

Case Report

Study of *Shigru Taila Vasti* in *Sthoulya*

Nilima N. Wadnerwar

Assistant Professor, Department of Agadtantra, Mahatma Gandhi Ayurved College,
Hospital & Research Center, Salod (H), Wardha. (dr.nilima_wadnerwar@rediffmail.com)
JISM1357H Received: December 17, 2013; Accepted: January 16, 2014



How to cite the article: Nilima N. Wadnerwar, Study of *Shigru Taila Vasti* in *Sthoulya*,
J-ISM, V2 N2, Apr-June 2014, pp.91-95

Abstract:

Sthoulya (Obesity) is an increasing and worrisome problem in present population of age group 20-40 years as its complications are contributing to hazardous diseases like diabetes, heart disorders, etc. The reason behind this is altered life style of the population. Those who want to reduce the weight, find it difficult as the exercises, gym practices and dietary restrictions are difficult to follow regularly. Ayurveda has described *Sthoulya* in “*Ashta Ninditiya*” (eight unappreciated) conditions as *Ati Sthoolata* is not a symptom of *Swasthya*. Further, to overcome this condition, Ayurveda has mentioned various treatment modalities like *Vaman* (Vomiting), *Virechan* (Purgation), *Vasti* (Enema), *Abhyang* (Massage), *Swedan* (Fomentation), *Udvardana* (Rubbing), *Yogasanas* (Postural exercises), *Pranayam* (Breathing exercises), dietary regimen etc. trying to perform *Apunarbhava Chikitsa* (Treatment without complications) according to the *Prakriti* (Constitution) of the patient. When *Shigru Taila Lekhan Vasti* was given to a patient of *Sthoulya*, his weight was reduced by 4.5kg in 45 days without any exercise and dieting. This case study explains the role of *Shigru Tail Vasti* in *Sthoulya*.

Key Words: *Sthoulya*, *Apunarbhava Chikitsa*, *Shigru Taila*, *Lekhan Vasti*.

Introduction:

Obesity is considered as a lifestyle disorder in which a complex interplay of genetic, environmental and psychological factors plays a major role. For thousands of years obesity was rarely seen [1]. It was not until the 20th century that it became common, so much so that in 1997 the World Health Organization (WHO) formally recognized obesity as a global epidemic [2].

As of 2005 the WHO estimates that at least 400 million adults (9.8%) are obese, with higher rates among women than men. As of 2008, the WHO claimed that 1.5 billion adults, 20 and older, were overweight and of these over 200 million men and nearly 300 million women were obese [3].

The rate of obesity also increases with age at

least up to 50 or 60 years old [4]. Obesity has reached epidemic proportions in India in the 21st century, with morbid obesity affecting 5% of the country's population [5]. Urbanization and modernization has been associated with obesity. It may result into several medical conditions like diabetes, heart diseases, high blood pressure, stroke gall stones, liver disease, osteoarthritis and reproductive problems in women. Besides suffering from physical illness, obese adults and children may experience social stigmatization and discrimination as well as psychological problems.

Ayurveda has described *Sthoulya* in “*Ashta Ninditiya*” [6-7] (eight unappreciated) conditions as *Ati Sthoolata* is not a symptom of *Swasthya* [8]. Those who want to reduce the weight, find it difficult

as the exercises, gym practices and dietary restrictions are difficult to follow regularly. Moreover, if weight is not reduced gradually in a systematic way, person can gain weight again.

Sthoulya is defined as *Chala Sphik, Guda* and *Stana* (in male and female) due to excess increase in *Meda* and *Mansa Dhatu* [9].

Obesity is an abnormal growth of adipose tissue [10] due to an enlargement of fat cell size (hypertrophic obesity), an increase in fat cell number (hyperplastic obesity) and a combination of both. Its features are excess body fat, abdominal adiposity, increased subcutaneous and intra-abdominal fat and deposition of fat in ectopic sites (such as liver, muscle and others). Obesity is a major driver for the widely prevalent metabolic syndrome and type-2 diabetes mellitus. Overweight (BMI ≥ 25) is classified as Pre-obese (BMI 25-29.99), Obese class I (BMI 30-34.99), Obese class II (BMI 35-39.99), Obese class III (BMI ≥ 40) [11].

There are so many drugs and various treatment modalities described in Ayurveda for the management of *Sthoulya* [12]. In *Sthoulya*, there is need of *Vataghna Anna Pana, Kapha* and *Medohara Ruksha* and *Teekshna Dravyas* as well as *Lekhana Vasti* [13]. *Shigru* is having *Katu Tikta Rasa, Ushna Veerya* and *Deepana, Pachana* activity. It is *Kapha Vatahar* and *Medohar*. It scraps *Meda Dhatu* [14]. *Til*

Taila is *Vatashamaka*. Thus, the properties of *Shigru* in oil form are useful in *Vasti* to regulate weight. In light of the above, the present case study was undertaken to analyze the effectiveness of *Shigru Taila Vasti* in *Sthoulya*.

Case history:

A female patient aged 30 years having weight 70.5 kg and height 152 cm (BMI= 30.51) presented with the history of gradual weight gain in subsequent three years. There were no other complaints. One year before her weight was 75 kg, BMI 32.46 (Obese class I). Within one year she lost near about 4.5 kg by dieting and exercise but not on regular basis. She was fed up with the exercises and wanted to lose weight without dieting and exercises. She has never used any sort of medicine for weight reduction. On arrival in the OPD of M.G.A.C.H. & R.C. Salod (H), Wardha, her detailed history was taken and it came to know that the obesity was hereditary in her family.

Examination:

Vitals were normal. There was central obesity along with bulky thighs and joints. Her body measurement was taken with various parameters.

Investigations:

CBC, LFT, KFT were within normal limits.

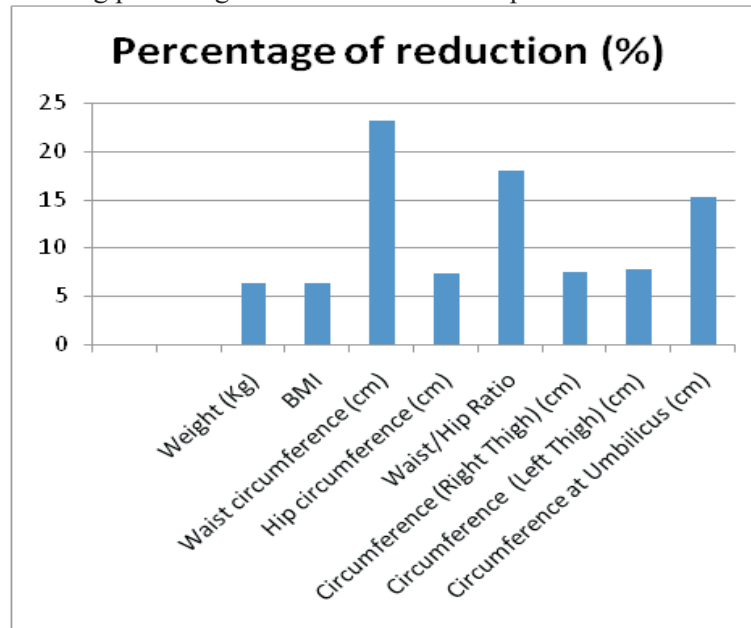
Diagnosis:

Type 1 hyperlipidemia.

Table 1: Showing reduction in parameters within 45 days:

Parameter	Day 0 (Before treatment)	Day 16 (1st follow up after <i>Kala Vasti</i>)	Day 45 (2nd follow up after <i>Kala Vasti</i>)	Total reduction	Percentage of reduction (%)
Weight (Kg)	70.5	69.5	66	4.5 kg	6.38
BMI	30.51	30.08	28.57	1.94	6.36
Waist circumference (cm)	104	86	80	24 cm	23.08
Hip circumference (cm)	110	107	102	8 cm	7.27
Waist/Hip Ratio	0.95	0.77	0.78	0.17	17.89
Circumference (Right Thigh) (cm)	67	65.5	62	5 cm	7.46
Circumference (Left Thigh) (cm)	67	65	61.75	5.25 cm	7.83
Circumference at Umbilicus (cm)	108	102	91.5	16.5 cm	15.28

Graph A: Showing percentage of reduction in all the parameters within 45 days:



Treatment Plan: *Kala Vasti* [under the guidance and supervision of HOD (*Panchkarma*)].

Trial Drug: *Moringa oleifera*

Part used: *Patra* (Leaves).

Posology: *Anuvasan Vasti: Shigru Patra Taila* 60 ml. (*Hrasiasi matra*).

Niruha Vasti: Total: 960 ml.

Saindhava 10 gm

Madhu 60 ml

Shigru Patra Taila 60 ml

Triphala Kashay 820 ml

Shatpushpa Kalka 10 gm

Discussion:

Weight control is widely defined as approaches to maintaining weight within the 'healthy' (i.e. normal or acceptable) range of body mass index of 18.5 to 24.9 Kg/m² throughout adulthood (WHO Expert Committee, 1995). It should also include prevention of weight gain of more than 5 kg in all people. In those who are already over-weight, a reduction 5-10 percent of body weight is recommended as an initial goal [16]. The percentage of weight reduction in this patient is 6.38 whereas percentage of reduction in BMI is 6.36 within 45 days.

According to Ayurveda, *Sthoulya* is *Santarpanjanya Vyadhi*. Charaka has mentioned *Vataghna Anna Pana, Kapha* and *Medohara Ruksha* and *Teekshna Dravyas* as well as *Lekhana Vasti* in the treatment of *Sthoulya* [17]. *Vasti* is considered as *Ardhachikitsa* of *Vatavyadhi* [18]. When *Kala Vasti* was scheduled by using *Shigru Patra Taila*, it is observed that it scraps *Medodhatu* by its pharmacological properties [19].

Pharmacological properties of *Shigru (Moringa oleifera)*: [20-33]

- Rasa-** *Katu, Tikta*
- Guna-** *Laghu, Ruksha, Teekshna*
- Veerya-** *Ushna,*
- Vipaka-** *Katu*
- Doshghnata-** *Kapha Vatahar*
- Karma-** *Medohar, Lekhana* [34].

In *Sthoulya*, there is *Dhatwagni Mandya* due to which *Dhatu*s and *Updhatu*s are not properly nourished and further channels are blocked (*Srotoavarodha*). To correct this *Dhatwagni Mandya*, there is need of *Laghu, Ushna, Teekshna, Deepana* and *Pachana Dravyas* which will improve *Jatharagni* as well as *Dhatwagni*. Moreover, *Teekshna Dravyas* remove *Avarodha* from the *Srotasa*, thus make the channels free for their normal function. To reduce weight,

Meda and *Kleda* should be removed from the body.

Shigru because of its *Ushna*, *Teekshna* properties digests *Meda*(*Prithvi*+*Aap*) and absorbs it [35]. *Ushna guna* evaporates *Aap* and *Teekshna guna* combats against *Prithvi* constituent of *meda*. Its *Katu* and *Tikta Rasa* and *Ushna Veerya* enhances *Deepana* and *Pachana* by eliminating *Kapha* accumulated in *Amashaya* leading to scraping of *Meda* [36]. The already digested *Meda* and *Kleda* by *Pachana Dravyas*, is absorbed with the help of *Ruksha* and *Teekshna* properties of *Shigru*. Further, *Til Taila* is *Ushna* and *Vatanulomak*. Hence the properties of both *Shigru* and *Til Taila* are utilized with the help of this *Lekhan Vasti* to reduce weight.

Constituents of Shigru:

Carbohydrate 13.4, Protein 6.7, Fat 1.7, Fibres 0.9, Mineral 2.3, water 75, Calcium 440mg, Phosphorus 70mg, Iron 7mg, Copper 1.1mg, Iodine 51mg, Carotene 11300 IU, Vitamin B 210mg, Tocoferol 7.4mg, Nicotinic acid 0.8mg [36], Ascorbic Acid 22mg, [38], Flavanoids [39].

Ascorbic Acid is a reducing agent. It is completely absorbed from GIT and widely distributed extra and intracellularly. It plays a role in many oxidative and other metabolic reactions [40].

Conclusion:

Before treatment, the patient reduced 4.5 kg weight with irregular exercise and diet control within one year. The study showed reduction in weight by 4.5kg (6.38% of total body weight) only with *Kala Vasti* given with *Hrasiasi Matra* (60 ml) of *Anuvasana* within 45days. If the dose of *Anuvasana* is increased from 75-100 ml, it can show significant reduction in weight.

The results will be more significant when the study will be carried with appropriate diet and exercise plan. The study is subjected to single case but may show significant weight loss when carried out in a group of patients.

References:

[1] Haslam D, Endocrinology: Adult and Pediatric: Diabetes Mellitus and Obesity, Obesity: a medical history, Obesity Reviews Vol. 8, 2007, Elsevier Health Sciences

Chicago, Issue Supplement 1: p-31–36.

[2] Caballero B, The global epidemic of obesity: An overview, Epidemiologic Reviews Vol. 29 Issue 1, Oxford University Press, Oxford, p-1–5.

[3] World Health Organization, Technical report series 894: Obesity: Preventing and managing the global epidemic, 2000, WHO, Geneva, p-56.

[4] Peter G. Kopelman, Ian D. Caterson, Michael J. Stock, William H. Dietz, Clinical obesity in adults and children: In Adults and Children, 2005, Blackwell Publishing ISBN 1-4051-1672-2, p-493.

[5] Selections from regional press, India facing obesity epidemic: experts" The Hindu, Vol 26, 2007, Institute Of Regional Studies South Asia, p-10-12.

[6] Shastri Kashinath, Charak Samhita, Vol. I, Sutrasthana, Chapter 21/3, 2009, Choukhamba Bharti Academy, Banaras, p-407.

[7] Sharma P V, Charak Samhita, Vol. I, Sutrasthana, Chapter 21/3, 2011, Choukhamba Orientalia, Banaras, p-300.

[8] Acharya Yadavji, Sushrut Samhita, Vol. I, Sutrasthana, Chapter 15/41, Choukhamba Orientalia, Banaras, p-75.

[9] Agnivesha, Charak Samhita, edited by Tripathi Bramhanand, Ashtouninditiya, Chapter 21, Verse 9, Reprint 2006, Choukhamba Surbharti Prakashan, Varanasi, p-401.

[10] Jeffrey Flier, Eleftheria Maratos-Flier, Biology of Obesity Harrison's Principles of Internal Medicine, Vol. I, 1999, Mc Graw Hill Medical Publication, New York, p-462.

[11] Park K, Epidemiology of non-communicable disease/ Obesity, Preventive Medicine, 21st edition (2011), Banarasidas Bhanot Publishers, Jabalpur, p-366.

[12] Kasture Haridas, Basti Vigyan, Ayurvediya Panchkarma Vigyan, 7th edition, 2006, Shri Baidyanath Ayurved Bhavan, Nagpur, p-376, 378.

[13] Murthy KRS, Ashtang Hridayam, Sutrasthana Chapter 19/64, edition 2006, Choukhamba Krishnadas Academy, Banaras, p-125.

[14] Vaidya Bapalal, Bhavprakash Nighantu, Vol. II, reprint 2007, Choukhamba Bharti Academy, p-345-352.

[15] Sharma P V, Charak Samhita, Vol. II, Chikitsasthana, Chapter 6/15, edition 2012, Choukhamba Orientalia, Banaras, p-170.

[16] WHO, International Agency for Research on Cancer, IARC Handbooks of Cancer Prevention- Weight control and Physical Activity, IARC Press, Lyon 2002.

[17] Murthy KRS, Ashtang Hridayam, Sutrasthana

Chapter 19/64, edition 2006, Choukhamba Krishnadas Academy, Banaras, p-125.

[18] Shastri Kashinath, Charak Samhita, Vol. I, Sutrasthana, Chapter 21/21, Choukhamba Bharti Academy, Banaras, p-409.

[19] Shastri Kashinath, Charak Samhita, Vol. II, Siddhisthana, Chapter 1/40, Choukhamba Bharti Academy, Banaras, p-971.

[20] Vaidya Bapalal, Bhavprakash Nighantu, Vol. II, reprint 2007, Choukhamba Bharti Academy, p-345-352.

[21] Sharma P V, Dravyaguna Vigyana, Vol II, Reprint 2011, Choukhamba Bharti Academy, p-112.

[22] Gogate V M, Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants, Choukhamba Publication New Delhi, p-501.

[23] Bedi Ramesh, Bedi Vanaspati Kosh, Vol. 5, 2005, Kitabghar Prakashan, New Delhi, p- 501.

[24] Sinha Ramsushil, Vanaushadhi Nidarshika, 3rd edition 2002, Uttarpradesh Hindi Sansthana, Lucknow, p-369.

[25] Varier P S, Indian Medicinal Plants, Vol. IV, Universities Press Pvt.Ltd. Hyderabad, p-59.

[26] Sharma P V, Priya Nighantu, Haritakyadi varga, 2004, Choukhambha Surbharti Prakashana, Varanasi, p-44.

[27] Sharma P V, Kaiyadev Nighantu, Oshadhi varga, verse 744-745, 2009, Choukhambha Orientalia, Varanasi, p-137-138.

[28] Sharma P V, Dhanvantari Nighantu, 2008, Choukhambha Orientalia, Varanasi, p-127.

[29] Chakrapanidatta, Chakradatta, commentary by Indradev Tripathi, Sthoulya Prakaran, verse 10, 4th edition,

Choukhambha Sanskrit Sansthan, Varanasi, p-221.

[30] Chunekar K C, Bhavaprakash, Vol. I, verse 105-110, 2006, Choukhambha Orientalia, Varanasi, p-255.

[31] Vaidya Bapalal, Nighantu Adarsh, 2007, Choukhambha Bharti Academy, Varanasi, p-346

[32] Nishteshwar K, Text Book of Dravyaguna, 2007, Choukhambha Publishing House, New Delhi.

[33] Shastri Shukla Jayaram, Vanoushadhi Sangraha, 2009, Choukhambha Bharti Academy, Varanasi, p-213.

[34] Sharma P C, Yelne M B, Dennis T J, Database on Medicinal Plants Used In Ayurveda, Vol.I, CCRAS, Dept of ISM & H, Ministry of Health & Family Welfare (Govt. of India), 2000, p-431.

[35] Sastry J L N, Dravyaguna Vijnana, Vol. II, 2nd edition 2005, Choukhamba Orientalia, Varanasi, p-139-143.

[36] Deshpande, Ranade, Dravyaguna Vigyana, Reprint 2010, Proficient Publishing House, Pune, p-342.

[37] Vaidya Bapalal, Nighantu Adarsh, 2007, Choukhambha Bharti Academy, Varanasi, p-351.

[38] The Ayurvedic Pharmacopoeia of India, Part I, Vol.II, 1st edition, The controller of Publications, Delhi, p-155-157.

[39] Sharma P C, Yelne M B, Dennis T J, Database on Medicinal Plants Used In Ayurveda, Vol.I, CCRAS, Dept of ISM & H, Ministry of Health & Family Welfare (Govt. of India), 2000, p-431.

[40] Tripathi K D, Essentials of Medical Pharmacology, 7th edition 2013, Jaypee Brothers Medical Publishers Pvt.Ltd., New Delhi, p-916.

Table 2: Changes in Lipid profile within 45 days:

Fasting Lipid Profile	Before Treatment	After Treatment
Total Cholesterol	270	220
Triglyceride	94	90
LDL	158	155
HDL	47	47
VLDL	18	18

