Management of Sthoulya through Basti Karma – A case report

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Abstract

Introduction: Overweight and obesity are characterized by an abnormal or excessive buildup of fat in the body, posing health risks. In 2022, 43% of adults aged 18 years who were overweight and 16% were living with obesity. Methods: A 37-year-old female patient presents with complaints of continuous weight gain for 10 years with an associated complaint of heaviness in body, constant fatigue, lethargy, excessive sleepiness, and excessive sweating along with dyspnea while walking. Triphaladi Lekhan Basti and Triphaladi Taila Anuvasan Basti were administered via the rectal route in a Kaal Basti manner for 16 days. Follow up was conducted 30 days after the completion of treatment. Results: Analysis of overall effects of Triphaladi Lekhan Basti provided markedly better reduction in weight, body mass index (BMI), and other signs and symptoms in the patients of obesity. Discussion: These interventions have shown significant effectiveness in reducing weight, BMI, body circumference, and improving various subjective measures. Conclusion: In this way, the combination of Triphaladi Kaal Basti reduces Kapha-Vata Dushti, increases Agni, digests the Ama, corrects the Medodhatvagni Mandya, and removes obstruction in Medovaha Srotas.

Key words: Body mass index, lipid profile, Medovriddhi, obese, weight

INTRODUCTION

Being obese significantly increases the likelihood of developing the primary causes of poor health and premature mortality globally, such as heart disease, certain cancers, diabetes, and osteoarthritis. Overweight and obesity are characterized by an abnormal or excessive buildup of fat in the body, posing health risks. For adults, being classified as overweight is indicated by a body mass index (BMI) exceeding 25, while obesity is defined by a BMI exceeding 30.^[1]

The rise in overweight and obesity worldwide is primarily driven by changes in our food environments, where unhealthy options are more readily available and affordable compared to healthier choices. This is further accompanied by decreased physical activity levels. Ultimately, the root cause of overweight and obesity lies in an imbalance between the calories we consume and the calories we expend. [2]

Worldwide adult obesity has more than doubled since 1990. In 2022, 43% of adults aged 18 years (43% of men and 44% of women) who were overweight and 16% were living with obesity.^[3]

Ayurveda Acharya Charaka said that an abnormal and excessive buildup of *Medo Dhatu* (fat tissue) and *Mamsa Dhatu* (muscle tissue) may develop a sagging or pendulous appearance in their hips, belly, and breasts. This increase in bulk is not balanced by a corresponding rise in energy expenditure. Acharya Charaka focuses on exogenous causes of obesity highlighting *Beejadosha* as a unique factor.^[4]

Acharya Sushruta emphasizes endogenous causes like *Dhatvagnimandya*, with *Rasa (Aaharrasa)* contributing to obesity.^[5]

Acharya Charaka has suggested using Ruksha, Tikshna, and Ushna Basti for the management purpose of Sthoulya because Basti therapy is the best treatment for aggravated Vata and Vata Pradhana Vyadhi. In Sthoulya along with kapha, Meda-avrita-vata is also a dominating in Kostha. Aacharya Sushruta also mentioned that Niruha Basti has Shodhana and Lekhana effect, [6] i.e., the basti prepared with Triphala

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Received: 01-08-2024 **Revised:** 24-09-2024 **Accepted:** 30-09-2024 Kwatha, Gomutra, Madhu, Kshara and a prakshep dravya is named as lekhana basti. Lekhana basti helps to remove meda, kapha, and kleda from body by its Virya and helps to alleviate Vata and normalize the function of Agni and Vayu. [7]

CASE REPORT

A 37-year-old female patient came to Panchkarma outpatient department of Sanjivani hospital, DSRRAU, jodhpur, presenting with complaints of continuous weight gain for 10 years with associated complaints of heaviness in body, constant fatigue, lethargy, excessive sleepiness, and excessive sweating along with dyspnea while walking.

History of Past Illness

Not known cases of hypertension, diabetes mellitus, thyroid, renal disease, and asthma.

General Examination

Blood pressure – 120/80 mmHg, Pulse rate – 82/min, Temperature – 37°C, Weight – 140 kg, Height – 166 cm.

Dashavidha Pariksha

During examination, the patient was observed as *Prakruti-Kapha-Vata*; *Sara-MedaSara In Pravara*; *Samhananna-Avara*; *Pramana-Hina*; *Satmya-Madhyama*; *Satva-Madhyama*; *Aharashakti-Pvara*; *Jaran Shakti-Avara*; *Vyayam Shakti-Avara*; *Vaya-Madhyam*.

Roga Pariksha

Aharaja Nidana such as Guru (heavy), Snigdha (unctuous), Madhura (sweet), and Sheeta (cold) Aahara sevana were present. Viharaja Nidana such as Avyayama (lack of physical exercise) and Diwaswapna (daytime sleep) were present. Mansika Nidana such as Achinta (stress-free state) and Harsha (joy) were definitely present.

Assessment Criteria

Subjective criteria

Daurbalya, Daurgandhya, Sweda–Adhikya, Ksudha-adhikya, Chalasphikudarstan, Kshudrashwasa, Nindra-adhikya, Gaurav.

(Absence of symptom -0, Mild degree of symptom -1, Moderate degree of symptom -2, Severe degree of symptom -3, Very severe degree of symptom -4).

Objective criteria

- Weight (unit) kg
- 2. BMI calculation (weight in kg divided by height in meter

- square)
- 3. Body circumference by measuring tape
- 4. Lipid profile Total cholesterol, triglyceride, low-density lipoprotein, high-density lipoprotein, very low-density lipoprotein.

Management

Triphladi Lekhan Basti and Triphladi Taila Anuvasan Basti in Kaal Bastimanner were administered through rectal route for 16 days.

Ingredients of Triphaladi Lekhan Basti -

Madhu -80 mL

Saindhav-6 g

Triphaladi Taila-60 mL

Shatahva kalka-20 g

Triphla Kwath- 400 mL

Gomutra- 120 mL

Yava Kshar- 5 g

Ingredients of Triphaladi Taila Anuvasan Basti -

- Sneha Tila Taila.
- Kalka Dravya Triphla, Ativisha, Murva, Nishoth, Chitraka, Vasa, Nimba, Araghvadh, Vacha, Saptaparna, Haridra, Daruharidra, Guduchi Indrayan, Pippali, Kushta, Sarshap Nagar.
- Kwath Dravya Tulasi, Kasmard, Vidanga, Kakmachi, Bakayan, Katphal.

Follow-up

One month after the completion of Basti Karma.

RESULTS

Before treatment 4 2 3	After treatment 1 1		
2	1 1 1		
3	1		
-	1		
_			
2	1		
3	2		
3	1		
3	1		
3	1		
Objective parameters			
140 Kg [Figure 1]	123.8 kg [Figure 2]		
166	166 cm		
50.8 kg/m ²	44.9 Kg/m ²		
122.2 cm	116 cm		
	3 3 e parameters 140 Kg [Figure 1] 166 50.8 kg/m²		

Subjective parameters			
Symptoms	Before treatment	After treatment	
Waist circumference	144.7 cm [Figure 3]	139 cm [Figure 4]	
Hip circumference	149.5 cm [Figure 5]	139 cm [Figure 6]	
Mid-arm circumference	40.5 cm	36 cm	
Mid-thigh circumference	68.5 cm	63 cm	
Lipid profile			
Total cholesterol	200.6 mg/dL	187.5 mg/dL	
Triglyceride	212.4 mg/dL	82.4 mg/dL	
LDL	145.2 mg/dL	124.22 mg/dL	
HDL	32.6 mg/dL	46.8 mg/dL	
VLDL	42.48 mg/dL	16.48 mg/dL	

LDL: Low-density lipoprotein, HDL: High-density lipoprotein,

VLDL: Very low-density lipoprotein

DISCUSSION

Kaphavardhaka Ahara, Adhyasana, Avyayama (lack of exercise), and Divaswapana (daytime napping) all contribute to the production of Ama Rasa. The Madhura Bhava of Anna Rasa circulates within the body, Snigdhansha of this Anna Rasa causes Medovruddhi leading to excessive weight gain. [8]

Since Basti therapy works wonders for treating Vata-dominant and aggravated Vata illnesses. In addition to Kapha, Meda-Avrita-Vata also has a stronghold in Kostha in Sthoulya.

Lekhana Basti relieves Vata and restores Agni and Vayu's normal functions while also aiding in the removal of Meda, Kapha, and Kleda from the body through its Virya. The Srotosanga is broken by the Lekhana Basti. As the medications create Shoshana, Lekhana, and Amahara Karma, they also have Tikta, Katu, and Kashaya Rasa. To break the Srotosang and enhance the cellular activity of Lekhan treatment, it calmed Saman Vayu, restored Jatharagni to its normal level, and triggered the Vyana Vayu. [9]

In Sthoulya, under Anuvasan-uttar Basti Chikitsa Adhyay, Acharya Sushrut suggested Triphaladi Taila. There are Tikta, Katu, Kashaya Rasa, and Katu Vipaka in the majority of this Taila's medications. Laghu, Rukhsa, Shothahar, Pachana, Deepana, Srotoshodhana, and other attributes are among its attributes. Better penetration and liquefaction of fat from the body's microchannels are facilitated by Shukshma Guna of Taila.^[10]

Probable Mode of Action of Basti Dravya

 Madhu is Srotoshodhak, Yogavahi, Tridoshahara, also it has Kaphanashak, Chedana properties. This quality



Figure 1: Before treatment



Figure 2: After treatment



Figure 3: Before treatment

helps cleanse the body's channels, facilitating the distribution of other medications. It is mentioned in the treatment of *Sthoulya Chikitsa*.^[11,12]

• Saindhav – When combined with Madhu, Saindhava is effective in liquefying Kapha and Meda, breaking it into



Figure 4: After treatment



Figure 5: Before treatment



Figure 6: After treatment

- smaller particles for easier elimination. It also supports the easy *Pratyagamana* of *Basti* without causing adverse effects.^[13]
- Triphladi Taila Most of the drugs of this Taila are Tikta, Katu, Kashaya Rasa, and Katu Vipaka. It has properties such as Laghu, Rukhsa, Shothahar, Pachana,

- *Deepana*, and *Srotoshodhana*. *Shukshma Guna* of *Taila* helps for better penetration and liquefaction of fat from microchannels of the body.^[14]
- Shatahva is Vata-Kapha-Shamaka and Pittavardhaka drug due to its Katu-Tikta Rasa and Ushna Virya.
 A study has shown that Shatpushpa inhibits intestinal cholesterol absorption by binding to bile acids in the intestine, promoting its fecal excretion.^[15]
- Triphla Kwatha It acts on Kapha-Vata by virtue of its Ushna Virya. Triphala is an effective blood purifier that stimulates bile secretion as it detoxifies the liver, helps digestion and assimilation and significantly reduces serum cholesterol and lipid levels throughout the body. [16]
- Gomutra possesses Kapha-Vata Shamaka, Ushna, Laghu, and Lekhana Guna. In Lekhana Basti, Gomutra is the primary ingredient, known for its irritant properties. It stimulates the secretion of more fluid into the intestinal lumen, thereby acting as Nitya-virechana. [17]
- Yavakshara has Katu, Ushna, and Kapha-Vata Shamaka properties. It is also described as a Lekhana dravya used in Basti.^[18]

In this way, the combination of *Triphaladi Kaal Basti* reduces *Kapha-Vata Dushti*, increases *Agni*, digests the *Ama*, corrects the *Medodhatvagni Mandya*, and removes obstruction in *Medovaha Srotas*.

CONCLUSION

This study indicates that using *Triphaladi Kaal Basti* effectively addresses imbalances in *Kapha* and *Vata Doshas*, enhances *Agni*, eliminates *Ama*, corrects *Medodhatvagni Mandya*, and clears blockages in *Medovaha srotas*. These interventions have shown significant effectiveness in reducing weight, BMI, body circumference, and improving various subjective measures.

REFERENCES

- 1. World Health Organisation. Obesity Overview. Available from: https://www.who.int/westernpacific/health-topics/obesity#tab=tab 1 [Last accessed on 2024 July 07].
- 2. Overweight and Obesity in Western Pacific Region. An Equity Perspective. Introduction. p. 1. Available from: https://iris.who.int/bitstream/handle/10665/255475/9789290618133-eng.pdf?sequence=1 [Last accessed on 2024 July 09].
- 3. World Health Organisation. Obesity and Overweight Keyfacts. Available from: https://www.who.int/newsroom/fact-sheets/detail/obesity-and-overweight [Last accessed on 2024 July 20].
- 4. Shastri PK, Chturvedi G. Vidyotini Hindi Commentary, Charak Samhita. Sutra Sthana-21/9. Vol. 1. Varanasi: Chaukhamba Bharti Academy; 2018. p. 411.

- Kaviraja AS. Ayurveda Tattva Sandipika, Hindi Commentary, Sushruta Samhita. Vol. 1. Varanasi: Choukhambha Sanskrit Sansthan; 2018. p. 81.
- Shastri PK, Chturvedi G. Vidyotini Hindi Commentary. Charak Samhita. Vol.1. Sutra Sthana-21/21. Varanasi: Chaukhamba Bharti Academy; 2018. p. 414.
- Kaviraja AS. Ayurveda Tattva Sandipika, Hindi Commentary, Sushruta Samhita. Vol.1. Chikitsa Sthana 38/82. Varanasi: Choukhambha Sanskrit Sansthan; 2018. p. 214.
- 8. Kaviraja AS. Ayurveda Tattva Sandipika, Hindi Commentary, Sushruta Samhita. Vol. 1. Sutrasthana 15/81. Varanasi: Choukhambha Sanskrit Sansthan; 2018. p. 81.
- Bhonsle A, Parwe S, Nisargandha M. A comparative study to evaluate the efficacy of lekhana basti and modified vachadi gana basti in combination with navaka guggulu in sthaulya (obesity)-a study protocol. J Pharm Res Int 2021;33:154-61.
- Hivale US, Bhatted SK, Bhojani MK, Bhusal N. A clinical study on the effect of triphaladi kala basti with Arjuna Punarnavadi Ghanavati in the management of essential hypertension. Ayu 2018;39:250-5.
- Kaviraja Sastri A. Ayurveda Tattva Sandipika, Hindi Commentary, Sushruta Samhita Sutra Sthana 45/132.
 Vol. 1. Varanasi: Choukhambha Sanskrit Sansthan;

- 2010. p. 81.
- Samhita C. Vidhyotini Hindi Commentary, by Kashinath Shastri, Dr Gaurakhnath Chturvedi, Sutra Sthan 27/245, 249. Vol 1. Varanasi: Chaukhamba Bharti Academy; 2018.
- 13. Jivaka V, Samhia K. Vidyotini Hindi Commentary. Ch. 7/68. Khilasthana. Varanasi: Chaukhamba Bharti Academy; 2008. p. 272.
- Chaturvedi D, Nakade M. Clinical study on the effect of triphaladi kaal bastiin the management of sthoulya roga (obesity). Int J Biol Pharm Allied Sci 2023;12:1690-700.
- Kamat SD. Studies on Medicinal Plants Drugs in Dhanavantari-Nighantu. Satpushpadih Chapter. Varanasi: Chaukhamba Sanskrit Pratisthan; 2002. p. 122.
- Rani B, Prasad M, Chauhan RK, Maheshwari R, Kachhawa GR, Sharma S. Triphala: A versatile counteractive assortment of ailments. Int J Pharm Chem Sci 2013;2:103.
- Bhatta SK. Siddhabhesajya Manimala of Mahakavi Sri Krishnaram Bhatta, Entitled with Vaishwanara Hindi Commentary. Dwittiya Guchha-Dravyaguna Parichaya. Varanasi: Chowkhambha Krishnadas Academy; 2008. p. 83.
- 18. Ayurveda Sara Sangraha. Shri Baidyanath Ayurveda Bhavan Limited; 2019. p. 697.

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