

## A REVIEW ARTICLE ON OBESITY W.S.R. TO STHAULYA

Dr. Dichen Angmo<sup>1\*</sup>, Akhilesh Kumar Srivastava<sup>2</sup>, Rajesh Kumar Manglesh<sup>3</sup>, Swapnil Saini<sup>4</sup> and Pooja Sharma<sup>5</sup><sup>1</sup>M. D. 2<sup>nd</sup> Year, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.<sup>2</sup>Prof. Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.<sup>3</sup>Prof. and H.O.D., Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.<sup>4</sup>Reader, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.<sup>5</sup>Lecturer, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.**\*Corresponding Author: Dr. Dichen Angmo**M. D. 2<sup>nd</sup> Year, Deptt. of Rog Nidan Evam Vikriti Vigyan, R.G.G.P.G. Ayurvedic College & Hospital, Paprola, Distt. Kangra, H.P., India.

Article Received on 21/08/2024

Article Revised on 11/09/2024

Article Accepted on 01/10/2024

**ABSTRACT**

Among the world's oldest medicinal sciences is *Ayurveda*. It formulates and explains, in terms of its own ideas and methodologies, the fundamental and practical elements of the life process, health, illness, and its management. From the very beginning of *Ayurveda*, *Sthaulya* has been mentioned in several *Samhitas*, *Sangraha Granthas*, etc. *Acharya Charaka* mention that *Sthaulya* is one of the *eight Nindita Purushas* and *Santarpanajanita Rogas*. *Sthaulya's* study focuses on *medovridhi*, which examines normal fat as a reflection of an endocrine imbalance rather than rational adiposity. Obesity is the most common nutritional issue in wealthy cultures. Patients have several problems over time. They are therefore more susceptible to many other diseases and are associated with comorbidities and mortality. Modern medicine is doing its best to overcome this problem, but it has limitations. The drug has its own complications. According to *Ayurveda*, excess accumulation of *Medha* and *Mansa*, which leads to sagging of the waist, abdomen, and chest, is called *Sthaulya*. *Nidhan*, *Lakshana*, *Updrav*, and different types of *Chikitsa* are mentioned in various classical texts.

**INTRODUCTION**

*Acharya Charaka* mentioned eight underlying faults, namely *Ayuphrasas*, *Javoprada*, *Arupavyavaita*, *Dhaurvalya*, *Dhaurgandhiya*, *Swedavada*, *Ati-trisha*, *Ati-kushda*, and *Staurya Purusha*. *Santarpan Janya Vikar*, or excess nutritional disorder, is the classification given to *Sthaulya*. The first person to give a thorough account of *Sthaulya* was *Aacharya Charaka*. He describes *Atisthula* as one of the *Ashtaunindita Purusha*. The symptoms that are mentioned today, such as difficulties doing physical labor, excessive perspiration, debility, and dyspnea are similar to those of *Lakshanas* that have previously been discussed in the classical *Samhitas* under *Sthaulya*.

Obesity refers to a group of metabolic disorders that share the phenotype of excess adipose tissue in the body. The causes of obesity are numerous and involve a complex interplay of genetic and Environmental factors. According to the etiology of obesity, contributing factors include excessive food intake, low energy expenditure,

endocrine diseases (including Cushing's syndrome, hypothyroidism, and hypogonadism), medications, and neurological disorders.

The WHO World Health Report ranked obesity among the top 10 health risks. The incidence of diabetes, hypertension, angina, and myocardial infarction is higher in obese people, often due to heavy and excessive food intake, endocrine factors, morphology, and genetics. A BMI (body mass index) above 27 indicates increased health risks. The rapid spread of urbanization and industrialization and the dramatic lifestyle changes that come with it have led to an obesity pandemic even in developing countries.

**Definition of *sthaulya***

मेदोमांसातिवृद्धत्वाच्चलस्फिग्नुदस्तनः अयथोपचयोत्साहो नरोऽतिस्थूल उच्यते ॥ च. सू. २१/९

A person is referred to as *Sthoola* if they exhibit an excessive and abnormal growth in *Medo Dhatu* and *Mamsa Dhatu*, which causes their breasts, abdomen, and buttocks to seem pendulous. There is no equivalent gain in energy to equal the increased mass.

### Obesity definition

An excessive amount of body fat that is harmful to one's health is called obesity. Although the term "overweight" is more commonly used to refer to a minor degree of adiposity, the phrase "grossly overweight" is typically reserved for those who fit this description. A 20% excess above ideal weight poses a risk to one's health.

### Nidan

अव्यायाम दिवास्वप्न श्रलेप्लाहार सेविनः। मधुरो अन्नरसः प्रायः स्नेहान्मेदो विवर्धयेत्। तदतिस्थौल्यमतिसंपूरणादगुरुमधुरशीतस्निग्धोपयोगादव्यायामादव्यवायादिवास्वप्नाद्दुर्षणित्यत्वादचिन्तनाद्दीजस्वभावात्त्वोपजायते।

Following are the *nidan* which causes the obesity:

- *Atisampuranada* i.e. unhealthy food, *Guru, madhur, atisnigdha dravya* i.e. to eat fatty foods
- *Avyayam* i.e. lack of exercise
- *Avyvaya* i.e. lack of coitus
- *Diwaswapa* i.e. sleep during daytime
- *Harshanitya* i.e. to remain always happy without any tension and without any mental illness.
- *Beeja swabhavat* i.e. hereditary obesity, when the obesity comes through maternal or paternal genes.

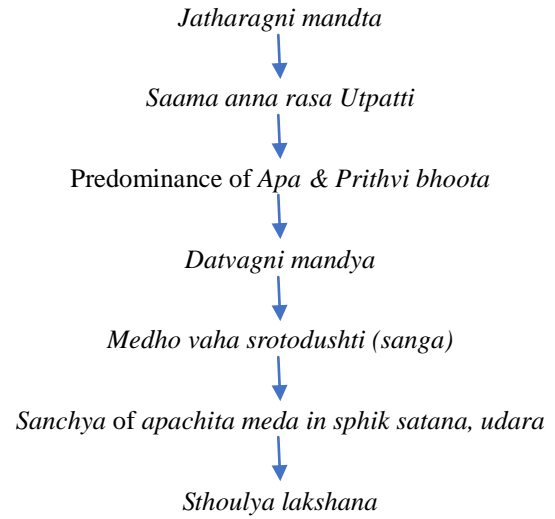
According to the modern science etiology of obesity is complex

- Age- can occur at any age
- Sex-women have higher rate of obesity than men
- Genetic factor- there is a genetic component in the etiology of obesity
- Physical inactivity
- Socio-economic status
- Psychological factors are deeply involved in the etiology. Over-eating may be the symptom of depression, anxiety and frustration.
- Familial tendency, obesity frequently runs in the families
- Alcohol
- Education
- Smoking
- Drugs.

### Samprapti

मेदसाऽऽवृतमार्गत्वाद्वायुः कोष्ठ विशेषतः। वरुण संधुक्षयत्वग्निमाहारं शोषयत्यपि ॥१॥ तस्मात् स शीघ्रं जस्यत्याहारे वातिकाडक्षाति। विकारांश्चानुते घोराण काश्चित्कालव्यतिक्रमात्।

*Nidana sevana (Kapha medo vardhaka ahara)*



### Pathogenesis of obesity (Modern perspective)

Adipose cell hypertrophy with the least amount of hyperplasia is the hallmark of adult-onset obesity.

In addition to the increase in the size of conventional depots (e.g., in obesity, subcutaneous tissue, omentum, retroperitoneal tissues, and epicardium, as well as adipose tissue), it may be extensive to tissues where it is not normally present.

Three main components of the pathogenesis of obesity are excess lipid accumulation, reduced lipid mobilization, and reduced lipid intake. Increased food intake, hypothalamic abnormalities, adipocyte hyperplasia, or hyper adipogenesis can lead to excess lipid accumulation.

Due to metabolic development, increased food intake in the form of carbohydrates, proteins, and fats is ultimately converted into fat and stored in fat depots. The decline in lipid metabolism is due to a decrease in lipolytic hormones and abnormalities in the autonomic control of thyroxine and adrenaline, which stimulate the mobilization of unsaturated fatty acids from adipose tissue. These abnormalities lead to decreased lipid mobilization and increased lipid authentication, ultimately leading to obesity.

Aging, inefficient lipid oxidation, insufficient thermogenesis, and immobility contribute to decreased lipid utilization.

The main pathophysiology of obesity in middle age is a decrease in lipid utilization.

### Rupa (Sign & Symptom)

अतिस्थूलस्य तावदायुषो हासो जवोपरोधः। कृच्छ्रव्यवायाता दौर्बल्यं दौर्गन्ध्यं स्वेदाबाधः ॥ क्षुदतिमात्रं पिपासातियोगश्चेति भवन्त्याष्टौ दोषाः। (च.सू. २१/४)

**According to acharya charaka**

- *Ayusho Hrasa* (Lacking in longevity),
- *Javoparodha* (Fewer energy levels),
- *Krichchra Vyavaya* (Complexity during Sexual Intercourse),
- *Daurbalya* (Weakness),
- *Daugandhya* (Awful Smell),
- *Swedabadha* (Additional Sweating),
- *Ati Kshudha* (Too much Hunger)
- *Ati Pipasa* (Excessive Thirst).

अतिस्थौल्यादतिक्षुत्प्रस्वेदश्वासनिद्रता  
आयासक्षमताजाड्यमल्पायुर्बलवेगता॥  
दौर्बन्ध्यं गद्गदत्वं च भवेन्मेदोऽतिपुष्पितः॥  
(अ.सं.सू. २४/२३-२४)

**According to acharya vagbhat following are the symptoms of obesity**

- *Aspashta bhashan* (unclear voice)
- *Alpa bala* (Decreased body strength)
- *Alpayu* (short life span)
- *Shwasa* (dyspnoea)
- *Nidra adhikya* (Excessive sleepiness)
- *Ayasa* (Difficulty to perform heavy work)
- *Ati kshudha evum atitrishna* (Excessive hunger & polydypsea)
- *Svedadhikya* (Excessive perspiration)
- *Jadyata* (Sluggishness)
- *Daugandhya* (foul smell).

**Updrava (complications)**

The *Ayurvedic* literature describes the following complications.

स्थूलैस्तुर्दुस्तया रोगा विसर्पाः सभगन्दराः ज्वरतिसारमेहार्शः  
श्लीपदापाचीकामलाः॥ (यो.र.)

- *Apachi*
- *Arsha*
- *Atisara*
- *Bhagandara*
- *Jwara*
- *Kamla*
- *Prameha*
- *Shlipada*
- *visarpa*

**Complications Described in Contemporary Science Among them include**

- diabetes
- heart disease
- arthritis
- cancer
- hypertension
- gallstones
- sleep difficulties
- piles and more.

**REFERENCES**

1. Charak, Charaka Samhita, Sutra Sthana, Ashtouninditiya Adhyaya In: 21/3-4, Tripathi B. vol-I 4th ed 1995, Chowkhamba Surbharti Prakashan, Varanasi, 1995; 398.
2. Harison T. R. Harison's Principle of Internal Medicine Evaluation and Management of Obesity, In: 416 Vol- II ed 19<sup>th</sup>, 2392.
3. ThakralK.Sushrut Samhita commentary by Acharya Dalhana and Shri Gayadasa. Varanasi; Chaukhambha Orientalia; Revised Edition, 2016; 174.
4. KushwahaH. Charak Samhita Chakrapani 'Aayushi Teeka' Part-1. Varanasi; Chaukhambha Orientalia; Revised Edition, 2016; 309(6).
5. Tortora G. C. Principles of anatomy and physiology, Metabolism and Nutrition, In: 25 ed 11, 986.
6. Charak, Priyavat Sharma (ed), Charak Samhita, Sutrasthana, Shadvirechanashratashritiya Adhyaya In: 4/9, Chowkhamba Prakashan, Varanasi: 25.
7. Sushruta Samhita Ayurvedasandipika hindi commentary by Dr.Ambika Dutt Shastri part 1; Chukhamba oriental Varanasi, 81.
8. Harrison's Principle of Internal Medicine 19th edition, 901.
9. Sushruta Samhita Ayurvedasandipika hindi commentary by Dr.Ambika Dutt Shastri; Chukhamba oriental varanasi part 1, 82.
10. Charak Samhita savimarsh 'vidyotini' hindi commentary by pt.kasinatha sastri, Dr.Gorakhanatha Chaturvedi part 1, 405.