

ROLE OF PANCHKARMA IN THE MANAGEMENT OF *STHOULYA* W.S.R. TO OBESITY  
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**ABSTRACT**

Obesity is emerging as an important health problem globally and as well as in India. It is estimated that 22 million Indians are obese, especially abdominally obese. Obesity is the primary driver of non-communicable diseases like diabetes, cardiovascular diseases, disabilities like osteoarthritis and even cancer. Obesity i.e. *Sthoulya Roga* as mentioned in Ayurveda is a *Medoroga* which results due to dysfunction of *Meda Dhatvagni* (factor responsible for nourishment/ metabolism of *Meda Dhatu*) and is considered as metabolic disorder. Further, its description is available in *Ashtanindita Purusha Adhyaya of Charak Samhita* (chapter dedicated to 8 types of undesirable physiques where obese are criticized by society because of inappropriate body size). In this disease condition there is excess deposition of adipose tissues in the body. In conventional medical science it has mainly surgical management which is even associated with other complications. *Ayurveda* has upper hand in the management of obesity which has been mentioned as *Sthoulya* in Ayurvedic classics. The treatment principles of *Ayurveda* for obesity not only deals medicines but also dietary restrictions, exercises, cellular level bio-purification therapies and *Rasayana* (rejuvenation) treatment. This article deals with mainly the *Shodhana* (purification) treatment which are beneficial in obesity along with other useful formulations.

**KEYWORDS:** Obesity, *Sthoulya*, *Panchkarma*, *Shodhana Chikitsa*.**INTRODUCTION<sup>[1]</sup>**

Obesity is a chronic and increasingly common disease globally characterised by excess body fat. It develops gradually and often persists throughout life. As a preventable cause of death, obesity is second only to smoking. Like any other chronic condition, such as diabetes or hypertension, obesity worsens when strategies applied for weight reduction are withdrawn. If it is not treated for the duration of the patient's life, obesity emerges as a potent co-morbid risk factor. Obesity has been described in *Charak Samhita*: (*Sutrasthana*: Ch XXI v. 3-4) in the context of body phenotypes with obese phenotype having the following 8 defects i.e. *Ashta dosha* of *Sthoulya* (obesity) includes: *Aayusho hrasha* (shortening of lifespan), *Javaoprodha* (hampered movement), *Krichhra Vyavayata* (difficulty in sexual intercourse), *Daurbalya* (debility), *Daurgandhya* (foul smell), *Swedabadha* (over sweating), *Kushdha Atmatram* (excessive much hunger), and *Pipasa atiyogascha* (excessive thirst).<sup>[1]</sup> The rapid spread of urbanisation and industrialisation and dramatic lifestyle changes that accompany these trends has led to the pandemic of obesity, even in developing countries.

Obesity has serious public health implications. Excess weight has been associated with mortality and morbidity.

**PREVALENCE<sup>[2]</sup>**

Obesity is emerging as an important health problem in India. It is estimated that 22 million Indians are obese, especially abdominally obese. Obesity is the primary driver of non-communicable diseases like diabetes, cardiovascular diseases, disabilities like osteoarthritis and even cancer.

**OBESITY ASSESSMENT<sup>[3]</sup>**

Presently, there are three commonly used objective methods of estimating obesity in clinical practice:

- (i) Body Mass Index (BMI),
- (ii) Waist-to-hip ratio (WHR), and waist circumference (WC) and
- (iii) Fat distribution.

**Table 1: Classification of Overweight and Obesity by Body Mass Index (BMI) for Asian Indians.**

	Obesity Class	BMI (kg/m <sup>2</sup> )
Underweight		<18.5
Normal		18.5 to 22.9
Overweight		23.0 to 24.9
Obesity	I	25.0 to 29.9
	II	30.0 to 34.9
Extreme obesity (Moribund obesity)	III	>35

**Table 2: BMI cut-offs for Asian Indians. According to WHO and IOTF guidelines.**

Body mass index Overweight: 23 kg/m <sup>2</sup> (as opposed to 25*) Obese: 25 kg/m <sup>2</sup> (as opposed to 30*)
Waist circumference Measurement method to be clearly mentioned Action level 1: 78 cm (M), 72 cm (F), to be further reached Action level 2: 90 cm (M), 80 cm (F), accepted
Waist-to-hip ratio 0.88 (men), 0.80 (women) This measure of abdominal obesity could be erroneous but some studies have shown it to closely correlate to coronary heart disease

**Aetiology<sup>[4]</sup>**

Obesity is a multifactorial condition. The factors playing a role in eating and weight control include: genetic, cultural, socio economic, behavioural, and situational. Metabolic, Physiological and now even Viral (adenovirus). Mostly obesity is primary, that is, no obvious cause exists other than an imbalance in energy intake and energy expenditure. When energy expenditure is less than energy intake, there will be weight gain. Other causes of obesity (though not common) include genetic alterations, endocrine diseases (including Cushing's syndrome, hypothyroidism and hypogonadism), drugs and neurological disorders. The endocrinopathies associated with obesity are Cushing's syndrome, hypothyroidism, insulinoma, craniopharyngioma, Turner's syndrome, male hypogonadism and polycystic ovarian syndrome. The genetic syndromes associated with obesity are Lawrence-Moon-Biedl (LMB), Prader-Willi, Alstrom, Carpenter, Cohen, Beckwith Wiedemann. The common medications which cause weight gain.

**MATERIALS AND METHODS<sup>[5]</sup>**

Information of *Nidanas* of *Sthoulya* (obesity) is collected from different Ayurvedic medical textbooks, magazine, journal, internet etc. it is review article and data has been collected from all available sources.

**NIDANAS OF MEDOROGA**

On the basis of concept of *Samanya*, the *Nidanas* of *Sthoulya* can be classified as:

- *Dravya Samanya* – intake of excessive fatty material like *Mansa*
- *Guna Samanya* - *Sheeta*, *Snigdha*, *Guru* etc.
- *Karma Samanya* - *Divaswapna*, *Avyayamaa*, *Sukhasana* etc.

All the *Nidanas* described by various *Acharyas* for *Sthoulya* can be classified under four broad categories & tabulated as follows:

- *Aharaja Nidana*
  - *Viharaaja Nidana*
  - *Manasja Nidana*
  - *Anya Nidana*.
- *Aharaja Nidana*
  - ❖ *Guru Aharsevan*
  - ❖ *Atibhojan*
  - ❖ *Snigdha Aharsevan*
  - ❖ *Madhura Aharsevan*
  - ❖ *Sheeta Aharsevan*
  - ❖ *Navanna sevan*
  - ❖ *Atimamsa sevan*
  - ❖ *Shleshma Aharsevan*
- *Viharaja Nidana*
  - ❖ *Avyayam*
  - ❖ *Diwaswapna*
  - ❖ *Avyavay*
  - ❖ *Sukhshaiyya*
  - ❖ *Snan sewan Manas*
- *Manas Nidana*
  - ❖ *Achintan*
  - ❖ *Priyadarshan*
  - ❖ *Manasonivrutti*
  - ❖ *Saukhyena*
  - ❖ *Harshaniyatvat*
- *Anya Nidana*
  - ❖ *Amarasa*
  - ❖ *Snigdha Madhura Basti sewan*
  - ❖ *Taila abhyanaga*
  - ❖ *Beejadoshaswabhawat*

**General diagnosis<sup>[6]</sup>**

तदतिस्थौल्यमतिप्रेरणाद

गुरुमधुरशीतस्निग्धोपयोगादव्यायामादव्यवायाद्विवास्वप्नाद्ध  
पनित्यत्वाद- चिन्तनाद्वीज स्वभावाच्चोपजायते। ॥4॥

(च.सू. 21/4)

Over-obesity is caused by over-saturation, intake of heavy, sweet, cold and fatty diet, indulgence in day-sleeping and exhilaration, lack of mental work and genetic defect.

The majority of the techniques discussed in *Ayurvedic* texts are subjective. According to *Susruta*, *Karsya* and *Sthoulya* can be identified through examination. Objective diagnostic criteria, such as measurements of height, weight, abdominal circumference, skin fold thickness, etc., can be correlated with *Akrutipariksa* (examination of body make-up, BMI, etc.), *Pramana* (parameters like Height Weight, etc.), and *Samhananapariksa* (compactness of tissues). Acharya Charaka and *Susruta* also mentioned the importance of measuring various *Angapratyanga* correctly. These can be correlated with the objective criteria for obesity, such as BMI, waist circumference, waist hip ratio, relative weight (i.e., actual weight divided by desired weight), and ponderal index (i.e., height in centimeters divided by weight in kilograms).

**Samprapti<sup>[7]</sup>**

Obesity except *Meda dhatu* other body tissues do not get properly nourished in him because the channels are blocked with fat.

**Samprapti Ghataka<sup>[9]</sup>**

<i>Doṣha</i>	<i>Kaphapradhana Tridoṣa, Samana &amp; Vyanavayu, Pacaka pitta, Kledaka Kapha</i>
<i>Duṣya</i>	<i>Rasa, Meda</i>
<i>Agni</i>	<i>Medadhatvagni Mandya, Jatharagnivṛddhi</i>
<i>Ama</i>	<i>Medodhatugata</i>
<i>Srotas</i>	<i>Annavaha, Rasavaha, Maṃsavaha, Medovaha</i>
<i>Srotoduṣṭi</i>	<i>Sanhga, Vimargagamana, Atipravṛtti</i>
<i>Udbhavasthana</i>	<i>Amasaya</i>
<i>Sañcarasthana</i>	<i>Rasayani</i>
<i>Adhiṣṭhana</i>	<i>Sarvasarira specifically Udara, Sphik, Stana</i>
<i>Vyaktasthana</i>	<i>Whole Body</i>
<i>Svabhava</i>	<i>Chirakalika</i>
<i>Sadhyasadyata</i>	<i>Kṛucchrasyadyata</i>

**Clinical features<sup>[10]</sup>**

अतिस्थूलस्य तावदायुषो ह्रासो जवापरोधः कृच्छ्रव्यवायता  
दौर्बल्यं दौर्गन्ध्यं स्वेदाबाधः क्षुदतिमात्रं पिपासातियोगश्चेति  
भवन्त्यष्टौ दोषाः। (च.सू. 21/4)

According to *Ayurveda*, the clinical characteristics of *Stoulya* include: *Ayuhra* (diminishing life span), *Javoparodha* (lack of enthusiasm), *Kṛcchravyavaya* (difficulties of sexual act), *Dourbalya* (weakness),

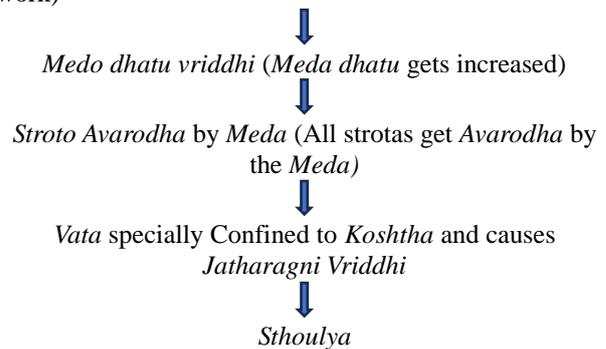
With the accumulation of fat, the person finds himself incapable of doing every type of activity. It is associated with dyspnoea on exertion, thirst, drowsiness, sleepiness, sudden (momentary) obstruction to respiration, bodyache, voracious appetite, excessive sweating and bad odour from the body. His life expectancy as well as sexual potency are decreased.

In all human beings (physiologically) there is a tendency for the fat to accumulate in the abdomen and in the bones (in the form of bone marrow); so (pathologically) in an obese person there is an excessive enlargement of the belly due to fat accumulation. As all the (other) channels are blocked by *Meda*, *vayu* is especially active in the abdominal cavity, stimulates the digestive fire and increases absorption of (the end products of digestion of) food.

**Samprapti of Sthoulya (pathogenesis)<sup>[8]</sup>**

In order for any disease to develop, the body's components must vitiate.

Following are the components for obesity- *Nidana* (*Madhura Rasa, Avyayma, Diwaswapa*, lack of mental work)



*Dourgandhya* (foul odor), *Svedavabadha* (excessive hunger), *Kṣudita atimatrata* (excessive thirst), *Chala Sphik, Stana, Udara* (flabby buttocks, breast, and abdomen), *Nidradhikya* (excessive sleep), *Gadgada Vani* (indistinctness of speech), and *Krathana* (breathlessness). The clinical characteristics of obesity, according to current research, include weight gain, the development of skin folds around the axilla, behind the breast and peritoneum, protuberant belly, dyspnea with exercise, irregular menstruation, and infertility.

➤ **Management**

▪ **According to Acharya Charaka<sup>[11]</sup>**

गुरु चातर्पण चेष्टं स्थूलानां कर्शनं प्रति । (च.सू. 21/20)

For reducing the bulk of the obese, heavy and non-saturating.

Food and drinks alleviating *Vata* and reducing *Kapha* and fat, rough, hot and sharp enema, rough anointing, use of *Guduci*, *Devadaru*, *Musta*, *Triphala*, *Takrariṣṭa* (a fermented preparation of butter milk) and honey is recommended for removing the over-obesity. *Vidanga*, *Sunthi*, *Vavakṣara* and ash powder of black iron mixed with honey and also the powder of barley and *amalaka* is an excellent formulation for the same. Similarly, *Bilvadi pancamula* (five big roots) mixed with honey and the use of *Shilajatu* alongwith the juice of *Agnimantha* is recommended.

▪ **According to Acharya Susruta<sup>[12]</sup>**

The person should make use of, according to stipulated procedure, *Shilajatu*, *Guggulu*, *Gomutra*, *Triphala*, *Loharaja* (*Lohabhasma*) *Rasanjana*, *Madhu*, *Yava*, *Mudga*, *Koraduṣaka*, *Ayamaka*, *Uddalaka* etc. which create dryness and clear the obstructed channels; indulge in physical exercises and resort to *Lekhana Basti* etc.

▪ **According to VAGBHATA (Astanga Samgraha)<sup>[13]</sup>**

• *Madana*, *Triphala*, *Musta*, *Satahwa*, *Ariṣṭa*, *Vatsaka*, *Patha*, *Aragwadha* taken in the form of decoction cures diseases due to excessive nourishment.

• Likewise, the decoction of *Vatsaka*, *Samyaka*, *Devadaru*, the two *Nisas* *Musta*. *Patha*, *Khadira*, *Triphala*, *Nimba* and *Gokṣura*.

• Application of paste of *Madana* and other drugs (mentioned above) to the body or bathing in water prepared by them should also be done.

• *Hingu*, *Gomedaka*, *Vyoṣa*, *Kustha*, bones of *Kraunca* bird, *Gokṣura*, *Ela*, *Vrksaka*, *Sadgrantha*, *Kharahwa* and *Upalabhedaka* - all these taken with buttermilk, whey or juice of kola will cure difficulty of Micturiti on, worms, diabetes and obesity.

• A *Mantha* prepared from *Krimighna*, *Triphala*, oil, flour of grains, *Tryuṣhaṇa* and *Dipyaka* mixed with water kept for some time in an iron vessel is ideal for patients who are overnourished.

▪ **According to BHAVAPRAKASA<sup>[14]</sup>**

Stored rice, *Mudga*, *Kulattha*, *Uddalaka*, *Kodrava* and other foods which can deplete fats are to be practised regularly. *Lekhana Basti* has to be practised regularly by individual having excess fat deposition. *Dhoompana* (Medicated smoking), anger, *Raktamokshana* (bloodletting), consuming food after digestion, eating only barley and wheat, fasting, sleeping on an uneven and hard bed, mental stamina, patience and letting out

depression are helpful to a patient of obesity. These factors reduce or deplete fat deposits. The problems due to excess eating and obesity are relieved by physical exercises, mental strain, sexual intercourse, walk, use of honey and awakening at night. Obesity is surely relieved by consuming a diet comprising of *Yava* (barley) and *Syamaka* (millets) mixed with *Cavya*, *Jiraka*, *Trikaṭu*, *Hingu*, *Sauvarca* salt and *Chitraka*. Curd water and powdered barley flakes suppress fats and promote appetite.

➤ **Effect of Lekhana Basti<sup>[15]</sup>**

*Lekhana Basti* (*Basti* using drugs with Scarifying action) has been the choice of therapy in Obesity in common practice. Medicinal formulation prepared with *Triphala kvatha*, *Honey*, Cow's urine, *Yavakṣara*, *Shilajatu*, *Hingu*, *kasisa*, *Tuttha*, *Saindhava* is used for *lekhaṇa basti* which has shown significant result in reduction of weight, BMI, Waist circumference. The drugs used in *Lekhana Basti* possesses opposite quality of *Meda* and *Kapha*, which cause *Lekhana* of *Medha* and also *Basti* controls the *Vayu* and causes *Koṣṭasuddhi* which starts proper metabolism by removing *Vayu Avaraṇa* and provide nourishment to the later *Dhatu*.

➤ **Kshara Basti<sup>[16]</sup>**

*Acharya Chakrapani* has mentioned in *Chakradatta*, *Kshara Basti* under *Niruha Basti Adhikara*. The term *Kshara Basti* is consists of two words *Kshara* and *Basti*. In this context the word *Kshara* refers to *Kshapana* i.e *Shodhana*. The specific *Gunas* of *Kshara Basti* are, it should not be *Ati Teekshna*, *Ati Mrudu*, *Ati Shukla*, *Ati Picchila* and should be *Slakshna*, *Avishandi*, *Shiva* (*Soumyatva*) and *Sheegrakari*. It Also has *Tridoshagna*, *Agneya Gunayukta*, *Ushna*, *Teekshna*, *Pachana*, *Shodhana*, *Ropana*, *Vilayana*, *Shoshana*, *Stambana*, *Lekhana* properties. In our classics we get references of *Bastis* where *Kshara*, *Gomutra* and *Teekshna dravyas* are used as one of the ingredients and those *Bastis* can also considered as *Kshara / Teekshna Basti*.

**Sequelae and complications<sup>[17]</sup>**

As all the other channels are blocked by *Meda*, *Vayu* is especially active in the abdominal cavity, stimulates the digestive fire and increases absorption of (the end products of digestion of) food. Consequently, the food is digested very quickly and the person craves for more food. In due course of time, many serious diseases may develop. Under the circumstances, *Vayu* and the digestive fire are the main culprits for producing the complications. They burn the obese as the jungle fire burns the forests.

**Food articles and Life style regimens which are to be practiced and avoided by the patients of Obesity<sup>[18]</sup>**

Types	Pathya (Do's)	Apathya(Don't's)
Cereals, Grain	PuranaShali Rice, Yava, Laja	Godhuma, New Shali
Pulses	Mudga, Masoor Dal, Kulatha Dal	Masha, Tila
Vegetables	Patola, Shigru, Ginger, Radish	Madhura Rasatmaka whole root vegetables like sweet potatoes, Potatoes etc
Fruits	Jambu, Amalaki, Bilwa, Triphala	All sweet fruits
Liquids	Honey, Takra, Hot water, Mustard Oil, Asava, Arista	Milk Preparation, Ikshu Rasa, Cold water
Physical	Physical Activity Awakening Travelling Brisk Walk Sexual Act	Laziness Day Sleeping Lack of exercise Lack of movement Absence of sexual Act

**DISCUSSION<sup>[19,20]</sup>**

The fact that the classical literature places a high value on *Basti* therapy and highlights the broad range of its application shows how widely it can be used to treat a variety of illnesses involving various *Doshas*, *Dushya*, and *Adhishthana*. The main treatment for *Vatika* diseases is *Basti*.<sup>[18]</sup>

The components that make up *Basti* determine how it works. Similar to how the sun, which is millions of miles from Earth, produces *Apakarshana* of Rasas due to its *Ushna-Tikshana Pradhana Gunas*, *Basti* causes the *Shodhana* of the *Doshas* from *Pada* to *Shirah*. *Prushtha*, *Kati*, *Koshta*, and other accumulated *Doshas* are eliminated by *Basti*, which is found in *Pakwashaya*.<sup>[19]</sup>

According to *Sthoulya*, the main causes of illness are *Vata* and *Kapha*. As previously mentioned, *Kshar & Lekhan Basti* is a blend of special medications of *Ushna Veerya* and *Katu Vipaka*; as a result, it effectively affects *Kapha Dosh*. Additionally, because of their *Ushna Veerya*, they also possess *Vatahara karma*. *Arand mool qwath (Madhutailik Basti)*, *Triphala qwath (Lekhan Basti)*, *Pippali, Chitak qwath (Kapharoga Nashak Basti)*, *Gomutra, Chinch, Guda, Satpushpa*, and *Saindhav Lavana* make up the majority of these *Basti*, with the exception of *Madhutailik Basti*. Due to their possession of *Ruksha Guna*, *Ushna Veerya*, *Balya*, *Rasayana*, and *Vata Kapha Shamaka* properties, these medications significantly alleviate the majority of *Sthoulya* symptoms.

*Pippali* and *Chitrak* have *Ushna Veerya* and *KatuVipaka*, which are found in *Kapharoga Naashaka Basti*. As a result, they have an effective effect on *kapha dosha*, and because of their *Ushna Veerya*, they have *vatahar karma*. This allows them to manage the primary causes of disease, which are *Kapha* and *Vata*. The combination functions even at the level of *Agni* due to its *Deepana* and *Pachana Karma*; its *Deepana* property primarily corrects the *Medodhatu Agnimandya* and inhibits the disease's progression by preventing the formation of *Meda*.

*Tikta, Kashaya Rasa*, and *Laghu Guna* work together to correct the *Sanga* in *Medovaha Srotas*, which nourishes *Uttaratar Dhatu* and halts the *Meda Vriddhi* process. Because the combination contains both *Ushna Veerya* and *Tikshna Guna*, it calms vitiated *Vata* and lowers *Sankocha*.

**CONCLUSION**

Overconsumption of *Madhura, Snigdha Dravya, Adhyasana*, and *Avyayama*, which accounts for high energy intake and low energy expenditure, is the cause of obesity. To varying degrees, obesity can result from hypothalamic dysfunction that regulates hunger, satiety, and energy expenditure. Obesity can be treated with *Sodhana* (purificatory) and *Samana* (palliative) therapy modalities. Treatment for obesity emphasizes both preventive and curative measures, such as teaching the patient about lifestyle choices (*Dinacharya, RutuCharya*), dietary practices, and mindfully monitoring dos and don'ts. Other treatment modalities need to be investigated further and validated by research.

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