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# AYURVEDIC MANAGEMENT OF OBESITY – A SINGLE CASE STUDY

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#### **ABSTRACT**

An abnormal build-up of body fat, often 20% or more than a person's optimal body weight, is called obesity. Obesity is referred to as Medo Roga or Sthaulya in Ayurveda. Constant overindulgence in fatty foods, fried foods, etc., combined with a sedentary lifestyle cause an excessive build-up of body fat that accumulates in various bodily channels. The prevalence of obesity has increased in recent years, and it is critical to comprehend the impact of obesity. In India, the prevalence of obesity is higher in urban regions than in rural ones because of sedentary lifestyles and overindulgent eating habits. Sthaulya (Obesity) is a disease that can lead to numerous health risks, including stress and psychological difficulties, as well as conditions like diabetes mellitus and hypertension. Classical literature has defined Sthaulya (Obesity) under Santarpanajanya Vikara. Obesity has been on the rise globally especially in children too due to the excessive sugar intake and junk food diet. A case of a 42 year old female patient presented with symptoms of excessive weight gain, excessive urination, acidity, disturbed sleep, fatigue and constipation. When the patient presented with symptoms, her weight was 68.5 Kg. After treatment for 45 days, weight reduced to 59.7 Kg and sleep also improved.

KEYWORDS: Sthaulya, Obesity, Lifestyle, diet.

## INTRODUCTION

Metabolic disorders have been on the rise in todays era due to the sedentary lifestyle and heavy junk food and unhealthy food consumption. One of the most common metabolic disorders that is seen is obesity. Obesity if not controlled then further leads to diabetes and heart disease and other liver health problems. Ayurveda always focuses on food as the first pillar of life. Food is the first point that needs to be corrected in cases of obesity and other metabolic disorders. Healthy way of eating and healthy food is the only way obesity can be brought under control. Obesity has an effect on the mind also leading to increased stress levels further contributing to other health hazards alongside obesity. The abnormal and excessive buildup of MedoDhatu is called Sthaulya. The most prevalent etiological factors include sedentary lifestyle, excess or frequent use of foods that increase Kapha, and insufficient mental and physical exercise.

In Charak Samhita, Ati-Sthulya is explained under Asthanindaniya- Purusha. Sushruta Samhita has also mentioned Sthaulya roga and its pathogenesis on the basis of Dhatvaagni Mandya. Sthaulya is considered as a condition of the body that results from vitiated Meda dhatu.

#### MATERIALS AND METHODS

Ayurvedic classics with references to Sthaulya, contemporary literature, published works in peer-reviewed journals, books, and website content pertaining to the subject have all been selectively obtained, arranged, and interpreted. In reference to published research works, studies pertaining to Sthaulya and various diseases were taken into consideration for the purpose of this study.

#### **CASE PRESENTATION**

Name – XYZ

Age - 42

Gender - Female

Weight – 68.5 Kg

Height – 156 cm

Family History –

Paternal – Diabetes Mellitus, Maternal – Diabetes Mellitus

#### **Diet History**

Patient was fond of eating all types of foods with no specific timings and routine. The diet included a lot of sweets and carbohydrates. Regular meal of the patient was 3-4 chapatis, rice, some sweet, excessive salt intake, stale food.

#### Vihar

The patient did not have any exercise regimen as such on a regular basis. The patient was also not able to exercise due to weakness.

#### Nidra

Khandit (disturbed sleep).

## Ashtavidha Pariksha

Nadi - Kapha Pradhan Vaat

Mala – Avashtambha

Mutra – Prabhut avil mutrata, nakta mutrata – 3-4 times

Jivha - Saam

Akruti – Sthula

Shabda – Ksheen

Sparsha – Snigdha

Druk - Prakrut

## Treatment given

#### Ahar

The main principle to be followed in the diet advice was having only 2 meals a day as described in Sushrut Samhita. The patient was told to skip breakfast.

Following are the diet guidelines that were given to the patient.

- 1) One meal One grain One portion
- 2) Start of the meal with steamed salad
- 3) One vegetable compulsory in a meal
- 1 or 2 small bowls of moong dal compulsory in a meal
- 5) Complete avoidance of sugar, honey and jaggery
- 6) After one grain portion has been eaten, fill the stomach with vegetables and pulses

#### Grains

The patient was advised to slowly replace whole wheat with millets in the meals. After 15 days both the meals had millets as grains Another important grain that was introduced was barley (yava).

#### **Dairy**

Milk and milk products were completely stopped except ghee and buttermilk.

## **Fruits**

The patient was advised not to consume fruits for the next 45 days.

#### **Dry fruits**

The patient was advised to consume 2-3 almonds, 2-3 walnuts, pumpkin seeds ½ tsp and sunflower seeds ½ tsp everyday.

## Vegetables

The patient was advised all vegetables except potato, pumpkin, brinjal, cabbage.

# Bakery

No bakery items at all.

#### Non vegetarian food

No non vegetarian food.

#### Vihar

- 1) Wake up early at around 5:30-6 am
- 2) Regular pranayama of anulom vilom for 10 minutes in the morning
- 3) Regular suryanamaskar as per capacity and increase gradually
- 4) No Diwaswap
- 5) Complete fasting of atleast 12 hours on a regular basis
- 6) Go to bed by 10-10:30 pm

#### RESULT

After 45 days of regular treatment as mentioned above, following results were observed.

Investigations /	Before	After
Symptoms	Treatment	Treatment
Weight	68.5 Kg	59.7 Kg
Fasting insulin	16.28	5.63
Acidity	Severe	No symptoms
Nidra (Sleep)	Disturbed	Deep sleep
Prabhut avil mutrata	Yes	No

## DISCUSSION

The word "sthula," which means "obese," itself denotes the presence of Prithvi and Apa Mahabhuta, two prominent elements in the body. The Charaka Samhita suggests that there are two possible interpretations for the etiopathology of obesity. Firstly, it suggests that increased Jatharagni (digestive fire) leads to maximum ingestion and absorption of prithvi and Apa Mahabhuta dominant factors in the body, ultimately resulting in increased Medodhatu. Dalhana claims that there is a condition known as Medodhatvagnimandya, which causes an excessive amount of inappropriate Medodhatu to form, ultimately leading to obesity.

The patient was treated with apatarpan in the form of food and exercise.

The ahar approach with regular exercise was the only focus of the treatment. In the aforementioned case, eating just twice a day and abstaining from food in between meals was the wisest course of action. Eat only two meals a day, one in the morning and one in the evening, as Sushruta advised in the Uttartantra. Reducing insulin resistance and controlling insulin secretion in the body were achieved by eating only two meals per day. As a growth hormone, insulin not only affects blood sugar levels but also aids in weight gain. Over the course of 45 days, the patient's weight dropped by about 9 Kg. As the levels of insulin began to decline, so did the weight.

There was only one grain portion in the meal. As a result of their high glycemic index, grains cause an instant increase in insulin release and blood sugar, which leads to an increase in the amount of carbohydrates you eat during meals. Therefore, it's critical to limit the amount of grain in a patient's diet and add an equal amount of vegetables and pulses if they suffer from obesity.

Millets have been mentioned in kshudra dhanya in Ayurveda with apatarpan properties. Millets help in reducing the medo dhatu in the physiology as they are ruksha in nature and have lekhana property as mentioned in Bhavaprakash/Dhanyavarga/74-75. Millets also help in reducing constipation as millets contain lots of fibers and no gluten.

Fructose, which is essentially an overabundance of carbohydrates, is found in fruits. Fruits naturally contain sugar, but some, like pineapple and watermelon, have a tendency to raise blood sugar and insulin levels more than others. Another significant aspect regarding fructose is that only the liver can digest 70% of it. [2] For this reason, it is best to avoid high fructose foods, particularly in patients with sthaulya.

The patient in this case study was also showing symptoms similar to prameha. The causative factors for prameha have been mentioned as follows in Charak Samhita. [3]

Excessive food intake, excessive sleep, yoghurt, non vegetarian food, milk and milk products, new grains, jaggery and its products, kapha increasing diet, sedentary lifestyle, laziness. Considering these factors, many of them were present in this particular case. Stopping the consumption of these factors was the most crucial treatment that was supposed to be done.

Dry fruits being a good source of fat and protein are important to keep the energy levels in check. Dry fruits such as almonds do not secrete too much of insulin as compared to other food items<sup>[4]</sup> and therefore they are beneficial in an obesity patient.

Fasting (Langhan) for a minimum of twelve hours helps increase insulin sensitivity and decrease insulin resistance thereby reducing the sugar levels in the physiology. Langhan also helps in reducing the meda dhatu in the physiology. Important effect of fasting is Autophagy. Autophagy regulates the normal functioning of the pancreatic beta cells and insulin target tissues.

After treatment, the patient felt more energetic and happy. Constipation reduced and bowel movements came back to regular and normal. Stress levels slowly started to reduce and digestion and appetite improved. Sleep quality improved a lot leading to positive changes in the patients overall health.

#### **CONCLUSION**

Obesity being a complete metabolic disorder, the main treatment lies in diet and lifestyle only. The case discussed above clearly states that only diet and lifestyle changes in a specific manner have the potential to reduce sufficient amount of weight without using any herbs or medications provided there are no allied diseases or syndromes.

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