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### ROLE OF AYURVEDA IN THE MANAGEMENT OF *STHAULYA* W.S.R TO OBESITY –A REVIEW

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#### ABSTRACT

**Introduction** -Obesity is a common and preventable condition that affects both clinical and public health. It is frequently a substantial risk factor for the onset of a variety of non communicable diseases, considerable disability, and early mortality. Obesity is today a significant epidemic affecting people of all ages in both developed and developing countries. Obesity is becoming more common, putting a strain on health-care utilization and expenses. Weight loss is linked to numerous health and financial advantages. Dietary therapy, physical activity, and lifestyle changes are all effective weight loss strategies. Our Ancient Acharayas mentioned several historical Ayurvedic recipes for the treatment of obesity. **Aims and objectives**-To evaluate, elaborate and discuss etiology and management of *Sthaulya* (Obesity). **Material and methods**-Material related to *Sthaulya* (Obesity) is collected from Ayurvedic text including Bahatriye, Laghutrye. The index, non-index medical journals has also referred to collect information of relevant topic. **Results**-The purpose of this paper is to highlight the role of Ayurvedic Management in decreasing disease symptoms and recurrence. **Conclusion** –By using various Ayurvedic formulations and following *Pathya apathya* in a rational manner, Ayurveda offers a lot of potential in the treatment of *Sthaulya* (Obesity).

**Keywords:** *Sthaulya*, Obesity, *Medoroga*, Ayurvedic formulations

## **INTRODUCTION**

Our personal lifestyle diseases are the result of our choices. Man has become increasingly physically inert as civilization has progressed. Sedentary lifestyles are a result of modernization, wealth, science, and technological advancement. Such habits are spreading across countries and, like an infectious disease, can be transmitted from one population to another, altering global disease patterns. Human beings inadvertently induced a variety of diseases by exposing themselves to all of these elements, one of which is Sthaulya (fat), which disrupts an individual's physical, mental, and social health. Globally, it has reached pandemic proportions. According to the World Health Organization, there are approximately 250 million obese adults and 1.1 billion overweight persons in the world<sup>1</sup>. Obesity prevalence in India was 18.6% and 20.7 percent among men and women aged 15–49 years, respectively, according to the National Family Health Survey (NFHS-4, 2015-16). The percentage of females and males who are overweight or obese is 23.7 and 19.7 percent in Gujarat, respectively<sup>2</sup>. Obesity is the first wave of a defined cluster of noncommunicable diseases known as "New World Syndrome," which has had a massive socioeconomic and public health

impact in both industrialized and developing countries in the twenty-first century<sup>3</sup>. Obesity is linked to a higher risk of illness and mortality, as well as a shorter life expectancy, and it is responsible for 2.6 million deaths worldwide each year<sup>4</sup>. Obesity, according to Ayurveda, is a condition in which the Medodhatu (Fatty Tissue) is in a state of Vikrita Vriddhi (Abnormal increase).

## **AIMS AND OBJECTIVES**

To evaluate, elaborate and discuss the Sthaulya with special reference to Obesity.

## **MATERIAL AND METHODS-**

Material related to Raktamokshana is collected from Ayurvedic text including Bahatriye, Laghutrye. The available commentaries of Ayurvedic Samhitas have also referred to collect relevant matter. The index, non-index medical journals has also referred to collect information of relevant topic.

## **Review of literature**

Sthaulya - is a person who is unable to work owing to excessive fat and flesh growth and is disfigured with pendulous buttocks, tummy, and breasts. The ailment is known as Sthaulya.

Obesity- is described as an excess of stored energy in the form of fat in the body. Obesity is defined as an increase in body weight that exceeds the limits of skeletal and physical needs as a result of

an excessive build-up of body fat<sup>5</sup>.

Causative factors for Sthaulya (Obesity)

In addition to dietary, regimen, and psychological aspects, the hereditary component (Bijadosha) in the cause of obesity is discussed in the Charaka Samhita<sup>6</sup>. Apart from these, components that vitiate Meda (Fatty Tissue) and Kapha (one of the three humors of the body) could be regarded causative elements of Obesity. Apart from other factors, Dhatvagni Mandya is the main cause of Sthaulya's etiopathology<sup>7</sup>. Exogenous reasons of obesity include Meda potentiating diets and regimens, whilst endogenous factors include Dosha (three humours of the body), Dhatu (body tissues), Mala (excreta), Srotas (body channels), and so on. All the factors can be categorized under four groups -

Aharatmaka Nidana (Dietetic Causes) - Adhyashana (eating after lunch or dinner), Ati Brimhana (overeating), Guru Ahara Sevana (eating food that is difficult to digest), Madhura Ahara Sevana (eating too much sugar), Shleshmala Ahara Sevana (A Food which will increase Kapha)  
Viharatmaka Nidana (Regimonal Causes)- Avyayama (No Exercise), Avyavaya (No Sexual Activities), Diwaswapa (Day Sleeping), Atisnana Sevana (Excessive Bathing) etc.

Manasa Nidana (Psychological factors)

Harshanityatva (Happiness),  
Manasonivritti (Idle Mind) etc.

### **SYMPTOMS OF STHAULYA**

Ati Sweda (Excessive Sweating), Sharamjanya Shwasa (Breathlessness on mild exertion), Ati Nindra (Excessive sleep), Karya Dorblyta (Difficulty to perform heavy work), Jadyatha (Sluggishness), Alpaayu (Short life span), Alpabala (Decreased bony strength), Uathashahani (Inertness), Sharir Durgandhta (Foul odour of the body), Gadgadtava (Unclear voice), Kshudha vridhi (Excessive hunger), Ati Trishna (Excessive thirst) are symptoms of Sthaulya<sup>8</sup>.

### **SAMPRAPTI OF STHAULYA**

Medo Dhatu obstructs the digestive system's channels in obesity (Koshta). This causes Vata Dosha to get obstructed in the digestive system. It boosts Agni (digestive heat) and causes food to dry up in the stomach and intestines. As a result, food digestion accelerates, boosting appetite. As a result, the patient quickly digests food and becomes a ravenous eater. He becomes prone to major disorders if he does not receive nourishment on time. Pitta and Vata Dosha impact the Agni (digestive fire), which becomes vitiated. They cook the food in the same way that a forest fire cooks the forest. As a result, the body weight rises. Diseases of highly serious sorts are caused as a result of a disproportionate increase in fat<sup>9, 10</sup>. Due to binge eating, Rasa, Rakta, Mamsagata Sneha

tends to increase. Angagaurav, Alasya, and Nidradhikya are examples of Rasavridhhi and Kaphavridhhi symptoms. Medadhatu grows stronger as a result of physical indicators such as Chala Sphik Udara Stana, Kshudra Shwas, Swed adhikya, and so on, till it reaches Sthaulya.

**Pathogenesis of Obesity (Modern Perspective)** Adipose cell hypertrophy is the most common feature of adult-onset obesity, with minimal hyperplasia. Apart from the typical depots' size increasing (e.g. In obesity, the subcutaneous tissue, the omentum, the retroperitoneal tissues, and the epicardium, as well as adipose tissue, may be expanded to areas where it is ordinarily absent<sup>11</sup>.

The three primary components in the etiology of obesity are excessive lipid accumulation, decreased lipid mobilisation, and decreased lipid consumption. Increased food intake, hypothalamic abnormalities, adipose cell hyperplasia, or hyper lipogenesis can all cause excessive lipid accumulation. Increased food intake in the form of carbs, proteins, and fats is eventually converted to fats and stored in fat depots due to metabolic processes<sup>12</sup>.

Reduced lipid metabolism is caused by a decrease in lipolytic hormones or an abnormality of the autonomous innervating thyroxin and adrenaline, which stimulates the mobilization of unsaturated fatty acids

from adipose tissue. Either of these causes reduces lipid mobilisation, increases lipid deposition, and eventually leads to obesity<sup>13</sup>.

#### Diagnosing overweight/obesity

**Body Mass Index (BMI):** BMI is used to determine whether or not a person is overweight or obese (BMI). It's calculated by multiplying a person's weight in kilograms by the square of his or her height in meters (kg/m<sup>2</sup>)<sup>14</sup>.

Healthy/Normal BMI - 18.5 - 24.9 BMI of  
Overweight - 25 - 29.9kg/m<sup>2</sup> BMI of  
Obesity -  $\geq 30$ kg/m<sup>2</sup>

In people with a BMI less than 35kg/m<sup>2</sup>, waist circumference should be evaluated in addition to BMI to assess central obesity and disease risk. Waist circumference normal range: 94–102 cm for men; 80–88 cm for women.

#### Lab Investigations

- Lipid profile
- Blood glucose (both Fasting and Post Lunch preferably fasting) and
- Blood pressure measurement

#### **Management of Sthulya (Obesity) Through Ayurveda**

Obesity is best treated by avoiding the conditions that cause it in the first place. Vagbhata recommends Nitya langhana therapy (Reducing Therapy) and Langhana even during Shishira Ritu (Winter Season) for Obesity patients<sup>15</sup>. Charaka

recommends many types of Langhana therapy, such as Vamana, Virechana (Bio purification therapies), and others, for use based on Vyadhibala (illness strength) and Dehabala (patient strength)<sup>16</sup>. Langhana and Rukshana (Drying) therapies are better suitable for the management of obesity among the Shadvidha Upakrama (Six Fold Therapy) therapies. Vagbhata classified all therapies into two categories: Langhana (reducing therapy) and Brimhana (healing therapy) (Nourishing therapy). The treatment for obesity, Langhana, has been further separated into Samshodhana (Bio purification therapies) and Samshamana (Alleviating Therapies)<sup>17</sup>.

Single drugs: Guduchi, Vidanga, Musta, Sunthi, Amla, Vaca, Daruharidra, Guggulu, etc

**Compound Formulations:** Trikatu, Navak Guggulu, Triphala Guggulu, Vidangadi Churna, Takrarishta, Navayasa lauha, Arogya Vardhini Vati, Mahasugandhi Tail, Chavayadi Sattu, Vidangadi Churna, Vyoshadi Sattu, Vidhanadi Loha, Medohara Lepa etc.

**Lekhaniya Mahakshaya-** usataka, Kushta Chirbilva Chiktraka Haimvati, Haridra, Daruharidra, Vacha, Ativisha and Katurohini

#### **Preventive measures**

A poor diet leads to the accumulation of adipose tissue in the body, resulting in

weight gain and obesity<sup>18</sup>. Physical activity helps to reduce the energy imbalance between calories consumed and calories expended, which leads to weight gain and obesity. As a result, a balanced diet rich in fibre, an active lifestyle, and the practise of Yoga and Meditation to manage stress and exhaustion are all highly advised for the prevention of obesity<sup>19</sup>.

#### **DISCUSSION**

Charaka has described the causal factors, etiopathogenesis, and signs and symptoms of obesity in great detail. The complications of the disease have been added by Acharya Susruta, as well as the significance of avoiding the disease's causal elements. Dalhana has introduced the notion of Dhatvagni Mandya among the commentators. The term "Sthula" (obese) refers to the body's deposition of Prithvi and Apa Mahabhuta dominating components. Aharatmaka, Viharatmaka, Manasa, and Anya are the four kinds of Nidana in Sthaulya<sup>20</sup>. Apart from these Nidanas, it is now known that highly processed foods with large percentages of carbs and high-tech machinery make people less active and prone to obesity<sup>21</sup>. The Nidanas of Sthaulya are changing nowadays, for example, earlier Manasonivrtti and Harsanityatva were believed to be the Nidanas of Sthaulya, but

these are now shifting to rising stress, which promotes periods of binge eating, which leads to obesity<sup>22</sup>. Ayurvedic treatment modalities such as Shodhan and Shaman are advised by Ayurveda. A suitable treatment modality can be chosen based on the stage of the disease and the patient's strength.

#### **CONCLUSION:**

Guru Apatarpana Aahar, Ruksha-Ushna-Tikshan-Chedaniya Aushad, purificatory measures like Vaman, Virechan, Rakta Mokshana, and combining physical and mental activities into an obese person's daily schedule are some of the treatment procedures. Sthaulya is a preventable metabolic lifestyle illness that encourages people to live a healthy lifestyle, as detailed by Acharya in many Ayurvedic texts to prove Ayurveda's first goal.

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