

CASE STUDY

Management of *Sthaulya* (Obesity) through Ayurveda - A Case Study

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ABSTRACT

Ayurveda describes various treatment of *Sthaulya* that includes both *Shodhana* and *Shaman Auoshadha*. *Lekhana Basti* is mentioned in *Ayurvedic* texts, for the management of *Santarpanotha Vyadhi*. *Shodhana* in the form of *Basti karma* is mentioned as unique treatment modality in *Sthaulya* specially with the drugs which are of *ushna*, *tikshna*, *lekhana guna* that help in combating *Kapha* and *medodushti*. The ideal *shamana* in the treatment of *Sthaulya* is usage of *Vata*, *kaphahara*, and *Medohara* properties. *Trayushnadya Loha* is mentioned in *Yogaratanakara* as *Shaman Auoshadha*. This article delves to an interesting case of a 40-year-old male presented with *Daurgandhya*, *Ayaseswaskashtata*, *Anga Gaurava*, *Atikshudha*, *Atipipasa*, *Alpa Vyavaya*, *Chala Sphika*, *Chala Udara*, *Chala Stana*, *Utshah Hani/Alasya*, *Daurbalya (Alpa Vyayam)*, *Nidradhikya*, *Anga Shaithilya* for past 2 years. For the same he visited for *Ayurvedic* treatment at Dept. of *Kayachikitsa*, *Gopabandhu Ayurveda Mahavidyalaya*, *Puri, Orissa*. He was diagnosed as a case of *Sthaulya/ Obesity*. As per *Ayurvedic* classics, this condition we have taken as *Medoroga*. Hence, the line of treatment we have adopted *Shodhana* which included *Lekhana Basti* along with *Shaman Auoshadha* as *Trayushnadya Loha Vati*. The outcome was very remarkable with the patient reduced his body weight and feeling better without any complication.

Key Words *Sthaulya*, *Shodhana*, *Shamana Auoshadha*, *Lekhana Basti*, *Trayushnadya loha*

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INTRODUCTION

The word '*Lekhana*' indicates its action '*Lekhanam Patlikaranam*'¹- scarifying helps in reduction of fat. *Sharangadhara* considered *Lekhana* in a wide sense as - '*Deha Visoshanam*,² '*Dhatun - Malan va Dehsya. Vishoshya Lekhayechha yat Lekhanam*'³ the process of drying up or desiccation of all excess *Dosha*, *Dhatu* and *Mala*. *Lekhana Basti*⁴ is emphasized

by all the classics of *Ayurveda* as treatment procedure in *Sthaulya roga*. Considering this aspect, *Lekhana* is opted for this study. *Trayushnadya loha*⁵, mentioned in *Yogaratanakara* as *Shamanoushadhi*, with a combination of *Aamalaki*, *Vibheetaki*, *Hareetaki*, *Shunti*, *Pippali*, *Maricha*, *Chavya*, *Chitraka*, *Bakuchi*, *Bida lavana*, *Audbhida lavana*, *Saindhava lavana* and *Souvarchala lavana* with

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equal amount of *Loha bhasma*, have *ushna veerya* and *laghu, ruksha guna* and are exactly opposite to the *guna of kapha* and *medodhatu*, is planned to evaluate its therapeutic efficacy in *sthaulya*.

AIMS AND OBJECTIVES

Case study evaluates the synergistic effect of *Lekhana Basti* and *Trayushnadya Loha* in *Sthaulya*.

CASE REPORT

Atura Vivara- A 40-year-old Hindu, graduate, middle class, businessman, married male patient was admitted on 06.04.2022 with OPD number 2761 and IPD number 11347 belonging to *Anoop Desha*. His treatment started on 06.04.2022 and completed on 30.04.2022.

Vedana Samuchhaya- Admitted with complaints (*Pradhan Vedana*) of *Daurgandhya* (foul smell), *Ayaseswaskashtata* (Dyspnoea), *Anga Gaurava* (Heaviness), *Atikshudha* (Poly phagia), *Atipipasa* (Polydipsia), *Alpa Vyavaya*, *Chala Sphika*, *Chala Udara*, *Chala Stana*, *Utshah Hani/ Alasya*, *Daurbalya (Alpa Vyayam)*, *Nidradhikya*, *Anga Shaithilya*. He was having these complaints for past 2 years.

History of present illness (Vedana Vruttanta): Patient started gaining weight when he was 32 years of age (adult). His routine work was getting affected due to his obesity and for past 2 years he has gradually developed *Chala Sphika*, *Chala*

Udara, *Chala Stana* and he felt lethargic all the times.

Dietary History: He has dietary history of *Niramish Ahara* as *Atipramana* with *Madhur, Amla, Lavana rasa pradhan* which is of *snigdha* and *guru prakruti*. His dietary habit was *Vishamasana*.

General Examination: The patient was well-built and well-nourished, with height 170cms and weight 119.9kgs resulting in a BMI of 41.3. His pulse rate was recorded 74/ min, Blood Pressure 130/80mm Hg and respiratory rate 18/ min.

Ashtasthana Pareeksha: His *Nadi* was observed to be *vatapittaj nadi*, *Jihva -Prakrita*, *Mutra-Vaikrita*, *Mala- Prakrita*, *Shabda- Prakrita*, *Sparsha- Dryness*, *Drik- Vaikrita*, *Aakriti-Vaikrita*.

Dashavidha Pareeksha: His *Prakriti* was observed to be *Vata pitta*, *Sara- Madhya*, *Samhanana- Madhyam*, *Pramana- Madhyam*, *Satmya- Madhyam*, *Satwa- Madhyam*, *Ahara shakti- Abhyavarana- Prawar*, *Jarana- Madhyam*, *Poorvakaleena- Madhyam*, *Adhyakaleena- Prawar*, *Vyayama Shakti- Poorvakaleena- Madhyam*, *Adhyakaleena- Awara* and *Vaya- Madhya*.

Investigations: His Haematological investigation was- Hb- 11 gm%, T.L.C- 4900 cells/cumm, D.L.C: N- 40 %, L 30%, E 6%, M 7%, B 0%₂ E. S. R: 19 mm/Hr, Random Blood Sugar 94 mg/dl, Post Prandial Blood Sugar 122 mg/dl.

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Table 1 Bio Chemistry

Lipid Profile	Result		Biological Ref. Range	Unit
	B.T.	A.T.		
Serum Total Cholesterol	230	155	150-220	MG/DL
HDL	90	40	35-80	MG/DL
LDL	174	100	90-160	MG/DL
Serum Triglycerides	185	120	60-165	MG/DL
Renal Function Test	Result	Biological Ref. Range	Unit	
Blood Urea	30	10-50	MG/DL	
Serum Creatinine	1.47	0.6-1.1	MG/DL	
Uric Acid	6.94	3.6-7.7	MG/DL	

Vikriti Pareeksha (Samprapti Ghataka)

- **Dosha:** *Vata: Samana, Vyana*
- **Pitta:** *Pachaka*
- **Kapha:** *Kledaka*
- **Dooshya:** *Rasa, Rakta, Mamsa, Medo, Sukra*
- **Agni:** *Jataragni, Rasa & Medo Dhathawagni*
- **Ama:** *Medo Dhatwagni Manda Janya*
- **Srotas:** *Medovaha, Rasavaha, Pranavaha, Shukravaha, Swedowaha*
- **Sroto dushti prakara:** *Sanga*
- **Udbhava sthana:** *Amashya*
- **Sanchara sthana:** *Rasayani*
- **Agni Vyakta sthana:** *Sarvang, Specifically Stana, Udara, Sphika*
- **Adhishtana:** *Sarva Shareera*
- **Roga marga:** *Bahya*

Table 2 Assessment Criteria

Sl. No	Subjective Parameters	Before Treatment	After Treatment	1 st Follow up	2 nd Follow up
1.	<i>Daurgandhya (Foul smell)</i>	3	2	2	2
2.	<i>Ayaseswaskashata (Dyspnoea)</i>	4	4	4	4
3.	<i>Anga Gaurava (Heaviness)</i>	3	2	2	2
4.	<i>Atikshudha (Poly phagia)</i>	5	3	3	3
5.	<i>Atipipasa (Polydipsia)</i>	4	3	3	3
6.	<i>Alpa Vyavaya</i>	3	3	3	3
7.	<i>Chala Sphika</i>	4	3	3	3
8.	<i>Chala Udara</i>	4	3	3	3
9.	<i>Chala Stana</i>	3	2	2	2
10.	<i>Utshah Hani /Alasya</i>	4	3	3	3
11.	<i>Daurbalya (Alpa Vyayam)</i>	4	3	3	3
12.	<i>Nidradhikya</i>	3	3	3	3
13.	<i>Anga Shaithilya</i>	3	2	2	2
Objective Parameters		Before Treatment	After Treatment	1 st Follow up	2 nd Follow up
1.Areas of Anthropometric measures					
Skin fold of the middle portion of the Biceps muscle.		28	27	27	27
Skin fold of the middle portion of the Triceps muscle.		24	23	23	23
Skin fold of the middle portion of the Sub scapular region.		22	20	20	20
Skin fold of the middle portion of the Abdomen		50	47	47	46
Skin fold of the middle portion of the thigh region.		22	20	20	20
2. Girth Circumference					
Chest - In normal condition at the nipple region		149	146	145	145
Abdomen - At the level of umbilicus.		141	138	136	136
Pelvis - At the level of anterior superior iliac spine.		110	104	102	101

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Hip - At the level of highest point of distention of buttock.	106	105	105	104
Mid arm - Mid of arm between shoulder and elbow joint.	44	42	42	41
Mid-thigh - Mid of thigh between Hip and knee joint	69	67	66	66
Mid-calf - Mid of the calf between knee and ankle joint.	63	61	60	60

3. Body Weight	119.9	112.5	111.3	109.4
4. Body Mass Index (BMI)	41.3	38.9	38.5	37.8
5. Waist Hip Ratio	1.04	0.99	0.97	0.97
6. Assessment of quality of life	61	58	52	52

Date of commencement of treatment: 6/4/2022 *Trayushnadya Loha* Treatment Duration: 24

Treatment given: days, from 6/4/2022 to 29/4/2022

Lekhana Basti and *Trayushnadya loha 2 Vati* of *Lekhana Basti* Treatment Schedule: 8 days, from 500mg twice a Day: 24 days 6/4/2022 to 13/4/2022

Table 3 *Lekhana Basti* Schedule

DATE	6/4/2022	7/4/2022	8/4/2022	9/4/2022	10/4/2022	11/4/2022	12/4/2022	13/4/2022
DAY	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	DAY 8
<i>BASTI</i>	<i>Anuvasana</i>	<i>Anuvasana</i>	<i>Lekhana</i>	<i>Anuvasana</i>	<i>Lekhana</i>	<i>Anuvasana</i>	<i>Lekhana</i>	<i>Anuvasana</i>
<i>TYPE</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>	<i>Basti</i>

CASE SUMMARY

A 40-year-old male, well nourished, well built, not a k/c/o HTN & DM, was apparently normal 8 years back. Gradually he felt heaviness and fullness in the lower abdomen and *Javoparodha* (Reduced Physical activity), *Kricchravyavaya* (Impaired sexual performance), *Daurbalya* (Debility), *Daurgandhya* (Foul smelling of body), *Swedabadha* (Excessive sweating), *Kshudhatimatra* (Excessive hunger), *Pipasatiyoga* (Excessive thirst) for past 6 to 8 years. Gradually, he developed *Daurgandhya*, *Ayaseswaskashtata*, *Anga Gaurava*, *Atikshudha*, *Atipipasa*, *Alpa Vyavaya*, *Chala Sphika*, *Chala Udara*, *Chala Stana*, *Utshah Hani/Alasya*, *Daurbalya (Alpa Vyayam)*, *Nidradhikya*, *Anga Shaithilya*. With these complaints, he visited Dept. of *Kayachikitsa*, *Gopabandhu Ayurveda*

Mahavidyalaya, Puri, Orissa for *Ayurvedic* treatment.

After taking his history and clinical examination along with Haematological Investigation, patient was diagnosed with *Sthaulya/ Obesity*. The patient was admitted on 06/04/2022, underwent treatment and was discharged on 30/04/22. His first follow-up was made on 17/05/2022 and second follow-up on 31/05/2022, thus completing the treatment. Patient was treated with *Lekhana Basti* and *Trayushnadya Loha Vati*. *Lekhana Basti* treatment was scheduled for 8 days, starting from 06.04.2022 to 13.4.2022. *Lekhana Basti* as *Purvakarma Sthanika Abhyanga* and *Nadi Sweda* as *Purvakarma* of *Basti* and *Pradhanakarma Lekhana Basti* have been given in *Yoga Basti* schedule that consists of 2 *Anuvasana Basti* followed by 3 *Lekhana* and

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3 *Anuvasana Basti* alternately a total of 8 *Basti* and *Paschatkarma* After *pratyagamana* of *Basti Dravya*, light food, which is *Ushna*, freshly prepared and luke warm water have been advised. The patients were advised to strictly maintain *Pathya* during full course of *Basti* as well as during *pariharakala* (16 days).

2 *vati* of 500mg each of *Trayushnadya Loha* was given to the patient, twice a day for 24 days simultaneously with *Lekhana Basti*. *Pathya-Apathya* patient has been advised to take food according to *Aharvidhi Visheshayatanas* (rules for proper diet consumption). For dietary changes, the patient has been made to limit the use of oil and *ghee*. He was also made to curtail the use of carbohydrate rich foods like rice, potatoes, fried foods, and bakery products. The patient has been advised to avoid overeating and leave one-third of the stomach capacity empty. He was also advised to drink lukewarm water and avoid refrigerated water. Patient has been followed up as under: On 0th day – base line data of all the parameters were taken, on 9th day- to assess the level of impact of the drugs and *Basti* administered for 8 days that is entire *basti* therapy period, On 25th day- to assess the level of impact of the drugs and *Basti* administered after *Parihara Kala*, The level of impact of the drugs and *Basti* administered during the follow up period (of 32 days) have been assessed on 42nd and 56th day, total duration of the study: 56 days or 8 weeks.

DISCUSSION

Sthaulya is described in almost all text as *Santarpana Nimittaja Vikara*, which means that it gets manifested only due to vitiation of *kapha dosha*. *Sthulta* and *Sthaulya* are considered amongst the ailments of *madhyama roga marga*. The role of *urdhwagami*, *adhogami* and *tiryak dhamani* in the pathogenesis of *Sthaulya* has been identified. *Lakshana* like *Daurgandhya*, *Ayaseswaskashtata*, *Anga Gaurava*, *Atikshudha*, *Atipipasa*, *Alpa Vyavaya*, *Chala Sphika*, *Chala Udara*, *Chala Stana*, *Utshah Hani/Alasya*, *Daurbalya (Alpa Vyayam)*, *Nidradhikya*, *Anga Shaithilya* has been explained. The key to successful treatment is the selection of the suitable treatment intervention by a physician considering the *Rogi Bala* and *Roga Bala*.

Lekhana Basti is mentioned in Ayurvedic texts, for the management of *Santarpanotha Vyadhi*, *Kaphaja Roga* and *Kaphavrita Vata*. *Shodhana* in the form of *Basti karma* is mentioned as unique treatment modality in *Sthaulya* specially with the drugs which are of *ushna*, *tikshna*, *Lekhana prakruti* that help in combating *Kapha* and *medodushti*.

The ideal *shamana* in the treatment of *Sthaulya* is usage of *Vata*, *kaphahara*, and *Medohara* properties. *Trayushnadya Loha* is a popularly used oral medicine, mentioned in *Yogaratnakara* as *shamanoushadhi*, with a combination of *Aamalaki*, *Vibheetaki*, *Hareetaki*, *Shunti*, *Pippali*, *Maricha*, *Chavya*, *Chitraka*, *Bakuchi*, *Bida lavana*, *Audbhida lavana*, *Saindhava lavana* and

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Souvarchala lavana with equal amount of *Loha bhasma*, have *ushna veerya* and *laghu, ruksha guna* and are exactly opposite to the *guna* of *kapha* and *medodhatu*.

CONCLUSION

Langhana (fasting), *Langhana-Pachana* (fasting and digestive drugs) and *Doshavasechana* (elimination) are considered as the line of treatment in *Sthaulya*. *Basti* is said to be the preferred line of treatment in *Sthaulya*. The *Medodhatu* and *Medovaha srotas* are invariably involved in this disease & thereby *Basti* is considered to be the prime treatment. The treatment of *margavarana* due to *kapha* & *medas* accumulation is said to be the basic pathology of *Sthaulya* which is said to be handled with *Basti karma*.

The *shodhana* is considered to be the best treatment to nullify the *samprapthi* of *avaranajanya kapha-vata vyadhi* which ensures *malanisharaka*. Since the patients of *Sthaulya* are considered to be *dehabala* they can be administered with milder form of *basti* in terms of *malanisharaka*. Here *Lekhana basti* was selected for the same purpose along with *Trayushnadya Loha vati*. This successful treatment gives us the confidence to accept more challenging cases and take the potential of this science to next level.

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