

# Management of Sthaulya (Obesity) Through Lekhana Basti Followed by Pathya-Apathya and Yogasana - A Case Study

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**Abstract:** Obesity is often expressed in terms of body mass index (BMI). Obesity is perhaps the most prevalent as a chronic disease, prevalent in both developed and developing countries, and affecting children as well as adults. The adverse effects of obesity are hypertension, hyperlipidaemia and glucose intolerance, while coronary heart disease and the long-term complications of diabetes, such as renal failure mainly caused by lack of sleep and lifestyle changes. In Ayurveda, sthauilya is considered as a santarpanjanya, bahudoshjanitajvyadhi. Sthauilya is one of the best examples of disease caused due to pramanatahavruddhi of the dhatu, medodhatu is particular in this case. Shodhana therapy have been mentioned for the management of the sthauilya. Different shodhana modalities have been mentioned like Lekhana Basti. This is single case study on effective management of sthauilya. Treatment was planned as administering Anuvasana and Niruha Basti alternatively for 16 days followed by Pathya-apathya and Yogasanas for 15 days. After completion of treatment patient was found to have significant relief in sign and symptoms of sthauilya and reduce a 7.5 kg of body weight. So, Lekhana Basti, Pathya-apathya and Yogasana was selected for the present study with an aim to assess its effect in the management of Obesity.

**Keywords:** Sthauilya, Obesity, Lekhana Basti, Pathya-apathya, Yogasana

## 1. Introduction

Obesity can be seen as the first wave of defined cluster of non-communicable diseases called 'New World Syndrome' creating enormous socio-economic and public health problems affecting every region of the globe [1]. First obesity was identified as an affluent society health problem but now it is affecting even the middle and the poor class [2]. In 1997 the WHO formally recognised obesity as a global epidemic WHO estimates that, 39% of adults aged 18 years and over were overweight in 2016 and 13% were obese, with higher rates among women than men and the rate of obesity also increases with age [3]. Several lifestyles alterations result from this transition; changes from their traditional eating habits, exposure to severe stress and decreased physical activity [4]. Dietary deficits and excesses and lifestyle changes that accompany industrialization and urbanization with economic development make significant contribution to conditions like obesity, diabetes mellitus, hypertension, cancers, coronary heart disease, stroke, alcoholism, endocrine disorders, mental health issues, arthritis, etc [5]. Some ethnic groups are generally susceptible to metabolic syndrome due to the accumulation of fat that is obesity [6].

A person having heaviness and bulkiness of the body due to extensive growth of medodhatu especially in the udaradi region is termed 'sthula', and the state (bhava) of sthula is called 'sthauilya'[7],[8]. Eating and physical exercise are behavioural activities and so controlled by willpower. Hence, sthauilya is behavioural disorder also. In the present century, there have risen in mechanization in industries, homes and for transport. This has greatly reduced the need

for use of human muscle power. So, most of the sthauilya reduction regime should stress on less food intake. This may be simple in theory, but difficult in practice. Hence 'Sthauilya' is a 'Nindit' vyadhi but the demand of the hour is to treat him with positive multidimensional approach [9].

Modern drugs for treatment of obesity have list of its side effects along with high cost on the contrary, Ayurveda is not only a Medical Science but also a way of healthy living. Apart from prescribing treatment to various chronic and complex diseases, Ayurveda also emphasises on an ideal method of healthy living[10].

## 2. Material and Method

**Table 1:** Lekhana Basti Contents [11]

Sr.No.	Contents	Quantity
1.	Triphala kwath	300ml
2.	Gomutra	100ml
3.	Madhu	30ml
4.	Yavakshara	2gm
5.	Ushakadi gana dravya (shilajit, kasisa, tuttha bhasma, hingu, vacha)	5gm
6.	Tila taila	50ml
7.	Saindhava	12gm

Patients with classical sign and symptoms of Sthauilya (Obesity) was selected from the O.P.D. of Swasthavritta and yoga of M. A. Podar Ayurvedic Hospital, Mumbai. The patient was thoroughly questioned and examined on the basis of the proforma, signs and symptoms were carried out to confirm the diagnosis.

**Aim and Objective**

To assess the efficacy of Lekhana Basti followed by Pathya-apathya and Yogasana in the management of Sthaulya.

**A Case Study**

Here presenting a case of 42 years old female patient. She came to M.A.Podar OPD on 26 th March 2019 and diagnosed as patient of obesity. She was not suffering from any other underlying systemic pathology. Family history of patient was negative for obesity. The patient presented with symptoms like gradually weight gain with onset in the past 2 years, external dyspnoea and excessive perspiration. Symptoms like Bhara Vriddhi (weight gain), Chalaspi Udara, Stana (Excessive movement of abdomen, breast and gluteal region) Atikshudha (excessive appetite), Swedabhadha (excessive perspiration), Daurbalya (weakness), Durgandhya (foul smell) were found.[12] On examination as objective criteria her weight was 78.00kg and BMI were 32.9. So, on the basis of weight, BMI and classical symptomatology she was diagnosed as a patient of grade – 1 obesity (Sthaulya). She did not take any medicine previously for obesity. Ayurvedic treatment was given as follows:

**Treatment Modality****Method of Lekhana Basti**

The duration of lekhan basti was 16 days. In this course 10 anuvasana basti with tila taila (80ml in single dose) and 6 niruha bastis with lekhan basti were administered. The anuvasana basti was administered, on that morning after evacuation of bowels and bladder, patient was advised to take light food at 9.30 am. then patient was subjected for abhyanga to nabhi, kati, prusta, and parshwa with tila taila and sarvanga nadi sweda for about ten minutes. Then the patient was asked to lie down on the table in the left lateral position, with the left knee extended, right limb flexed and resting on the left knee. The head was supported by the patients left hand. The plastic glycerine enema syringe, with a capacity of 100ml and plane rubber catheter of size no.12 were used for the purpose of anuvasana basti. The anal orifice and the inserting end of the syringe were smeared with oil for lubrication. The enema syringe filled with tila taila was gently inserted to about 4 inches in to the rectum parallel to the spinal column. Simultaneously the patient was asked to take deep breaths. The enema syringe was removed with some of the drug still remaining in the syringe to prevent the entry of air into the colon. Then the patient was asked to turn to the supine position, and his buttocks were gently patted and his palm and soles were rubbed. Patients were asked to remain in the same position for 10 minutes. The patient was watched for the evacuation of the drug. After evacuation they were allowed to take hot water bath and then light food. The quantity of tila taila taken was 80 ml. The course of lakshana basti was started with two anuvasana bastis of tila taila and then it was given in alternate days. The niruha Basti was started on the third day of the course. The niruha basti dravya was prepared at the time of administration. First 30 ml of Madhu and 12 grams of finely powdered saindhava lavana was taken in the mortar and are mixed. Then 50 ml of tila taila was added slowly till they get properly mixed. Then 5 gms of Ushakadi gana dravya kalka was added and are mixed. After that 300 ml of Triphala kwatha mixed into the mortar. Finally 100 ml of

filtered Gomutra was added slowly and all were mixed well till it gets a uniform consistency. This was filtered and indirectly warmed in a boiling water vessel to make it lukewarm. The niruha basti was given in the similar manner to that of anuvasana basti. Like all niruhas it was administered before taking food. The poorva karma, pradhana karma and paschat karma were similar to that of Anuvasana. The patient was advised to remain on the table till he feels the urge of defecation. After defecation they were allowed to take hot water bath and then light food. The quantity of lekhan Basti administered was 499 ml a day. The patient was advised to follow Pathya-apathya and Yogasana after the completion of Basti course for 15 days.

**Table 2: Schedule of Lekhana Basti**

Day	Type of Basti	Day	Type of Basti
1	Anuvasana	9	Niruha
2	Anuvasana	10	Anuvasana
3	Niruha	11	Niruha
4	Anuvasana	12	Anuvasana
5	Niruha	13	Niruha
6	Anuvasana	14	Anuvasana
7	Niruha	15	Anuvasana
8	Anuvasana	16	Anuvasana

**Pathya-apathya Ahara & Vihara in Sthaulya**

A good and proper pathya in disease is worth giving a hundred medicines and no amount of medication can do well to a patient who does not follow a strict regimen of pathya.

**Table 3: Sthaulya Pathya-apathya Ahara [13], [14]**

Sr. No.	Ahara Varga	Pathya	Apathya
1	Shuka Danya	Yava(barley), Jau niwar (wild rice), Puran shali(rice), Yavanal(jowar)	Godhuma (wheat), Navanna (newly harvested)
2	Shami Dhanya	Mudga (green gram), Rajmasha(cow pea), Kulatha (horse gram), Masura (lentil), Adhaki (pigeon pea)	Masha (black gram), Tila (sesame seeds)
3	Shaka Varga	Patol, Vruntaka, Bottle Gourd	
4	Phala Varga	Kapittha (wood apple), Jamun (Jambu fruit), Amalaki (Indian gooseberry)	Madhura phala, Draksha (grapes).
5	Anyahariya Dravya	Takra, Madhu, Ushnodak (lukewarm water), Madhu-udak, Sarshap tail(Mustard oil), Tila tail (sesame oil).	Dugdha, Navneet, Ghrita, Dadhi.
6	Mansa	Rohit Matsya	Anupa (meat of animals found in Anup desha), Gramya (meat of animals found in villages) Mansa.

**Table 4: Sthaulya Pathya-apathya Vihar**

Sr. No.	Pathya	Apathya
1	Shram (labour)	Sheetal jala snana (cold bath)
2	Jagarana (night awaking)	Diwaswapna (day sleep)
3	Vyayama (exercise)	Avyayama (no exercise)
4	Vyavaya (intercourse)	Avyavaya (avoiding intercourse)
5	Chinta (worry)	Achinta (no worries)
6	Shoka (grief)	Sukha Shaiyya (comfortable bed)
7	Krodha (anger)	Nitya harsha (always happy)
8		Swapna prasanga (Excessive sleep)

Yogic practices have an important role to play in the treatment of Obesity and it should be a regular part of a person's lifestyle. Yogasana advised to the patient are as follows:

**Table 7: Yogasanas advised [15]**

Position of Asanas	Name of asanas
Relaxing asanas	Neck rotation, wrist rotation shoulder rotation, thigh rotation, waist rotation, knee and ankle rotation.
Surya Namaskar	10 Rounds of 12 steps
Seating position asana	Siddhasana Vajrasana Paschimittanasana
Supine position asana	Pavanmuktasana
Standing position asana	Ardhakati chakrasana Padahastasana
Pranayama	Bhastrika, Bhramari, Anulom-vilom (Nadi shuddhi).
Yogic shuddhikriya	Kapalbhati

### 3. Observation and Result

**Table 5: Assessment of Signs & Symptoms before and after treatment**

S. No.	Signs & Symptoms	BT	AT-1(After Lekhana Basti), on 17th day	AT-2 (After Pathya-apathya & Yogasana), on 32 <sup>nd</sup> day
1	Ayasan Swasakastata (Excessive dyspnoea)	+++	+	+
2	Swadabhadha (Excessive perspiration)	+++	++	++
3	Daurbalya (Weakness)	+	+	+
4	Daurgandhya (foul smell)	++	++	+
5	Ati Pipasa (Polydipsia)	+++	++	+
6	Ati Kshudha (polyphagia)	++++	+++	+

**Note:**(++++) – Severe presentation of symptoms  
 (+++) – Moderate presentation of symptoms  
 (++) – Mild presentation of symptoms  
 (+) – Least presentation of symptoms

After the scheduled treatment patient was assessed for any changes before and after treatment with special reference to anthropometric measurements. Details are noted in the following table as follows:

**Table 6: Assessment of Anthropometry Changes before and after treatment**

Variables	Before Treatment	AT (After Lekhana Basti), On 17 <sup>th</sup> day	AT (After Pathya-apathya and Yogasana), On 32 <sup>nd</sup> day
Weight (kg)	78.00	72.60	70.50
Body Mass Index (kg/m <sup>2</sup> )	32.9	30.61	29.72
Mid Arm Circumference (cm)	Right hand – 20cm	Right hand – 19cm	Right hand – 18cm

	Left. hand – 19cm	Left hand – 18cm	Left hand – 17 cm
Waist Circumference (cm)	101.3	97.1	95.00
Hip Circumference (cm)	103	100	98.2
Waist Hip Ratio (WHR)	0.98	0.97	0.96

### 4. Discussion

#### Efficacy of Lekhana Basti on Sthaulya Roga –

Lekhana Basti is especially a Tikta Shodhana Basti and it is indicated in Bahudoshavastha which includes Medovridhi. It removes vitiated doshas from whole body, thus causes srotoshodhana. It makes the further removal of the doshas from the body, hence breaks the Samprapti of Medodusti.

According to Ayurveda the patient was diagnosed as a case of Sthaulya, predominantly Kapha Vata as a vikrita doshas and Rasa, Mansa, Meda as vikruta dushyas. Patient adopted sedentary life style, lack of exercises and day sleep with excess intake of Madhura snigdha ahara and improper dietary practices. Clinically patient presented with signs and symptoms such as increased body weight, fatigue and joint pains. Considering Sthaulya to be the Santarpanjanya vyadhi the line of treatment mainly includes Snehana, Swedana, Lekhana basti, Pathya-apathya and Yogasana. Lekhana basti dravyas have medoghna prabhava. Katu, Tikta, Kashaya rasa is opposite to Kapha, Ama and Medodhatu. So Katu, Tikta and Kashaya rasa reduces the Kapha, Ama, Medodhatu. So, the content of Lekhana Basti helps to remove obstruction of Meda, Kapha & Kleda from body by its virya & helps to alleviate Vata & normalize the function of Agni & Vayu. Significant changes were observed. The treatment showed encouraging results after Basti karma. She lost about 5.4 kgs weight only after Lekhana basti and total about 7.5kgs weight in 32 days. At last after Pathya-apathya and Yogasana BMI of patient ranges from 32.9 to 29.72 which shows significant decrement. In all subjective criteria patient showed significant improvement and not only patient feeling lightness in the body but also is feeling energetic. Modern drugs for treatment of obesity have list of its side effects along with high cost; while this case showed that Lekhana basti followed by Pathya-apathya and Yogasana helps to lose 9.61% of body weight and most importantly without any side effect in just 32 days.

### 5. Conclusion

Based on the signs and symptoms, Sthaulya was treated with Snehana, Sarvanga Nadi Swedana, Lekhana basti followed by the Pathya-apathya Ahara and Vihara and Yogasanas showed remarkable changes in reducing the weight of the patient.

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