AYURVEDIC UNDERSTANDING OF OBESITY W.S.R TO STHAULYA

Sunil Kumar Godara

Assistant Professor, Dept. of Rognidana Evam Vikriti Vigyana, National College of Ayurveda, Barwala, Hisar, Haryana, India

Email: skgodara4382@gmail.com

ABSTRACT

Obesity is a metabolic disorder. Obesity involves the abnormal growth of the adipose tissue. Obesity resembles the features of Sthaulya roga /Medo roga in Ayurveda. Acharya Charaka has included Sthaulya roga under the list of Astanindita purusha. Diet and life style play a significant role both in development and control of obesity. Obesity causes health hazards by various modes. Obesity persistently leads to a cluster of conditions commonly known as Metabolic syndrome characterised by features like increased blood pressure, high blood sugar level, excess body fat around the waist and abnormal cholesterol levels and all these factors together increases the risk of heart disease, stroke and diabetes. Sthaulya roga involves various features told in Ayurveda samhita. Present article will help to understand obesity in context to Ayurveda reference.

Keywords: Obesity, Ayurveda, Sthaulya roga, Medo roga, Astaninditiya purusha

INTRODUCTION

Sthaulya and Medo roga are the similar terms and obesity is the resemblance disease with Sthaulya. Obesity is a global health problem affecting human population worldwide. The term Obesity is applied to excessive deposition or distribution of fat in the body. Obesity involves the abnormal growth of the adipose tissue. Acharya Charaka has included Sthaulya roga under the list of Astanindita purusha. Obesity may lengthen the waist line but shortens the life line. Obesity imparts health risk; a body weight of 20% excess over ideal weight for age, sex and height is considered a health risk. Obesity increases the likelihood of various diseases, particularly heart disease, type 2 diabetes, breathing difficulties during sleep, certain types of cancer, and osteoarthritis. All these disorders singly as well as in combination lead to serious health conditions. Obesity contributes to a medical condition known as metabolic syndrome which includes features like Hyper-tension, Hyperglycaemia, Hypertriglycerideremia, reduced high-density lipoprotein Cholesterol (HDL-C), and abdominal obesity. Sthaulya roga as described by Acharya Charaka itself is a leading cause of health hazards.

Medoroga

Medoroga (obesity) is characterized by following features:

a) Excessive increase of fat and other tissues of body (Medo mamsa ati vridha)
b) Bulky look of body (Ati sthoolta)
c) Pendulous appearance of buttocks, abdomen and breast (Chalasphigagudarstanaha)
d) Excessive anabolic conditions (Ayatha upachaya)
e) Lack of vitality (Utsaha haani)

Commonly abdominal enlargement stated as Sthaulya and the morbid changes occur due to the obstruction of channels of Meda (srotoavrodha). The physiological concept of Ayurveda is based on Ahara which further helps in growth and other activities of body. Improper consumption of food and Improper digestion of food due to Agnimandya forms Ama Rasa which circulates all over the body, causing Srotodusti, which help to accumulate the dhatu called Dhatu-vriddhi as well as Srotoavrodha manifest in the form of Medoroga. 

STHAULYA NIDANA

- Absence of physical activity (Avyayama)
- Sleeping during day time (Diwaswapan)
- Intake of foods which increase Kapha (Shaleshmla ahara sevana), make the end product of digestion abnormally sweet which in turn causes increase of Medas (fat). This obstructs the nutrient channels of the tissues and leads to condition like obesity. This makes the person incapable of various activities. Difficulty in breathing even on slight exertion, thirst, delusion, sleep, breathlessness exhaustion, excessive hunger, bad smell of the body, poor physical and sexual capacity etc. gradually develop. As the abdomen and bones are the chief depots of fat, the abdomen gets enlarged in such persons, buttocks, abdomen and breasts begin to show movement (during activity) due to disproportionate accumulation of fat on those places to his age. The aetiological factors of medo roga may be classified as follows:

1. Aharaja hetu:
   Atisampurnam Atibhojnam, Guru, Madhura, Sheeta, Snigdha ahara sevana, Medasvi prani mamsa sevana, Varuni madya ati sevana

2. Viharaja Hetu:
   - Atinidra (more sleep)
   - Avyayama (Lack of exercise)

- Divaswapan (day time sleep)
- Avyavaya (lack of sexual intercourse)
- Sukha shaiya (Comfortable luxurious bed)

3. Mansika hetu:
   - Harshanatitaya (Cheerfulness)
   - Achintata (Free from worries)

4. Madhura rasa as Garbhopghatkar bhava in relation to sthaulya:

Charaka has considered that when mother takes excessive Madhura ahara during pregnancy, the progeny will be ‘Sthoola’ It is well known that Madhura rasa increases Kapha in body which has maximum effect on Medo dhatu responsible for enhancing Sthauylata in the body and the infant become Sthoola due to excessive Medo dhatu. Vagbhata has called such pregnancy as ‘Garbhaja vyadhi’ and subdivided it in Anarasaja type.

5. Bijasvabhava:

The role of Bijasvabhava or genetic abnormality in pathogenesis of medo-roga is stated by Acharya Charaka. It can be explained that when parents or grandparents are indulged in Madhura, Snigdha ahara they may develop Bija dosha, which gives rise to a constitution that there is tendency for the formation of Meda even with normal or subnormal diet. The Matrubija is responsible for Medo dhatu. From abnormal Bija the development of Medo dhatu is excessive and child becomes Sthoola.

CONCEPT OF NINDANIYA PURUSHA IN CONTEXT OF STHAULYA:

In context of body, eight type of persons are criticized and discarded (Nindaniya) such as

1. Ati Deergha (Over tall)
2. Ati Hruswa (Over short)
3. Ati Loma (Over hairy)
4. Aloma (Less hairy)
5. Ati Gaura (Over fair)
6. Ati Krushna (Over black)
7. Ati Sthoola (Over obese)
8. Ati Krisha (Over lean)

Among all the above Nindaniya purusha, Ati Sthoola is having peculiarity in regard to health haz-
ard. *Sthaulya dosha* told by Acharya Charaka are also known as *Asta sthaulya dosha* as are as follows:\(^{10}\):

1. **Aayush hrasa (Ayu haani)**
2. **Javoprodha (Akala vriddhavastha)**
3. **Krichravyavayta (Maithuna asamarthtata)**
4. **Daurbalyam (Durbalata)**
5. **Daurgandhym (Sharirika durgandha)**
6. **Swedabadha (Atyadhika sharirika jaladhatu haani, more sweating)**
7. **Ati Kshudha**
8. **Ati Pipasa**

In obese individuals the life span decreases because of laxity and due to softness and heaviness of fat, there is restriction in movement. Further due to non-abundance of semen, there is difficulty in sexual intercourse. Due to disequilibrium of *Dhatus* there is debility. Foul smell is due to defect in fat and excess sweating. Due to association of *Medas* with *Kapha* it is of oozing nature having heaviness and intolerance to physical exercise there is excess sweating. Because of intensified *Agni* and increase of *Vayu* in stomach, there is excessive hunger and thirst. Due to obstruction of passage by fat, *Vayu* moves faster and stimulates digestion and absorbed food, hence the person digest food quickly and further desires to have food in excess quantity and even short delay in consuming food may cause severe disorders.

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. Obesity is the accumulation of fat results from a discrepancy between energy consumption and expenditure. Increasing energy intake can be understood by increase portion size, increase snacking and loss of regular meals, increase energy dense food (mainly fat), increase affluence (wealth). Decreasing energy expenditure can be understood by increase car ownership, decrease walking to school/work, increase automation and decreased manual labour, decrease sports in schools, increase time spent on videos and watching TV, increase central heating\(^{11}\).

Obesity is also having the similar features like of *Asta Sthaulya dosha*, as follows:

1. Obesity causes reduced life expectancy due to side by side health hazardous disease production which affects longevity of life
2. Obesity promotes untimely ageing
3. Obesity causes difficulty in sexual intercourse due to more body weight
4. Obesity causes dullness, lassitude, Fatigability of the body
5. Obesity causes Foul smell from the body due to unhygienic protocols followed by person
6. Obesity cause more sweating due to more fat as obese people have low body surface area (BSA) relative to their weight, they cannot eliminate body heat efficiently, so they sweat more than thin people
7. Obesity is promoted by excessive eating and so it is outcome of eating too much and moving too little
8. Obesity also increases thirst

**OBESITY IN RELATION WITH SOME DISEASES**

**Obesity & High blood pressure:**
Multiple factors are responsible for increase in blood pressure in obesity. Weight gain is associated with decrease in elasticity of blood vessels & increase heart rate. Excess calories are deposited in body as fat in fatty tissue. This fatty tissue increases demand for oxygen & nutrients, which in turn increases amount of blood circulating in the body. More blood travelling through arteries adds pressure on walls of arteries leading to increase in blood pressure. Obesity increases level of insulin in body. Insulin causes sodium & water retention in body, which results in increase in blood volume & extra pressure on arteries. All of these factors can increase blood pressure.

**Obesity & Diabetes: Increased blood sugar level:**
Type2 diabetes is a common health problem in diabetes. Insulin controls blood sugar. Insulin is required for the entry of sugar (glucose) into body cells from blood. Excess body fat in obesity makes
body resistant to insulin. Because of this insulin resistance, sugar will remain in blood, which will lead to increase in blood sugar or diabetes. High amount of sugar in blood leads to complications in kidney, eye, blood vessel & heart.

**Atherosclerosis or fatty deposits in blood vessels:** Cholesterol is carried in the blood as two compounds: Low-density lipoproteins (LDL) and High-density lipoproteins (HDL). HDL is also called the 'good' cholesterol and LDL is also called the 'bad' cholesterol. Obesity is associated with low levels of good (high-density lipoprotein) cholesterol and high levels of bad (LDL) cholesterol. When cholesterol levels are high, some of the cholesterol is deposited on the walls of the blood vessels. Cholesterol deposits reduce the elasticity of blood vessels, narrows blood vessels & decreases blood flow. All these changes lead to atherosclerosis and an increased risk of heart disease & stroke.

**Coronary artery disease – angina & heart attack:** Atherosclerosis (fatty deposits in arteries) in coronary arteries (arteries that supply heart) reduces blood supply to heart. Decreased blood flow to heart can cause angina (chest pain) and complete blockage of blood flow to heart can cause heart attack. Obesity causes higher risk of diabetes, heart problems, high blood pressure and stroke.

**STHAULYA SAMPRAPTI IN RELATION TO SHATKRIYAKALA**

1) **Sanchaya:** Sanchaya of Kapha takes place because of intake of excessive Madhura, Snigdha, Guru Ahara, Divasvapna, Avyayama and also because of Bijasvabhava

2) **Prakopa:** The Kapha increases in quantity and quality and is responsible for the formation of the Atimadhura and Atisnigda ahara rasa

3) **Prasara:** Atimadhura and Atisnigda ahara rasa circulates all over body through channels

4) **Sthanasansrya:** Kha-vaiogunyta in Medovaha srotas leads to collection of circulating Ahara rasa in Medo dhatu. That increases Medo dhatu and increased Medo dhatu gets accumulated in Udara etc.

5) **Vyakti:** The Medodhatu accumulation in body parts causes increase in size and thus gives them. Pendulous like movement when the person moves. The channels get blocked by the Meda, causing ill effects of Sthaulya

6) **Bheda:** The manifestation of the Upadrava or the complications of obesity such as Prameha (diabetes), Prameha-pidika (diabetic carbuncle), Bhagandara (fistula) etc. can be considered as the Bhedavastha of Sthaulya roga

**COMPLICATIONS OF OBESITY**

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Metabolic syndrome</td>
<td>Coronary artery disease</td>
</tr>
<tr>
<td>Type 2 DM</td>
<td>Stroke</td>
</tr>
<tr>
<td>HTN</td>
<td></td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>Diabetes complications</td>
</tr>
<tr>
<td>2. Liver fat accumulation</td>
<td>Non alcoholic steatohapatitis, cirrhosis</td>
</tr>
<tr>
<td>3. Restricted ventilation</td>
<td>Exertional dyspnoea, sleep apnoea, Respiratory failure</td>
</tr>
<tr>
<td>4. Mechanical effects of weight</td>
<td>Urinary incontinence, varicose veins, Osteoarthritis</td>
</tr>
<tr>
<td>5. Increased peripheral steroid inter-conversion in adipose tissue</td>
<td>Hormone dependent cancers (breast, uterus) polycystic ovary syndrome (infertility, hirsutism)</td>
</tr>
<tr>
<td>6. Others</td>
<td>Psychological Morbidity (low self-esteem, depression) Socioeconomic disadvantage (lower income, less likely to be Promoted), Gall stones, colorectal cancer, Skin infections (Candidiasis)</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Sthaulya in the resemblance of Obesity is a health hazardous status as in both Literatures the harmful effects are mentioned very well. Asta sthaulya dosha as told in Ayurveda Samhita puts light on the body conditions after attaining Sthaulya roga. Various causes are elaborated in literatures for the disease Obesity as well as for Sthaulya in contemporary sci-
ence. A list of Nidana is given, which helps in the production of Sthaulya roga from Aharaja nidana to Bijaswabhavaja Nidana. Shatkriyakala of Sthaulya will help to understand the disease properly.

**CONCLUSION**

Good metabolism of the body leads to a good health but the disturbed metabolism causes impairment in the body functions especially metabolic disturbance. Such disturbance produces diseases like obesity. Present article has given a good platform to understand obesity by means of modern science as well as of Ayurveda perspective. The ill effects of Sthaulya roga or the obesity are clearly told which will definitely help readers to understand this particular disorder of human being.

**REFERENCES**


**Source of Support:** Nil

**Conflict Of Interest:** None Declared