaluation of efficacy of the treatment.

### Methodology of study

#### Aims and Objectives of study

- To compare the effect of abdominal girth reduction by *Udvartana*
- To compare the effect of abdominal girth reduction by tummy trimmer.
- To compare the effect of abdominal girth reduction by *Udvartana* and tummy trimmer.

**Source of data:** Patient presenting with *Udaralambanatva* attending O.P.D of S.J.G. Ayurvedic Medical College & Research Center, Koppal will be selected for the study.

**A. Study Design:** A Comparative clinical study.

**B. Sample Size And Grouping:** A minimum of 30 patients will be taken for the study and they are randomly made into 2 equal groups

**Group – A:** 15 patients will be subjected *Udvartana* with *Kolakulathadi churna*<sup>[5]</sup>.

**Group – B:** 15 patients will be subjected Tummy Trimmer procedure with Sauna Slim Belt.

#### C. Exclusion Criteria

- Patients suffering from any systemic illness.
- Pregnant ladies and lactating mother

#### D. Inclusion Criteria

**Composition of Trial Durg:** *Kolakulathadi Churna*

The drugs in it have *katu, tikta, Ushna & Vatakaphahara* properties.

**Table 1: Ingredients of *Kolakulathadi Churna***

S.No	Ingredients	Botanical name	Ratio
1	<i>Kola</i>	<i>Zizyphus jujube</i>	1
2	<i>Kulattha</i>	<i>Dolichus biflorus</i>	1
3	<i>Suradaru</i>	<i>Cedrus Deodara</i>	1
4	<i>Raasna</i>	<i>Pluchea lanceolata</i>	1
5	<i>Maasha</i>	<i>Vigna mungo</i>	1
6	<i>Atasi</i>	<i>Linum usitatissimum</i> Linn	1
7	<i>Kusta</i>	<i>Saussurea leppa</i>	1

- Age between 17 to 50 years of either sex.
- Patients presenting with *Udara lambanatva*/ central obesity
- BMI between 25 to 35.

**E. Criteria of Diagnosis:** The symptoms mentioned in the classics for *Sthoulya*, in which only *Udara lambanatva* along with contemporary modern texts for central obesity will be taken as base for diagnosis.

#### F. Posology :

- Udvartana* with *Kolakulathadi choorna* - quantity sufficient.
- Tummy trimmer belt – 30 minutes daily.

**G. Study Duration:** *Udvartana* - 14 days Tummy Trimmer – 14 Days

**H. Follow Up:** 14 Days.

#### I. Assessment of Result

Subjective and objective parameters of baseline data and after treatment will be compared to assess the result with “paired t test”, by using SPSS Software.

#### J. Subjective Parameters : *Udara Lambana*

Various features of obesity had been considered and grading was given to analyze the results statistically as follows.

#### Assessment of *Chala Udara*

- Absence of *Chalatva*
- Chalatva* during fast movement
- Chalatva* during moderate movement
- Chalatva* during slight movement

#### K. Objective Parameters

- Abdominal girth in cm
- Body Weight.
- BMI.

**L. Investigations :** None

#### Preparation of the trial drugs

The ingredients of *Kolakulathadi Churna*<sup>[5]</sup> will be collected and *Churna* will be prepared in RS & BK department of S.J.G.A.M.C and Hospital, Koppal, as standard procedure mentioned in classics for *Churna kalpa vidhi*. Tummy Trimmer belt was purchased by HBN telebrands (India) pvt ltd

8	Vacha	Acorus calamus	1
9	Shatahva	Pistacia integerrima	1
10	Yava	Hordeum vulgare	1
11	Taila phala	Ricinus communis	1

**Procedure: Udvartana**

**Materials Required:** Measuring tape, weighing machine, A clean vessel, gas stove, Kolakulaththadi churna etc.

**Purvakarma:** Ask the subject to be devoid of Vegas. Blood pressure, Pulse rate, Heart rate and Respiratory rate should be recorded. They should be of Laghu kosthi.

**Pradhana karma:** Prescribed quantity of Churna is taken and heated in a clean dry vessel without adding any Sneha and is kept ready. Subject is asked to lie down on the Abhyanga table and Udvartana is started from abdomen and back region and is done in upward direction, duration is 25 minutes.

**Paschat karma:** After Udvartana, patient should take rest for 5 to 10 minutes, which helps the patient to relax.

**Procedure: Tummy Trimmer**

**Materials Required:** Measuring tape, Weighing machine

**Purvakarma:** Ask the subject to be devoid of Vegas. Blood pressure, Pulse rate, Heart rate and Respiratory rate should be recorded. They should be of Laghu kosthi.

**Pradhana karma:** AB Sauna shaping belt of India mart is taken. Belt is tied to the most projected part of the abdomen (Udara lambana pradesha)

Ask the subject to sit on the Janu matraasana, then tied belt power is made on and made to sit it with 25 minutes as well.

**Paschat karma:** After application of Tummy Trimmer, patient should take rest for 5 to 10 minutes, which helps the patient to relax.

**Regimen:** All the patients of two groups were strictly instructed to avoid the Aharas and viharas which increases the Kapha and Medas.

**OBSERVATIONS AND RESULTS**

The following observations were made during the study. It includes before the treatment, after the treatment and after follow up.

Before starting treatment thorough counselling of patient and brief explanation regarding the procedure of Udvartana karma and action of the belt will be explained. Patients of both the groups were advised to stay in specific diet during the therapy and till follow up completes. All the patients were examined before and after the treatment according to the case sheet format given in the appendix. Both the Subjective and Objective changes were recorded. The data recorded are presented under the following heading.

**Demographic data:** Age, gender, religion, occupation, Desha, socioeconomic status, Ahara, Vihara, Agni and Kosta.

- 1) Data related to the disease
- 2) Data related to overall response to the treatment.
- 3) Statistical analysis of the group.

**Table 2: Comparative difference of body weight between Group A and B**

Group Statistics						t-test for Equality of Means			
	Group	n	Mean	±SD	±SE	Mean difference	t	p	Remarks
After Treatment	Group A	15	70.81	9.72	2.51	- 8.69	2.18	<0.05	MS
	Group B	15	79.50	11.99	3.09				
After follow up	Group A	15	70.73	9.94	2.57	- 8.55	2.15	<0.05	MS
	Group B	15	79.27	11.78	3.04				

**Table 4: Comparative difference of BMI between Group A and B; Independent Sample t-Test**

Group Statistics						t-test for Equality of Means			
	Group	n	Mean	±SD	±SE	Mean difference	t	p	Remarks
After Treatment	Group A	15	28.83	4.31	1.11	-4.06	2.07	<0.05	MS
	Group B	15	32.89	6.25	1.61				
After follow up	Group A	15	28.69	4.32	1.12	-4.13	2.10	<0.05	MS
	Group B	15	32.81	6.26	1.62				

MS – Moderate significant

**Table 5: Comparative difference of body weight between Group A and B**

Comparative effect of treatment on body weight; paired samples t test											
Paired samples statistics						Paired differences			Paired test findings		
Group	Comparative pairs	Pairing	Mean	±SD	Reduction in %	Mean dif.	±SD	±SE	t	P	Remarks
Group A <i>Udvartana</i>	BT-AT in Group A	BT	73.49	9.72	3.7%	2.68	1.25	0.32	8.30	< 0.001	HS
		AT	70.81	9.72							
	BT-AF Group A	BT	73.49	9.72	3.8%	2.77	1.35	0.35	7.94	< 0.001	HS
		AF	70.73	9.94							
Group B Sauna belt	BT-AT in Group B	BT	81.56	11.76	2.5%	2.06	0.87	0.22	9.20	< 0.001	HS
		AT	79.50	11.99							
	BT-AF Group B	BT	81.56	11.76	2.8%	2.29	1.06	0.27	8.38	< 0.001	HS
		AF	79.27	11.78							

**Table 6: Comparative effect of Udvartana and Tummy trimmer on Abdominal girth**

Comparative effect of treatment on Abdominal girth; paired samples t test											
Paired samples statistics						Paired differences			Paired test findings		
Group	Comparative pairs	Pairing	Mean	±SD	Reduction in %	Mean dif.	±SD	±SE	t	P	Remarks
Group A <i>Udvartana</i>	BT-AT in Group A	BT	107.33	10.64	11.8%	12.63	5.35	1.38	9.15	< 0.001	HS
		AT	94.71	8.07							
	BT-AF Group A	BT	107.33	10.64	12.4%	13.33	8.57	2.21	6.02	< 0.001	HS
		AF	94	10.43							
Group B Sauna belt	BT-AT in Group B	BT	107.67	8.60	8.8%	9.50	4.01	1.04	9.17	< 0.001	HS
		AT	98.17	7.25							
	BT-AF Group B	BT	107.67	8.60	8.3%	8.94	4.37	1.13	7.93	< 0.001	HS
		AF	98.73	8.62							

**Table 7: Comparative effect of treatment on BMI; paired samples t test**

Comparative effect of treatment on BMI; paired samples t test											
Paired samples statistics						Paired differences			Paired test findings		
Group	Comparative pairs	Pairing	Mean	±SD	Reduction in %	Mean dif.	±SD	±SE	t	P	Remarks
Group A <i>Udvartana</i>	BT-AT in Group A	BT	29.99	4.36	3.9%	1.17	0.69	0.18	6.52	< 0.001	HS
		AT	28.83	4.31							
	BT-AF Group A	BT	29.99	4.36	4.4%	1.31	0.73	0.19	6.89	< 0.001	HS
		AF	28.69	4.32							
Group B Sauna belt	BT-AT in Group B	BT	33.94	5.66	3.1%	1.05	1.96	0.51	2.08	< 0.05	IS
		AT	32.89	6.25							
	BT-AF Group B	BT	33.94	5.66	3.3%	1.13	1.90	0.49	2.29	< 0.05	MS
		AF	32.81	6.26							

HS: Highly Significant

**Table 8: Comparative effect of treatment on BMI; Paired Sample t-test**

Comparative difference of Udaralambanatva between Group A and B; Mann-Whitney U											
Qualitative parameters	Descriptive statistics			Mann-Whitney U test ranks			Text statistics				
	Group	Mean	±SD	N	Mean Ranks	Sum of Ranks	U	Z	P	Remarks	
After treatment	Group A	1.33	0.49	15	11.00	165	45	3.35	<0.01	S	
	Group B	1.93	0.26	15	20.00	300					
After follow up	Group A	0.53	0.64	15	10.60	159	39	3.32	<0.01	S	
	Group B	1.40	0.51	15	20.40	306					

**Table 9: Comparative effect on Udaralambanatva; Wilcoxon signed ranks test**

Group	Descriptive statistics				Wilcoxon signed ranks test				Text statistics		
	Pairing	Mean	±SD	Reduction in %	R	N	Mean rank	Sum of ranks	Z	P	Remarks
Group A	<b>BT With AT In Group A</b>				R+ (BT>AT)	12	6.5	78	3.36	<0.01	S
	BT	2.20	0.561	39%	R- (BT<AT)	0	0	0			
	AT	1.33	0.488		RO (BT=AT)	3	-	-			
	<b>BT With AF In Group A</b>				R+ (BT>AF)	13	7	91	3.23	<0.01	S
	BT	2.20	0.561	76%	R- (BT<AF)	0	0	0			
	AF	0.53	0.640		RO (BT=AF)	2	-	-			
Group B	<b>BT With AT In Group B</b>				R+ (BT>AT)	8	4.5	36	2.83	<0.01	S
	BT	2.47	0.516	22%	R- (BT<AT)	0	0	0			
	AT	1.93	0.258		RO (BT=AT)	7	-	-			
	<b>BT With AF In Group B</b>				R+ (BT>AF)	13	7	91	3.36	<0.01	S
	BT	2.47	0.516	43%	R- (BT<AF)	0	0	0			
	AF	1.40	0.507		RO (BT=AF)	2	-	-			

**Table 10: Effect of Souna Belt on symptoms/Parameters of Stholya in Group B; paired samples t test**

N=15	Symptoms/Parameters	Mean BT	Mean AT/AF	% Change	Mean Dif.	±SD	±SE	t	P	Remarks
After Treatment	Udara	2.47	1.93	21.6%	0.53	0.52	0.13	4	<0.001	HS
	Abdominal girth	107.67	98.17	8.8%	9.50	4.01	1.04	9.17	<0.001	HS
	Weight	81.56	79.5	2.5%	2.06	0.87	0.22	9.2	<0.001	HS
	BMI	33.94	32.89	3.1%	1.05	1.96	0.51	2.08	<0.05	MS
After Follow up	Udara lambanatva	2.47	1.40	43.2%	1.07	0.59	0.15	6.96	<0.001	HS
	Abdominal girth	107.67	98.73	8.3%	8.94	4.37	1.13	7.93	<0.001	HS
	Weight	81.56	79.27	2.8%	2.29	1.06	0.27	8.83	<0.001	HS
	BMI	33.94	32.81	3.3%	1.13	1.90	0.49	2.29	<0.05	MS

HS: Highly Significant, MS: Moderate Significant, S: Significant

**Table 12: Effect of Souna Belt on symptoms/Parameters of Stoulya in Group A; paired samples t test**

N=15	Symptoms/Parameters	Mean BT	Mean AT/AF	% Change	Mean Dif.	±SD	±SE	t	P	Remarks
After Treatment	Udara lambanatva	2.20	1.33	39.4%	0.87	0.52	0.13	6.50	<0.001	HS
	Abdominal girth	107.33	94.71	11.8%	12.63	5.35	1.38	9.15	<0.001	HS
	Weight	73.45	70.81	3.7%	2.68	1.25	0.32	8.30	<0.001	HS
	BMI	29.99	28.83	3.9%	1.17	0.69	0.18	6.52	<0.001	HS
After Follow up	Udara lambanatva	2.20	0.53	75.8%	1.67	0.98	0.25	6.61	<0.001	HS
	Abdominal girth	107.33	94.00	12.4%	13.33	8.57	2.21	6.02	<0.001	HS
	Weight	73.49	70.73	3.8%	2.77	1.35	0.35	7.94	<0.001	HS
	BMI	29.99	28.69	4.4%	1.31	0.73	0.19	6.89	<0.001	HS

**RESULTS**

The present clinical study was conducted on a minimum of 30 patients will be taken for the study and they are randomly made into 2 equal groups.

**Group - A:** 15 Patients were subjected to *Udvardana* with *Kolakulathadi churna*.

**Group - B:** 15 Patients were subjected Tummy Trimmer procedure with Sauna Shaping Belt.

The signs and symptoms of Patients were noted before treatment, after treatment and after follow up on the basis of earlier mentioned assessment criteria. The effects of therapies are presented here according to the groups of the treatment.

### Effect on Group A

**Effect on Udaralambanatva:** The mean score of *Udaralambanatva* was reduced from 2.20 to 1.333 after 14 days of treatment with an improvement of 39.4% which was highly significant at the level of  $p < 0.001$  and it was reduced from 2.20 to 0.53 after 28 days of treatment with an improvement of 75.8% which was highly significant at the level of  $p < 0.001$ .

**Effect on Abdominal girth:** The mean score of abdominal girth was decreased from

107.33 to 94.71 after 14 days of treatment with an improvement of 11.8% which was highly significant at the level of  $p < 0.001$  and it was decreased from 107.33 to 94 after 28 days of treatment with an improvement of 12.4% which was highly significant at the level of  $p < 0.001$ .

**Effect on Weight:** The mean score of body weight was decreased from 73.49 to 70.81 after 14 days of treatment (AT) with an improvement of 3.7% which was highly significant at the level of  $p < 0.001$  and it was decreased from 73.49 to 70.73 after 28 days of treatment (AF) with an improvement of 3.8% which was highly significant at the level of  $p < 0.001$ .

**Effect on BMI:** The mean score of BMI was decreased from 29.99 to 28.83 after 14 days of treatment (AT) with an improvement of 3.9% which was significant at the level of  $p < 0.01$  and it was decreased from 29.99 to 28.69 after 28 days of treatment (AF) with an improvement of 4.4% which was significant at the level of  $p < 0.01$ .

### Effect on Group B

**Effect on Udaralambanatva:** The mean score of *Udaralambanatva* was reduced from

2.47 to 1.93 after 14 days of treatment with an improvement of 21.6% which was highly significant at the level of  $p < 0.001$  and it was reduced from 2.47 to 1.40 after 28 days of treatment with an improvement of 43.2% which was highly significant at the level of  $p < 0.001$ .

**Effect on abdominal girth:** the mean score of abdominal girth was decreased from

107.67 to 98.17 after 14 days of treatment with an improvement of 8.8% which was highly significant at the level of  $p < 0.001$  and it was increased from 107.67 to 98.63 after 28 days of treatment with an improvement of 8.3% which was highly significant at the level of  $p < 0.001$ .

**Effect on weight:** the mean score of body weight was decreased from 81.56 to 79.50 after 14 days of treatment (AT) with an improvement of 2.5% which was highly significant at the level of  $p < 0.001$  and it was decreased from 81.56 to 79.27 after 28 days of treatment (AF) with an improvement of 2.8% which was highly significant at the level of  $p < 0.001$ .

**Effect on BMI:** the mean score of body mass index was decreased from 33.94 to 33.89 after 14 days of treatment (AT) with an improvement of 3.1% which was significant at the level of  $p < 0.01$  and it was increased from 33.94 to 33.81 after 28 days of treatment (AF) with an improvement of 3.3% which was significant at the level of  $p < 0.01$ .

### Discussion on *Sthoulya -Udara Lambanatva*

In present era, Obesity/ *Sthoulya* is a burning issue, but it is not being easy to burn it. Abdominal obesity also known as central obesity<sup>[6]</sup>, when excessive fat around the abdomen has built up to an extent that it is likely to have a negative impact on health. With all kinds of foods becoming readily available at any times while humans are sedentary, intake of higher energy intake and less energy expenditure.

### Discussion on Drug

*Kolakulathadi churna*, ingredients so formed that, most of them are with *Ushna Virya* and *Laghu Guna*, *Rooksha* property. AB sauna shaping belt made of neoprene material. Neoprene material of sauna belt is not water absorbent and it stimulates sweat secretion in other words it supports perspiration

**Discussion on Dose-** As we are using it externally, dose flexibility is allowed and quantity sufficient needed to that respective patient covering the area of abdomen kept in mind and used is given.

**Effect on *Dushya*:** *Rasadi dhatu*, majorly *Mamsa* and *Meda* are the main *Dushyas* connected with *Sthoulya*. *Kolakulathadi churna* contains the drugs which are more of *Laghu*, *Ruksha*, *Tikshna* and *Sukshma gunas*. By virtue of these qualities the potency of drugs helps in attaining *Medovilayana*.

**Effect on *Srotas*:** *Srotas* get cleared due to the properties like *Sara* and *Sukshma Guna*. These serves better to open the *Srotas* which are under obstruction. By the virtue of *Pachana* and *Vilayana* properties, finally removes the *Upalepatwa* of the *srotases*.

### Discussion on Procedure

***Udvartana*:** The effect of rubbing upon muscle tissue is of vast importance. This effects removal of fatigue products. Muscles in action exert a kind of massage up on each other. Ordinary movements of the voluntary muscle are a means of accelerating the blood by their alternate contractions and relaxations. At every contraction blood is pressed out of the muscle, at the same time it receives an impulse to return to the heart, while during each relaxation fresh blood comes to the muscle. Muscular fatigue from over exertion is relieved by massage. Toxic materials will be removed from the tissues in order

to restore the normal functions of the body and this can be accomplished by rubbing.

Influence of rubbing upon the circulation of fluid is also of great importance. Both the venous and lymphatic circulations are accelerated towards the heart. Deep manipulations cause the veins and lymphatic to be mechanically emptied and the fluid cannot return on account of the valves within the vessels. More space is thus made for blood returning from the deeper parts. The rubbing may be said to act both by pressure and by suction. Massage diminishes the blood pressure without increasing the activity of the heart. But the blood vessels are relaxed, distended and stretched by this.

**Tummy trimmer:** Neoprene cloth is used to prepare the belt with which includes electrical circuit, power supply is given with which heat is generated and that heat produces act of perspiration as per the physiology of sweating.

### CONCLUSION

Here *Udvardana* being selected with *Kolakulathadi churna*, in its most of the drugs having *Kaphameda vilayana* and *Ruksha* property. Hence the drug *Kolakulathadi churna* is suitable and proved as standard in the management of *Sthoulya/Udaralmbanatva*. On the other side Tummy trimmer (AB Sauna shaping belt) is claiming to reduce fat locally, realizing ought to be the need of the hour study was chosen.

Statistically 8 patients got complete remission, but in both the groups there was no

marked variant difference after treatment. Whereas after follow up in both the groups, marked results were appreciated which again proves that *Oushadi* alone or procedure alone cannot take care *Sthoulya* also *Ahara* and *Vihara* are also plays importance.

Both the procedures are safe and no severe complications were observed. Tummy trimmer is independent procedure need not need any extra manpower. Whereas *Udvardana* though found to be better than group B in this study, but it is tedious and it should be methodically and meticulously performed.

At the same time we would like to quote that tummy trimmer appears to be more patient and privacy friendly than *Udvardana* shown better than Tummy Trimmer.

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#### Cite this article as:

Manjunath Akki, Suresh Hakkandi, Abid Hussain. A Comparative Clinical Study on the Effect of Udvardana and Tummy Trimmer in Udara- Lambanatva w.s.r. Central Obesity. International Journal of Ayurveda and Pharma Research. 2019;7(1):32-38.

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

#### \*Address for correspondence

**Dr. Manjunath Akki**

Professor & Guide,  
Dept of Panchakarma, S J G  
Ayurvedic Medical College, Koppal,  
Karnataka.

Email: [drmanju78@gmail.com](mailto:drmanju78@gmail.com)

phone: 8123044125 / 9886325907

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