

A COMPARATIVE STUDY TO EVALUATE THE EFFICACY OF *BHADRADI ASTHAPANA BASTI* WITH *LEKHANA BASTI* IN THE MANAGEMENT OF *STHAULYA* (OBESITY)

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Article Received on
25 August 2022,

Revised on 15 Sept. 2022,
Accepted on 05 October 2022

DOI: 10.20959/wjpr202214-25762

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ABSTRACT

Sthaulya is a common metabolic & lifestyle disorder caused by unhealthy diet and no physical activities. The etiology, pathogenesis, and treatment of *Sthaulya* is similar to Obesity. In this era where more than 50% of human beings suffered from this major ailment which causes various diseases like diabetes, hypertension etc. as well as psychological issues such as low self-esteem and lack of confidence. In *Ayurvedic* texts, *Sthaulya* is described under *Santarpanajanya Roga*. *Sthaulya* comes under the heading of *Medoroga* which results due to dysfunction of *Medadhatvagni*. According to Modern, Obesity is a condition in which excess body fat cause negative effect on health. The treatment for obesity in modern science mainly consists of dieting

and exercise. In *Ayurveda*, Single or double therapy was done previously in the management of *Sthaulya* i.e, *Vaman*, *Virechana* & *Lekhana Basti*. In the present study, *Lekhana Basti* and *Bhadradi Asthapana Basti* were selected for *Sthaulya*. *Basti* therapy is considered *Ardhachikitsa* among all therapeutic measures and some physicians accept it as treatment because *Basti* has a vast field of action. *Sthaulya* is *Kapha-Meda Pradhana Vyadhi* with *Medavritta Vata*. The drugs of *Bhadradi Basti* have *Ushna Virya* and *Kapha-Vatahara* property. So, it regulates the *SamanaVayu* and restores the "*Jatharagni*" to normal, while also activating the *VyanaVayu* to break the *Srotosanga* and synergize the activity

of *Bhadradi Basti* at the cellular level. Thus it helps to break the pathogenesis of the disease. Considering the above facts case study was planned to evaluate the comparative effectiveness of *Bhadradi Asthapana Basti* with *Lekhana Basti* in the management of *Sthaulya* (obesity) in 66 clinically diagnosed and confirmed cases of *Sthaulya* from OPD of Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Delhi.

KEYWORDS: *Sthaulya, Obesity, Meda dhatu, Bhadradi Asthapana basti, Lekhana Basti* .

INTRODUCTION

Sthaulya is blessing of modern age of machine and materialism, which occurs due to lack of physical activities, increase intake of food and change in dietetic habits. A person having heaviness and bulkiness of the body, due to accumulation of fat especially in abdominal and hip region, is termed as *Sthaulya* and the state of *Sthula* is called "*Sthaulya*". In *Sutra Sthana*, *Acharya Charaka* described eight *Asthaninditha Purusha* ^[1] among which *Sthaulya* has been most emphasis. *AtiSthaulya* is mentioned among twenty *Kaphaj NanatmakjVikara*.^[2] Impaired metabolism of *MedaDhatu*^[3] (Adipose tissue) is the main cause of *Sthaulya Roga*, that's why it is also known as *MedoRoga*. It is mentioned among *Santarpana janita Vyadhi*^[4] in *Ayurvedic* text. Though it is *Santarpana janita Vyadhi* only *Aptarpana Chikitsa* is not sufficient for the management of *Sthaulya*. In *Sthaulya* etiological factors mainly vitiate *Meda* – *Kapha*, and *Vata* get *Avarita* by excessive *Meda*. Thus if we used only *Aptarpaka Dravya* it increases the vitiated *Vata*. Therefore, treatment should be planned considering vitiated *Vata*, *Meda* and *Kapha*. It is a difficult task to reduce *Meda* and to pacify the *Samana Vata* at same time. Panchkarma can provide better solution to this problem.

The etiology, pathogenesis and treatment of *Sthaulya* is similar to Obesity. According to ICMR-INDIAB study 2015, prevalence rate of obesity is 11.8%.^[5] According to Modern Science, Obesity happens when there is excess of calories uptake and less energy expenditure for a long period of time. Obesity manifests as symptoms such as shortness of breath, snoring, excessive sweating, back and joint discomfort, and the inability to do even mild physical exercise without becoming exhausted.^[6] This condition also includes psychological issues such as low self-esteem and lack confidence. Long-term morbid obesity causes lots of new health issues, including diabetes, hypertension, osteoarthritis, and stroke. Obesity is gradually becoming a worldwide issue.

The treatment for obesity in modern science mainly consists of dieting and physical exercise. Diet plans may help people to lose weight in the short term, but maintaining that weight loss is generally challenging, and it often involves adopting necessary exercise and a lower-calorie diet a permanent part of one's lifestyle.^[7]

In *Ayurveda* more attention are given on lifestyle modifications according to different places, seasons, and even daily regimen (*Ahara, Vihara, Nidra*) to maintain health of a healthy individual and to cure the disease without any side effect. This is the ideal treatment for obesity. Due to these reasons, the *Ayurveda* system of medicine must have the role in management of obesity without any side effects. So, the aim of this study is to manage the obesity by using cheap, easily available and safe *Ayurveda Panchkarma* procedures and *Ayurveda* medicines. *Lekhana Basti* and *Bhadradi Asthapana Basti*^[8] according to *Ayurveda* texts are used in this study. Primary aim of this thesis is to evaluate the comparative efficacy of *Bhadradi Asthapana Basti* with *Lekhana Basti*^[9] in the management of *Sthaulya*.

AIM AND OBJECTIVES

Aim

- To study the efficacy of *Bhadradi Asthapana Basti* in comparison with *Lekhana Basti* in the management of *Sthaulya*.

Objectives

1. To evaluate the efficacy of *Bhadradi Asthapana Basti* in the management of *Sthaulya*.
2. To evaluate the efficacy of *Lekhana Basti* in the management of *Sthaulya*.
3. To compare the efficacy of *Bhadradi Asthapana Basti* with *Lekhana Basti* in the management of *Sthaulya*.

MATERIAL AND METHODOLOGY

Research is essential for diagnosis of disease, development of new treatment and gives the latest information. It often lead to effective treatment that helps people to improve quality of life. Keeping this in mind the present study was taken into consideration. A case study was planned A Comparative study to evaluate the efficacy of *Bhadradi Asthapana Basti* with *Lekhana Basti* in the management of *Sthaulya* (Obesity)”. in randomly selected 66 clinically diagnosed and confirmed cases of *Sthaulya* (Obesity) from OPD of Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, New Delhi.

PLAN OF STUDY

Pre-Clinical screening: Complete medical history and related Diagnostic tests of patients was done

Clinical screening: A detailed case history proforma was specially prepared for this purpose. All the following mentioned points were recorded in this proforma before the initiation of the trial. A total of 70 patients suffering from *Sthaulya* (Obesity) fulfilling the inclusion criteria were taken for the study and 66 patients completed the trial.

Eligibility Criteria

Inclusion criteria

- Patients of age group 20 - 50 years.
- Patients of either sex – male or female
- Patients with BMI 25-40 kg/m²

Exclusion criteria

- Patients of *Sthaulya* with severe complications like Cerebral vascular diseases, Ischemic heart diseases will be excluded.
- Patients having any renal, hepatic or cardiac involvement.
- Pregnant or lactating women.
- Patient having any malignancy.
- All those people who are unfit for basti as per *Shashtra - Pandu, Unmada, Visuchika, Alasaka, Kustha, Hikka, Svasa, Kasa, Bala, Vriddha, Chidrodera, Murchita* etc.

Withdrawal criteria

- If patients willing to quit in between project will be allowed to quit and will be replaced.
- If any acute illness or complications develops, patient will be treated accordingly and will be excluded from the study.

PROCEDURE PROTOCOL

Patients will randomly divide and studied under two Groups viz. Group A and Group B irrespective of religion, sex, occupation, cast etc.

Group A – *Bhadradi Asthapana Basti* with *Murchit Tila Tail Anuvasana Basti* were given to patient 2 times in the form of *Kala Basti*.^[10]

Group B – *Lekhana Basti* with *Murchit Tila Tail*^[11] *Anuvasana Basti* were given to patient 2 times in the form of *Kala Basti*.

KALA BASTI SCHEDULE

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16
A	A	N	A	N	A	N	A	N	A	N	A	N	A	A	A

A – Stands for *Anuvasana Basti*

N - Stands for *Niruha / Asthapana Basti*

Time of administration of *Bhadradi Asthapana Basti* / *Lekhana basti*– Empty stomach in the morning.

Quantity of administration- 450ml

Time of administration of *Murchit Tila Tail Anuvasana Basti*- After taking light diet in the afternoon.

Quantity of administration- 120ml

Frequency – Once in a day

- Duration of clinical trial and follow up study**

Total Duration of trial: 64 days for each Patient.

Follow up screening: Initial assessment – 0 day, then on 16th, 32nd, 48th and 64th day done to evaluate their clinical status and to observe the effect or adverse effect of treatment.

DIET AND EXERCISE

Patients of both the group have been advised to adhere to the *Pathya Ahara* and *Vihara* prepared according to the principals of *Ayurveda* and caloric value calculations and food items and caloric demand of the individual. Beside this patients is advised to do exercise or *yogasana* and walking for half an hour daily.

ASSESSMENT CRITERIA

Patient will be assessed according to the Subjective and Objective criteria.

SUBJECTIVE CRITERIA

Sign and symptoms of *Sthaulya* which are subjective in nature described in *Ayurveda* will be used for symptomatic evaluation for which scoring pattern will be adopted.

1. *Chal Sphik-Udar-Stana*^[12] (Table No. - 1)

Sr. No.	Features	Score
1	Absence of Chalatva	0
2	Little visible movement after fast movement	1
3	Little visible movement after moderate movement	2
4	Movement after mild movement	3
5	Movement even after changing posture	4

2. *Daurbalya* (Table No. - 2)

Sr. No.	Features	Score
1	Feeling of well being	0
2	Tired after doing strenuous	1
3	Tired after doing moderate physical activity but can perform daily chores	2
4	Perform daily chores with difficulty	3
5	Extreme tired to carry out daily routine work	4

3. *Atinidra* (Table No. - 3)

Sr. No.	Features	Score
1	Sleep upto 6-8 hrs/day	0
2	Sleep upto 8-10 hrs/day	1
3	Sleep upto 10-12 hrs/day	2
4	Sleep upto 12-14 hrs/day	3
5	Sleep upto >14 hrs/day	4

4. *Utsaha Hani* (Table No. - 4)

Sr. No.	Features	Score
1	No alasya during working time	0
2	Doing work with desire with late initiation	1
3	Doing work without desire with mental pressure	2
4	Not starting any work on his own responsibility and doing little work very slowly	3
5	Don't want to work even in pressure and does not show any initiation for work	4

5. *Ati-Pipasa* (Table No. - 5)

Sr. No.	Features	Score
1	Drinks about 1liter water daily	0
2	Drinks about 1-1.5liter water daily	1
3	Drinks about 1.5 -2 liter water daily	2
4	Drinks about 2-2.5 liter water daily	3
5	More than 3 liter water daily	4

6. Ati- Kshudha (Table No. – 6)

Sr. No.	Features	Score
1	Becomes hungry after about 5 hrs	0
2	Becomes hungry after about 4 hrs	1
3	Becomes hungry after about 3 hrs	2
4	Becomes hungry after about 2 hrs	3
5	Becomes hungry after about 1 hrs	4

7. Swedadhikya (Table No. – 7)

Sr. No.	Features	Score
1	Normal perspiration	0
2	Mild perspiration after doing exertion	1
3	Increased perspiration after doing little exertion	2
4	Profuse perspiration after doing little exertion	3
5	Perspiration without exertion	4

8. Daurgandhya (Table No. – 8)

Sr. No.	Features	Score
1	Absence of bad odour	0
2	Occasionally bad odour removed after bath	1
3	Persistent bad odour limited to closed areas difficult to suppress with deodorants	2
4	Persistent bad odour limited felt from long distance not suppressed with deodorants	3
5	Persistent bad odour limited felt from long distance not tolerated even by patient himself	4

9. Anga Gauravata (Table No. – 9)

Sr. No.	Features	Score
1	No heaviness in the body	0
2	Feels heaviness in the body but doesn't hamper routine work	1
3	Feels heaviness in the body which hampers routine work	2
4	Feels heaviness in the body which hampers movement of the body	3
5	Feels heaviness with flabbiness in all over body which causes distress to the patient	4

10. Snighadgatra (Table No. – 10)

Sr. No.	Features	Score
1	Normal body lusture	0
2	Oily lusture of body in summer season	1
3	Oily lusture of body in dry season	2
4	Excessive oily lusture of body in the dry season which can be remove with difficulty	3
5	Persistent and profuse stickiness in all over body	4

OBJECTIVE CRITERIA**A. Body Weight****B. Body mass index (BMI)^[13] scale (Table No. – 11)**

Classification	BMI(kg/m ²)
Underweight	<18.50
Healthy weight	18.50-24.99
Overweight	25.00-29.99
Obesity class I	30.00-34.99
Obesity class II	35.00-39.99
Obesity class III	≥40.00

C. Circumference of following region's

1. **Mid -arms** – Middle of the arm between the shoulder joint & the elbow joint
2. **Neck**
3. **Chest** – At the level of the nipples in normal expansion.
4. **Abdomen belly**
5. **Waist** – At the level of umbilicus
6. **Hip-** At the level of highest point of distension of the buttocks
7. **Mid- thigh** – Middle of thigh between hip joint & knee joint

D. Pinch Test will be done on the following parts of the body with the help of Skinfold Calipers –

- **Back of the arm(Triceps)**
- **Front of the arm(Biceps)**
- **Shoulder blade(Subscapular)**
- **Waist(Suprailiac)**

E. Waist – Hip Ratio. (Table No. – 12)

Indicator	Cut-off points	Risk of metabolic complication
Waist circumference	>94cm(M), >80cm(W)	Increased
Hip circumference	>102cm(M), >88cm(W)	Substantially increased
Waist-hip ratio	≥0.99cm(M), ≥0.89cm(W)	Substantially increased

The assessment will be done before and after the treatment and during the follow up period.

Criteria for overall Assessment of therapy

Patients who receive *Shodhana therapy* shows changes in subjective and objective parameters were monitored. After the experiment was completed, the total effect of therapy on each patient was assessed.

Routine examination and assessment

The full details of history and physical examination of patient were recorded as per the clinical and physiological assessment were done before treatment, during treatment and at the end of the treatment and results were analyzed with appropriate statistical tests.

STATISTICAL ANALYSIS

The information gathered on the basis of observation made about various parameters was subjected to statistical analysis in term of Mean, Standard Deviation and Standard error. **IBM SPSS** software was used.

For calculating the intra-group comparison, '**Wilcoxon sign rank test**' was applied for subjective parameters and '**Repeated measure Anova test**' for Objective parameters.

For calculating the Inter group comparison, '**Mann Whitney test**' was applied for subjective parameters and '**Independent Sample T Test**' for Objective parameters.

The results were calculated.

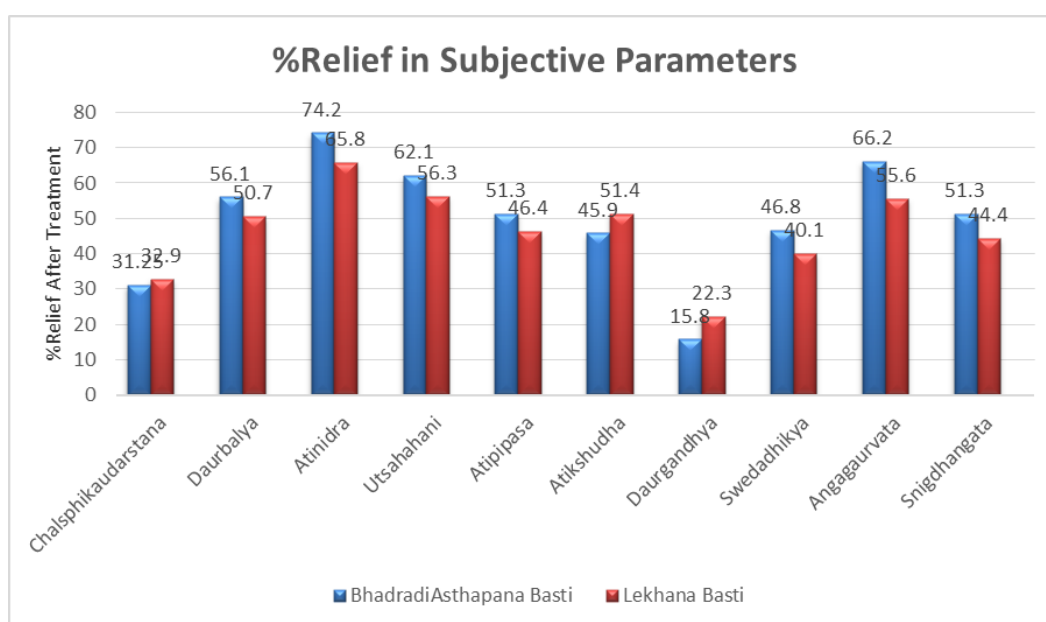
Not significant : $P > 0.05$

Significant : $P < 0.05$

Highly significant : $P > 0.01$, $P < 0.001$

OBSERVATION AND RESULTS

Overall Effect of therapy

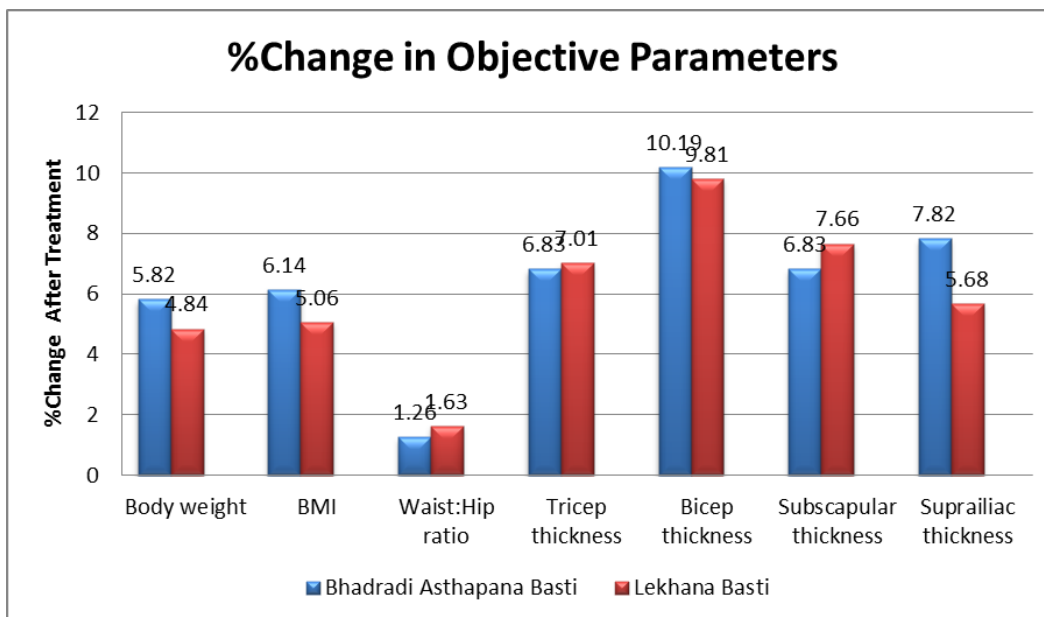


Graph No. 1: Showing % Relief in Subjective parameters.

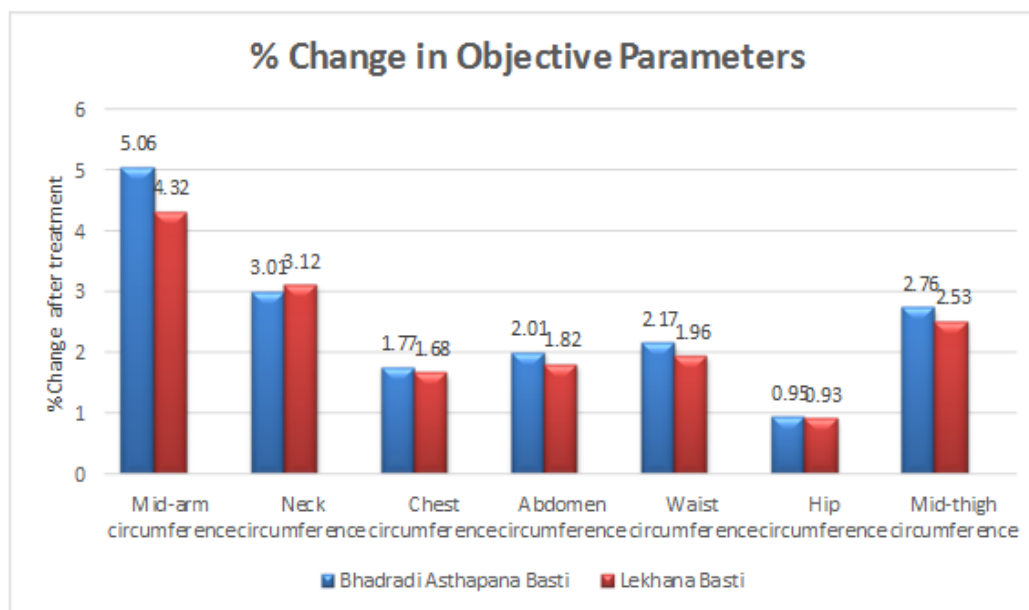
In the case of symptoms such as *Chala SphikaUdaraStana*, *Daurbalya*, *Ati Nidra*, *Utsaha Hani*, *Ati Pipasa*, *Ati Kshudha*, *Daurgandhya*, *Swdadhikya*, *Angagauravata* and *Snigdhagata* graph has shown significant relief in both groups. However, no significant difference was observed in the subjective parameters between both the groups at any of the assessment visits. Graph shows % relief in *Bhadradi Asthapana* Group on *Chala SphikaUdaraStana* symptom of obesity is 31.23 and *lekhana basti* group is 32.9% relief on *AtiNidra* in *Bhadradi Asthapana Basti* group was better than in *Lekhana Basti* group (74.2% v/s 65.8%). Better effect of *Bhadradi Asthapana Basti* was observed as compared to *Lekhana Basti* on *Daurbalya* after treatment (56.1% v/s 50.7%). Better effect of *Bhadradi Asthapana Basti* was observed as compared to *Lekhana Basti* on *UtsahaHani/ Alasya* after treatment (62.1% v/s 56.3%). It was observed that effect of the treatment was slightly better in *Lekhana Basti* group as compared to *Bhadradi Asthapana Basti* (51.4% compared to 45.9%) on *Atikshudha* symptom. Effect of the treatment on *Atipipasa* was slightly better in *Lekhana Basti* group as compared to in *Bhadradi Asthapana Basti* group (% change/relief was 51.3% as compared to 46.4%). Similarly effect of the treatment on *Daurgandhya* was slightly better in *Lekhana Basti* group as compared to in *Bhadradi Asthapana Basti* group (% relief was 22.5% as compared to 15.8%). Effect of the treatment on *Swedadhikya* was better in *Bhadradi Asthapana Basti* group (% relief = 46.8%) as compared to in *Lekhana Basti* group (% relief = 40.1%). Effect of the treatment on *Anga Gaurvata* was better in *Bhadradi Asthapana Basti* group (% relief = 66.2%) as compared to in *Lekhana Basti* group (% relief = 55.6%). Effect of the treatment on *Snigdhagatra* was better in *Bhadradi Asthapana Basti* group (% change = 51.3%) as compared to in *Lekhana Basti* group (% change = 44.4%). It is hence concluded that *Bhadradi Asthapana Basti* and *Lekhana Basti* both are significantly effective to reduce all subjective parameters in *Sthaulya* (Obesity).

Average % Relief in Subjective Parameters

In Group A, Average % Relief was 50.95% and in Group B, Average % Relief was 46.59%. . Hence **according to % relief in symptoms**, *Bhadradi Asthapana Basti* is significantly effective than *Lekhana Basti* in *Sthaulya* (Obesity).



Graph No. 2: Showing % Change (Relief) in Objective Parameters.



Graph No. 3: Showing % Change (Relief) in Objective Parameters.

In the case of all parameters such as Body weight, BMI, Waist- Hip Ratio, Pinch Test (Tricep, Bicep, Subscapular, Waist Skinfold thickness) Mid-Arm circumference, Neck circumference, Chest circumference, Abdomen circumference, Waist Circumference, Hip measurement, Mid-Thigh Circumference, graph has shown significant difference between BT and AT symptom scores. However, no significant difference was observed in the objective parameters between both the groups at any of the assessment visits.

Effect of *Bhadradi Asthapana Basti* on reduction in body weight was more as compared to *Lekhana Basti* (% change was better 5.82% v/s 4.84%). *Bhadradi Asthapana Basti* Group showed a slightly better reduction in BMI (% change = 6.14%) as compared to *Lekhana Basti* Group (% change = 5.06%). In *Lekhana Basti* Group slightly better results were obtained (% change = 1.63%) as compared to in *Bhadradi Asthapana Basti* Group on Waist:Hip Ratio (% change = 1.26%). Change was slightly better in *Lekhana Basti* Group (% change = 7.01%) as compared to *Bhadradi Asthapana Basti* Group on Tricep Skinfold thickness(% change = 6.83%). In *Bhadradi Asthapana Basti* Group change in bicep thickness after 64 days of treatment was slightly better (10.19%) as compared to in *Lekhana Basti* Group (9.81%). A slightly better change in *Lekhana Basti* Group was observed as compared to *Bhadradi Asthapana Basti* Group (7.66% v/s 6.83%) on Subscapular thickness. A slightly better reduction in Waist thickness was observed in *Bhadradi Asthapana Basti* Group in which % change at day 64 was 7.82% as compared to 5.68% in the *Lekhana Basti* Group. Group a slightly better effect of treatment was observed in Mid-arm circumference as compared to *Lekhana Basti* Group (5.06% v/s 4.32%). In both the groups it was observed that change in neck circumference after 64 days of treatment was almost similar. Change in chest circumference was also found to be similar after 64 days of treatment in both the groups. Change in abdominal belly circumference was better in *Bhadradi Asthapana Basti* Group (2.01%) as compared to in *Lekhana Basti* Group (1.82%). *Bhadradi Asthapana Basti* showed a better reduction in waist circumference as compared to *Lekhana Basti* (2.17% v/s 1.96%). It was observed, that change in hip circumference after 64 days of treatment was almost similar in both the groups (0.95% v/s 0.93%). Percentage change at day 64 w.r.t baseline was almost similar in both the groups (2.76% in *Bhadradi Asthapana Basti* Group v/s 2.53% in *Lekhana Basti* group) in Mid- Thigh Circumference. It is hence concluded that *Bhadradi Asthapana Basti* and *Lekhana Basti* both are significantly effective to reduce all objective parameters in *Sthaulya* (Obesity).

Average change in Objective parameters

Average change in objective parameters is more in Group A than in Group B. Hence **according to Average change in parameters, *Bhadradi Asthapana Basti*** is significantly effective than *Lekhana Basti* in *Sthaulya* (Obesity).

DISCUSSION

After completion of clinical trial all data was collected in Case Record Forms. Collected data was tabulated, classified and presented in the forms of tables and graphs. Data was then analyzed statistically in order to draw interference. Symptom score grades of *Chala Sphika Udara Stana*, *Daurbalya*, *Ati Nidra*, *Utsaha Hani*, *Ati Pipasa*, *Ati Kshudha*, *Daurgandhya*, *Swdadhikya*, *Angagauravata* and *Snigdhangata* were decreased after treatment in Group A as well as in Groups B. It means both treatments have reduced *Chala Sphika Udara Stana*, *Daurbalya*, *Ati Nidra*, *Utsaha Hani*, *Ati Pipasa*, *Ati Kshudha*, *Daurgandhya*, *Swdadhikya*, *Angagauravata* and *Snigdhangata* in *Sthaulya* (Obesity). When compared, Average % Relief was 50.95% in group A and Average % Relief was 46.59% in Group B. Hence according to % relief in symptoms, *Bhadradi Asthapana Basti* is significantly effective than *Lekhana Basti* in *Sthaulya* (Obesity). Both treatments have decreased Body weight, BMI, Waist- Hip Ratio, Pinch Test (Tricep, Bicep, Subscapular, Waist Skinfold thickness) Mid-Arm circumference, Neck circumference, Chest circumference, Abdomen circumference, Waist Circumference, Hip measurement, Mid-Thigh Circumference. Average change in objective parameters is more in Group A than in Group B. Hence according to Average change in parameters, *Bhadradi Asthapana Basti* is significantly effective than *Lekhana Basti* in *Sthaulya* (Obesity). The drugs of *Bhadradi Asthapana Basti* have dominance of *Katu-Tikta-Kashaya Rasa*, *Laghu-Ushna- Tikshna-Shukshma-Ruksha Guna*, *Katu Vipaka*, *Ushna Virya* and *Kapha-Vatahara Guna*. *Katu*, *Tikta*, *Kashaya Rasa* reduces *Kleda* hence they cause wasting of all the *Dhatus*, which result as emaciation. It also helps with *Lekhana Karma* by reducing *Kapha-Meda-Sweda Dushti*. Moreover *Tikta-Kashaya Rasa* reduces *Pitta Dushti* also. *Laghu Guna* is a *Vayu*, *Agni* and *Akasha*, *Mahabhuta Pradhan*. It causes *Krishata* and *Dhatukshya*. Reduction of over nourished *Dhatu* is the main aim of *Lekhana Karma* which helps in *Sthaulya*. *Tikshna Guna* is dominated by *Agni Mahabhuta* and it break downs the *Dosha Sanghata* in *Srotas*, thus it help in removing *Sanga* in *Srotas*. By removing *Sanga* it keeps *Sanchrana Marga* of *Vyana Vayu* in normal condition. Thus *Vyana Vayu* can transport the nutrient to its related *Dhatu* and *Uttrotar Dhatu Nirmana* takes place properly. As a result, the process of *Medovridhhi* is stopped. As a result, *Bhadradi Basti* regulates the *Samana Vayu* and restores the "*Jatharagni*" to normal, while also activating the *Vyana Vayu* to break the *Sroto sanga* and synergize the activity of *Bhadradi Basti* at the cellular level. Thus it helps to break the pathogenesis of disease.

CONCLUSION

Sthaulya (Obesity) is very prevalent disease in today's world which is causing physical, mental, and social impact on the suffering individual. It is common in middle age, females, married woman, housewife and educated people. Administration of *Lekhana Basti* as well as *Bhadradi Asthapana Basti* showed significant results in the management of *Sthaulya* (obesity) independently but when both the groups are compared, the results were statistically insignificant, means both treatments are having similar results. Clinically, *Bhadradi Asthapana Basti* is found slightly better than *Lekhana Basti* in reducing the parameters of *Sthaulya*. Average relief in parameters of *Sthaulya* (obesity) found more better in *Bhadradi Asthapana Basti* (50.95%) than *Lekhana Basti* (46.59%). Both the groups were found equivalently significant when compared Statistically in reducing Body weight, BMI and other features of *Sthaulya*. There is further scope for new researchers to compare one *Shodhana Chikitsa* given as adjuvant therapy along with *Shamana Chikitsa* with only *Shamana Chikitsa*.

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