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# OBESITY-A LIFE STYLE DISORDER AND ITS MANAGEMENTS THROUGH AYURVEDA

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#### **ABSTRACT**

WHO has estimated that by 2022, two third of the global population would be afflicted with chronic non communicable diseases which are mostly related with faulty dietary pattern and life style habits. Obesity being one of them. Obesity is defined as body weight above a desirable standard BMI 25 to 29.5 as a result of lack of physical activity with increased intake of food. Obesity is well defined in Ayurveda as Sthoulya. According to Ayurveda and modern medicine obesity is caused due to a build-up of excessive fat in the body. The present abstract is focused onidentifying definitive approach for management of sthoulya through ayurvedic interventions both shodhan and shaman therapy. Sthoulya is a notorious disease which disturbers the total

metabolic system of the body various treatment modalities have been defined for sthoulya in our samhita. Among them langhana, swedana, lekhana, guruaptarpan and basti karma have significantimportance. Modern management of obesity emphasizes on the use of anoraxients drugs which adjuncts basically stimulate the satiety centre in medial hypothalamus and suppress eating canter in the lateral hypothalamus. However these drugs are of no value without strict food restrictions have side effects and our in ineffective during long period of time.

**KEYWORDS:** Life style disorder, obesity, *ayurveda*, sthoulya.

## INTRODUCTION

Obesity or abnormal weight gain is common metabolic disorder. It is accumulation of access fat in the body which may lead to negative effects on health, reduced life expectancy and/or increasedhealth problems.

The world health organization (WHO) defines good health as a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity<sup>[1]</sup>, which is in closeproximity to the definition of good health mentioned in Ayurvedic classics.

Obesity is defined as body weight above a desirable standard BMI 25 to 29.5<sup>[2]</sup> as a result of lack of physical activity with increased intake of food. Obesity is well defined in Ayurveda as Sthoulya. It has been described under the caption of Santarpanotha Vikara and being counted under eight undesirable conditions (Ashta-Nindaniya-Purush)<sup>[3]</sup>, Shleshma Nanatmaja Vikara<sup>[4]</sup>, Atinindita, Atibrihmana Nimittaja and Adhika Dosha Yukta Roga<sup>[5]</sup>, Rasa Nanatmaja Vyadhi. [6] Moreover Acharya Sushruta has emphasized on metabolic disturbances (Dhatvagnimandya) in the etiopathogenesis of Sthoulya. However Sthoulya can also occurs due to Beejdosha.<sup>[7]</sup> According to Ayurveda and the patients of Sthoulya exhibits very strange phenomenon. Their appetite is excessive and whatever they eat is quickly digested, which indicates hyper functioning of the *Jatharagni*. Besides this, the patient suffer from laziness, may be due to under supply of energy, which may be due to the hyper functioning of Bhutagni. Further Dhatvagni also seems too disturbed, as in Sthoulya patient. In modern medicine obesity is caused due to a build-up of excessive fat in the body.

#### **Methods**

Sthoulya is a notorious disease which disturbers the total metabolic system of the body and other NCD such as Diabetes, Cardiovascular disease, stroke and Cancer are major a public health concern across India. Overweight and Obesity are a modifiable risk factors for NCD. Various treatment modalities have been defined for Sthoulya in our Samhita. Among them Langhana, Swedana, Lekhana, Guruaptarpan and Basti Karma have significant importance. Acharya Charak Ushma Tikshna Basti has recommended whereas Acharya Shushurt has indicated Lekhan Basti for Sthoulya. Modern management of obesity emphasizes on the use of anoraxient drugs which adjuncts basically stimulate the satiety centre in medial hypothalamus and suppress eating canter in the lateral hypothalamus. However these drugs are of no value without strict food restrictions have side effects and our in ineffective during long period of time and their regular use is most of the times associated with adverse effect like dryness of mouth, constipation, menstrual disorders, rhinitis, migraine etc.

### **Definition of Obesity**

In simple term, obesity can be defined as the increased volume of adipose tissue in the thighs, abdomen and chest, where the body vitality decreases and might result in deteriorated health.

According to *Ayurveda*, *Atisthaulya* (obesity) is described a person in whom excessive and abnormal increase of *Medo Dhatu* along with *Mamsa Dhatu* is found, which result into pendulous appearance of buttocks, belly and breast is called *Sthoola*. It is considered as one of *Santarpanottha Vikara* (disease due to consumption of excessive calories) in *Ayurveda*. *Medodusti* (disorders of fat metabolism) may be one of the risk factors for ischemic heart disease (IHD).

Quantifying obesity with BMI and waist circumference for risk of type 2 DM and cardiovascular disease<sup>[9]</sup>

Waist circumference				
BMI(weight in kg/height in m <sup>2</sup> )	Classification	Men <94cm Women<80cm	Men94-102cm Women 80-88cm	Men >102cm Women >88cm
18.5-24.9	Reference range	Negligible	Mildly increased	Moderate
25.0-29.9	Overweight	Negligible	Moderate	Severe
>30.0	Obese			
30.0-34.9	Class I	Moderate	Severe	
35.039.9	Class II	-	Very severe	Very severe
>40.0	Class III	-	Very severe	Very severe

# **Causative factors for Obesity**

- Increase intake of energy-dense foods that are high in fat, carbohydrates.
- Overeating and irregular food habits.
- Lack of physical activities due to sedentary life style.
- Genetic, endocrine disorders, medical reasons or psychiatric illness.
- Day time sleep.
- In *Ayurveda*, the heredity component (*Bijadosha*), besides dietetic, regimen and physiological factors in the causation of obesity.
- According to Sushruta, 'Rasa' dhatu is responsible for 'Sthoulya' or 'Karshya'.
- *Dhatvagni Mandya* (weak digestive fire at the level of body tissues) is the main cause besides other components in the etiopathology of *Sthaulya*. (A.S.Su.24/15)
- All the factors can be categorized under four groups:
- 1. Aharaja Nidana (dietetic causes).
- 2. Viharaja Nidana (regional causes).
- 3. Mansika Nidana (psychological factors).
- 4. Anya Nidana (other).

## **Symptoms**

- Breathlessness even on little exertion/physical activity.
- Lack of interest in doing work.
- Profuse sweating with foul body odor.
- Excessive hunger.
- Feeling of tiredness.
- Excessive sleep.
- Acharya Charak has enlisted the following symptoms as cardinal symptomsof obesity. [10]
- 1. Medomamsa Ativridhi (excessive growth of muscle and fat tissue).
- 2. Chala Sphik-Udara-Stana (pendulous buttocks-abdomen-breast).
- **3.** Ayatha Upachaya Utsaha (disproportionate strength with his physical growth).
- According to acharya sushrut The characteristics (ROOPA) of obese individual<sup>11</sup>:
- Shortness of breath
- Increased thirst
- Increased appetite
- Increased sleep
- Excessive perspiration with foul odour
- Hypoventilation
- Heaviness of body
- Mumbled speech

Besides these cardinal symptoms, eight disabilities of Atisthaulya (morbid obesity)<sup>[12]</sup>

- 1. Ayusho Harsa (deficient in longevity).
- 2. Javoparodha (less energy level).
- 3. Krichchra Vyavaya (difficulty during sexual intercourse).
- 4. Daurbalya (weakness).
- 5. Daurgandhata (bad smell).
- 6. Swedabadha (more sweating).
- 7. Ati Kshudha (excessive hunger).
- 8. *Ati Pipasa* (excessive thirst).

These are the most prominent clinical features of morbid obesity.

## **Diagnosis**

Specific criteria for diagnosis of obesity:

- 1. Age specific weight for height table.
- 2. Body mass index.
- 3. Skins fold measurements.
- 4. Body girth measurement.
- 5. Waist circumference
- 6. Relative weight
- 7. Waist/hip ratio.

## Management of obesity

For treatment of Sthoulya, the ancient Ayurvedic texts advice regular exercise, Langhana and body purification by Panchakarma procedures ike Lekhana Basti and Rukshana Basti. Many Medohara, Lekhana and Karshana Dravya like Shilajatu, Gomutra, Madhu, Musta, Guduchi, Vidanga, Yava, Amalak Churn, Bilwadi Panchamoola etc are also told. It is also said that treatment of Sthoulya is not easy, but with proper selection and combination of drugs and Panchakarma procedures, it can be managed.

The first line of treatment of obesity is to avoid the causative factors. According to Acharya Charak types of Langhan therapy i.e. Vamana, Virechana (biopurification therapies) etc. are advised for practice according to Vyadhibala (strength of the disease) and Dehabala (strength of the patients). Nitya Langhana therapy (reducing therapy) Rukshana therapy are more suitable for the management of obesity. Langhana has been further divided into Samshodhana (biopurification therapies) and Samshamana (alleviating therapies). Ruksha, Ushna, Tikta Basti, Ruksha Udvartana, Lekhana Basti, Guru Aptarpana, Lekhaniya Dashemani, Karshana Yavagu of Gavedhuka, Madhudaka, Varunadi Gana, Salsaradi Gana, Rodhradi Gana, Arkadi Gana, Mushkadi Gana, Trayushnadi Gana are also suggested in the management of obesity.

Vayu and Akash Mahabhuta dominant Dravya attributed to Laghavkara action. Katu & Kashaya Rasa are having Karshana, Upachayahar property, while Tikta Rasa is having Lekhana and Upshoshana Karma, hence Vayu & Akash Mahabhuta Pradhana Dravya and Katu, Tikta & Kashaya Rasa Pradhan Dravya can be used for treatment of Sthoulya.

Ruksha Udvartana is the Bahi Parimarjana Chikitsa indicated for the management of Sthoulya. Vagbhatta has mentioned the benefits of Rooksha Udvartana like Kaphahara, Medasa Parivilayana, Sthirikarnam Angam etc.

Snehana karma always restricted for the patients of Shoulya. However Lekhaniya, Medohara properties and Sthulatvahara Karma of Taila are described in Ayurveda. So, on exigency of Taila is recommended.

Swedana for obese patient is contraindicated but if essential Mridu Sweda is advice. Through Virechana has not been recommended for patients of Sthoulya but Virechana Dravya mentioned in Ayurvedic texts like Haritaki, Katuki, Aragvadha, Trivrita, Danti Dravanti etc, which have Medonashaka property could be applied to the patients of Sthoulaya.

Some Samshana yoga used for treatment of Sthoulya like Guduchi, Takrarista, Vidangadi Lauha, Triphala, Gomutrapaki Haritaki, Navaka Guggulu, Amritadi Guggulu, Medohara Guggulu etc.

Diet and life style modification plays an important role in the management of obesity. Practice of specific yoga postures is also advised to reduce body weight. Along with these, appropriate *Ayurvedic* treatment which could be safe, effective, economically affordable and freefrom any untoward effects, are also achieve the best results.

According to *Acharya Vagabhatta* administration of medicine before meal is insisted for doing *Karshana* and *Acharya Sharandhara* advised to take *Langhana* drug on empty stomach in early morning and before a meal.

#### **COMPLICATIONS**

- **1. Psychological:** Eating disorders, poor self-esteem, body image disorder, social isolation and stigmatization, depression.
- **2. Neurological:** Pseudotumour cerebri (idiopathic intracranial hypertension).
- **3. Pulmonary:** Exercise intolerance, obstructive sleep apnoea, asthama.
- **4.** Cardiovascular: Hypertension, dyslipidaemia, coagulopathy, chronic inflammation, endothelial dysfunction.
- **5. Gastrointestinal:** Gallstone, gastro-oesophageal reflux, non- alcoholic fatty liver disease, colon cancer.
- **6. Renal:** Glomeruloscleosis, Renal cancer.

- 7. Endocrine: Insulin resistance, impaired fasting glucose or glucose intolerance, type 2 diabetes, precocious puberty, menstrual irregularities, polycystic ovary syndrome, hormonal related cancer (breast, endometrium, prostate)
- **8.** Musculoskeletal: Ankle sprains, flat feet, tibia vara, osteoarthritis, back pain.
- 9. In Ayurveda, Acharya Sushruta has described that the complications occur due to grave obstruction of various body channels particularly *Medovaha Srotas*. The following complications are:

Amaroga, Apachi, Arsha, Atisara, Bhagandar, Jwara, Kamla, Kasa, Kushtha, Mutrakriccha, Prameha, Pramehapidika, Shlipada, Sanyasa, Udarroga, Urustambha, Vatavikar, Vriddhi. (Su.Su.15/32)

#### **CONCLUSION**

On the basis of above facts and discussion it can be concluded that Ayurveda provides better managements approach in Sthoulya with both its pharmacological and as well as nonpharmacological measures. Along with these, appropriate Ayurvedic treatment which could be safe, effective, economically affordable and free from any untoward effects, are also achieve the best results.

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