A COMPREHENSIVE OUTLOOK OF OBESITY IN AYURVEDA

Dr. Purani Dipti S.1*, Dr. Purani Rina S.2, Dr. Raut Krupali3 and Dr. Baldaniya Himangi V.4

1 M.D.Ayu,(Kayachikitsa), Assistant Professor, Upgraded P.G. Dept. of Kayachikitsa, Govt. Akhandanad Ayurved College Ahmedabad, Gujarat, India.

2 M.D.Ayu,(Kayachikitsa), Assistant Professor, Dept. of Rog Nidana evam Vikruti Vigyan, Govt. Akhandanad Ayurved College Ahmedabad, Gujarat, India.

3 M.D.Ayu,(Panchkarma), Assistant Professor, Upgraded P.G. Dept. of Panchkarma, Govt. Akhandanad Ayurved College Ahmedabad, Gujarat, India.

4 M.S.Ayu, (Striroga evam Prasutitantra), Associate Professor, Striroga evam Prasutitantra Dept., Govt. Akhandanad Ayurved College Ahmedabad, Gujarat, India.

ABSTRACT

Obesity is nowadays a major lifestyle hazard gifted by modern civilization and a root cause of majority of metabolic diseases. Obesity is not merely a cosmetic problem but a severe threat to health and longevity. Nowadays urbanization has led to faulty dietary habits and sedentary lifestyle which is found the main cause of obesity. No medication is able to prove a permanent solution to obesity without lifestyle modification. Sthaulya (Obesity) is described by Acharya Charak under "Ashta Nindit Purusha" and is also considered as Santarpanjanya Vyadhi (over nutrition), due to excessive accumulation of Meda (depot fat) in Body. In Ayurveda, not only medicines are prescribed but healthy daily regimen is recommended. Practically, Drug, Diet and Daily exercise together gives better result to cope with this rampant.

KEYWORDS: Obesity, Sthaulya, life style modification.

INTRODUCTION

Obesity is the most common nutritional disorder in affluent societies. Obesity has taken place as an epidemic problem yet still majority of people are not aware of the factors that welcome...
this problem. The incidence of Diabetes mellitus, hypertension, angina pectoris, and myocardial infarction etc. is higher among obese individuals. So, the WHO recognized obesity as a global epidemic disease in 1997.[1]

Commonly obesity is due to excessive eating and lack of adequate exercise. Women more likely to be obese than men.[2] Industrialization, stress during the work, lack of exercise, faulty dietary habits e.g. fast food, frozen food and fruits, increased amount of soft drinks and beverages, canned foods results into the clinical entity which we call Obesity.

Sthaulya is mentioned in various literatures since Veda to till now. Charaka has described scientific study on Sthaulya. It has been classified under "Ashta Nindit Purusha”[3] (eight despicable personalities). Ati-sthaulya comprises one of them. Acharya Charaka also listed this problem under Santarpanajanita Vyadhi.[4]

NEED FOR STUDY
Obesity is a medical condition in which excess body fat has accumulated to the extent that it might have an adverse effect on health, leading to reduced life expectancy and increased health problems. Excess weight is definitely unattractive, but more importantly it is a serious health hazard. The old saying ‘Longer the belt, shorter is the life’ is entirely accurate. The increasing sedentary life style and increasing urbanization have added to the problem. Moreover increased intake of foods that are high in fat and sugars but low in vitamins, minerals and other micronutrients and decreased physical activity has a large impact on worldwide increase in obesity rates.

Though modern system of medicine has their own therapeutic modalities to tackle with obesity, they are associated with many adverse effects. Taking into consideration this, the global population is enthusiastically looking towards effective natural remedies.

DISEASE REVIEW
Obesity as an abnormal growth of adipose tissue due to an enlargement of fat cell size or an increase in fat cell number or a combination of both. (Park) It exists when body weight is 20% above ideal body weight. Obesity is often express in terms of body mass index (BMI). BMI of 30 or more in male and 28.6 or more in females indicate obesity.
CLASSIFICATION

No systemic classification of Sthaulya is available in Ayurvedic texts. Acharya Vagbhath has described three types of Sthaulya- Adhika, Madhya and Hina Sthaulya while describing the efficacy of Langhana therapy.\(^5\)

Sharangdhara has enumerated only one type of Sthaulya.\(^6\)

_Sthaulya can be correlated with different types of obesity as follows._

1. **Hina Sthaulya** (Over weight)
   - BMI 25 to 29.99 Kg/m²
   - Without any complications or secondary diseases.
   - Duration of less than 1 year.

2. **Madhyam Sthaulya** (Obesity Class 1 & 2)
   - BMI - 30 to 34.99 kg/m²
   - With least complications without any secondary diseases.
   - Within duration of 1 to 5 years.

3. **Ati Sthaulya** (severe or morbid obese)
   - BMI > 40 kg/m²
   - With systemic complications or secondary disease.
   - With more than 5 years duration.

The etiological factors mentioned by Charak can be classified under four broad groups.\(^7\) e.g.

1. Ati Sampurna (Excessive intake)
2. Avyayam (Less Calories destruction)
3. Manasabhava (Psychological factors)
4. Beeja Dosha (Genetic /Hereditary predisposition)

These are most of exogenous type. Except these factors, the components which may vitiate meda and shlesma could be considered as the causative factors of Sthaulya. Endogenous types of causes are mentioned by Acharya Shushrut and Maharshi Vagbhat. Defective intercellular metabolism has been considered as main cause besides other components in etiopathology of Sthaulya by Vagbhat.\(^8\)

In context with Sthaulya, exogenous causes are Meda potentiating diet and regimens whereas Dosha. Dhatu, Mala, Srotas etc. come under the endogenous factors.
In Ayurved especially Charak has mentioned the Beejadosha as an important etiological factor for the disease. In the person having hereditary predisposition disease becomes quickly incurable due to the short circuit in the metabolic pathway. Patient starts to convert most of the food nutrients into fat irrespective of body requirement most of the symptoms of the disease. Obesity occurs due to the material increase of Meda dhatu in the fat depots leading to Chaltva of the various organs.

**NIDANA (Causative Factors)**[9]

*Acharya Charaka* has mentioned the causes of obesity analytically, which can be classified into four groups. 1. *Aharatmaka Nidana*, 2. *Viharatmaka Nidana*, 3. *Manas Nidana*, 4. *Anya Nidana*.

**Aharatmaka Nidana**: Santarpana, Adhyasana, Guru Aharasevana, Sheeta Aharasevana, Mamsasevana, Snigdha Aharasevana.

**Diet pattern**: It is high in calories but low in fiber which is very important to regulate body weight. Fat gives taste to food that stimulates our appetite centre and we take more food. Intake of large meals in the form of fat, carbohydrate and protein lead to increase the body weight.

**Viharatmaka Nidana**: Avyayama, Divaaswapna, Asanasukha, Bhojanottara Snana, Bhojanottara Nidra, Swapnaprasangat.

**Sedentary Life style**: Decreased physical activity, day sleep, lack of physical exercise etc leads to obesity.

**Manasika Nidana**: Harshanityatvat, Achintanat, Manasonivritti, Priyadarshana.

**Psychogenic factors**: Eating behaviour, hyper responsiveness to external food influence on psychogenic factor which leads to obesity.

**Anya Nidana**: Bijadoshaswabhvat, Snigdha Udavartana, Tailabhyanga, Snigdha Madhura Basti Sevana.

**Genetic factors**: Recent study reveals that the genetic abnormality of feeding, centres to set the level of energy storage high & low. Several obesity genes which have been identified are encoded as molecular components of the physiologic system that regulates energy balance.
SAMPRAPTI GHATAKA

Dosha : Kapha – Kledaka, Pitta – Pachaka, Vata – Saman, Vyana
Dusya : Rasa, Meda
Agni : Jatharagni, Dhatwagni (Medodhatwagni)
Srotas : Rasavaha & Medovaha Srotas
Srotodusti : Sanga
Adhistantha : Whole-body; Particularly Vapavahana and Medodhara kala
Udbhavasthana : Amashaya(as Kaphaj Vyadhi )
Prasara : Rasayani
Roga Marga : Bahya
Ama : Jatharagnimandhyajanit, Medodhatwagnimandhyajanit
Vyaktasthana : Sarvanga (specifically sphik, Udara, stana)
Swabhava : Chirkaleen

PURVARUPA (Prodromal symptoms)[10]

- The amount of body fat is normally more in the abdominal cavity. Hence the increase in body fat is more marked in abdomen.
- There is enlargement of abdomen.
- Other symptoms like increased perspiration, lethargy, slight breathlessness are also present.

RUPA (Symptoms)[11]

The pratyatma Lakshana of Sthaulya has been enlisted by Charaka are: Chala Sphika, Chala Udara, Chala Stana, Ayatho Upachaya and Anutsaha.

According to Charaka, the inordinate increase of fat and flesh is disfigured by pendulous buttocks, abdomen and breast and that increased bulk reduces the corresponding increase in energy. So, the person has less enthusiasm in his physical activity.

Symptoms (Ma.Ni.34:3)[12]

- Ashakt-sarvakarmasu- reduced working capacity
- Kshudraswas- feeling breathlessness
- Trisha- excess thirst
- Moha- drowsiness
- Swapnakrathansadanehe- excess sleep, lethargy
Kshutswedadaurgandhye- increased appetite, perspiration & bad odour
Alpamaithun- decreased libido

UPADRAVA (Complications)\(^{[13]}\)
Acharya charaka has described 8 updravas which are as follows:
1. Ayusohrasa
2. Javoparodha
3. Kriccha Vyavaya
4. Daurbalya
5. Daurgandhyya
6. Svedabadha
7. Kshudhatimatrata
8. Pipasa atiyoga

CHIKITSA (Treatment)\(^{[14]}\)
General principal of management of any disorder in Ayurveda is divided into three parts.
i) Nidana Parivarjana   ii) Sanshodhana   iii) Sanshamana
1) Nidana Parivarjana (Prevention): This indicates that Nidan should be avoided as it is the root of Samprapti process, for best management of the disease.
2) Sanshodhana (Purification Therapy): This therapy especially useful in Atisthaulya. Acharya Sushruta has mentioned Lekhan Basti in Atisthaulya.\(^{[15]}\) Charaka Acharya also has mentioned Ruksh Ushna Tikshna Basti in Sthaulya.\(^{[16]}\)

Many Acharyas have mentioned external purification therapy for management of Sthaulya. Ruksha Udavartana was narrated by Acharyas for Sthaulya.\(^{[17]}\)

According to Vagbhata, Atisthaulya patients with Adhika Dosha and Adhik Bala should be treated by Sanshodhana therapy including Vamana, Virechana, Ruksha Niruha, Raktamokshana and Shirovirechana.\(^{[18]}\)

Though higher exclamation of Sanshodhana therapy Snehana Karma is always restricted for the patients of Sthaulya.\(^{[19]}\) However, Lekhaniya, Medohara properties\(^{[20]}\) and Sthulatvha Karma\(^{[21],[22]}\) of Taila are described in Ayurveda. So, on exigency usage of Taila is recommended.\(^{[23]}\)
3) Sanshaman (Pacifying Therapy): Among Shad Upakarma, Langhana and Rukshana can be administrated for Sanshaman purpose in Sthaulya.\[24\]

Acharya Charaka has recommended the administration of Guru and Apatarpan articles which possess additional Vata, Shleshma and Medonasaka properties are considered as an ideal for pacifying therapy.\[25\]

**SADHYA - ASADHYATA (PROGNOSIS)**

Most of the Acharyas have described bad prognosis and Sahaja Sthaulya is considered incurable. Charaka has mentioned (Chi. 6/57) bad prognosis for Sahaja (hereditary) disease.\[26\]

Charaka also emphasized the fact that the treatment of sthauyla is more difficult than Karshya.\[27\]

Acharya Charaka (Ch. Su. 21/8) has mentioned the bad prognosis of Sthaulya as means, if an obese person is not duly managed, he is prone to death due to excessive hunger, thirst and complications.\[28\]

**PATHYA – APATHYA (DO’S AND DON’TS)**

Pathya and Apathya should be strictly followed by obese patients for optimum results.\[29\]

Acharyas have listed numerous Pathya-Apathya for Sthaulya. According to the pathophysiology of Sthaulya, Apatarpankara Ahara (Low calorie diet) and Vyayama (Physical activity) has more roles in the management of obesity.

**Dietary Therapy**

As described in Ayurvedic classics, Astavidha Aahara Ayatanani (dietetic rules and regulations) should be followed strictly.\[30\]

Diet should be nutritionally adequate & must be tailored to a person’s tastes & habits.

It should create a deficit of 800-1000 kcal/day.

Avoid fasting or feasting/skipping any meals; do not eat in-between the meals.

The fat content should be 30% or less of total calories.

Emphasis should be on greater intake of fruits, vegetables & foods high in fiber.

Always eat breakfast with food choice of cereals.

Have low calorie/high volume food items

Avoid ready to eat food items, concentrated food items like sweets, fried items etc.

Do not sleep immediately after eating.
Do not eat while watching television, opening refrigerator, cooking, serving or reading.
Thoroughly chew each & every morsel of food.
Avoid alcohol

A low calorie balanced diet providing at least 1200 kcal/day is considered safest & most effective for weight loss in majority of obese patients.
Energy restriction below 800-1000 kcal/day is not recommended as it may lead to deficiencies of other nutrients.
Unrealistic/very low calorie diets may lead to “Yo-Yo” syndrome, gall stones etc.

**The food pyramid**
Each section of the pyramid is a food group. The smaller the section, the less of that type of food one should eat. Fig.1.

![Food Pyramid Diagram]

*Incorporate being active into your lifestyle.*
- *Acharya Sushruta* has described *Vyayama* as a part of treatment of obesity.[31]
- It does not mean you need to go to a gym everyday but a brisk walk, yoga paired with resistance training, or even a home workout.
- *Yoga* and *Pranayam* are the best option for exercise. Yoga paired with resistance training. *Paschimottanasana, Uttanpadasana, Bhujagasana, Tadasana, Sarpasana, Shalbhasana, Makarasana* are few *Asanas* which are useful to reduce weight.
- The *Bhastrika Pranayam* is useful to those who suffer from thyroid gland malfunction induced Obesity. *Kapalbhati Pranayama* is also very wellknown way to reduce fat around the abdomen and waist.[32]

**CONCLUSION**
- Obesity is mostly primary, that is, no obvious cause, exists other than an imbalance in energy intake & energy expenditure. When energy expenditure is less than energy intake, there will be weight gain.
- Any physical activity goes a long way in maintaining good health and sustaining efforts towards weight management.
- The instant gratification of losing the weight eventually gives way to old eating habits that causes weight gain and emotional distress.

**REFERENCES**
3. Agnivesa, Caraka, Drdhabala, Charaka Samhita edited with Vaidyamanorama hindi commentary by Acharya V. Shukla and Prof. R. D. Tripathi vol. 1 published by Chaukhamba Sanskrit Pratishthan. Sutra Sthan Adhyay 21/3; 300.


32. https://www.google.co.in/search?q=yoga+%26+pranayam+useful+in+obesity&biw=1366&bih=578&ie=UTF-8&source=lnms