



ETIOLOGY OF *STHOULYA* (OBESITY) AND ITS PREVENTION ACCORDING TO *AYURVEDA*

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ABSTRACT

Obesity (*sthoullya*) is not because it runs in the family; it is because no one runs in the family. *Sthoulya* has been included by *Acharya Charaka* among *ashtauninditiya purusha*. Obesity has become epidemic today and it is essential to understand the consequences of

obesity. Obesity is a blessing of the modern age of machines and materialism. A new research has shown that obesity can shorten your life span by 8 years. Obesity has become life style disorder. These individuals can easily develop diabetes or cardiovascular problems early in life, this excess weight can rob them of nearly two decades of healthy life. Present paper aims to give the general idea of factors or causes responsible for the obesity. This paper also discusses about the important associated symptoms, complications, preventive measures and management of obesity. Since *Ayurveda* takes a multidimensional and holistic approach in the management and cure of any disease and so obesity.

KEYWORDS: *sthoullya*, obesity, *ashtauninditiya purusha*.

INTRODUCTION

Present day everyone is in mental and physical stress due to their modern living lifestyle undisciplined to pursue the daily regimen, dietic rules and regulations, which result in many diseases as hypertension, diabetis mellitus, obesity, osteoarthritis, cardiac diseases, depression, respiratory diseases etc. Among these lifestyle induced diseases like obesity (*sthoullya*) is one of them which is defined as increased body weight beyond desired standard. Obesity is a state of excess adipose tissue mass, "overweight".^[1] Obesity is very well said in

Ayurveda by the name of *sthoulya* and *atisthoulya*. *Acharya* Charaka, who may be called as the Indian Hippocrates described obesity as a disease of fat tissues (*medoroga*) leading to hugeness (*sthoulyam*). It has been classified under “Eight despicable personalities” (*ashta nindita purusha*) and defined as excessive and abnormal increase of *meda dhatu* along with *mamsa dhatu* resulting in the pendulous appearance of buttocks, belly, and breasts. Hence the excess weight is both due to retention of water and storage of fatty tissue.^[2] Obesity is a state of excess adipose tissue mass.^[3] *Ayurveda* has described its causative factors of obesity (*sthoulya*) mainly to be exogenous and hereditary type (*bijdosha*). Exogenous causes of fat (*meda*) potentiating diet and regimens, whereas *dosha*, *dhatu*, *mala*, *strotas* etc come under the endogenous factors. In the pathogenesis of obesity (*sthoulya*), all the three doshas are vitiated, especially *kledak kapha*, *pachaka pitta*, *samana* and *vyana vayu* are the *doshika* factors responsible for the etiopathogenesis of obesity (*samprapti of sthoulya*). *Aama annarasa* travelling in the body channels gets obstructed in the *medovaha srotas* owing to the *khavaigunya* due to *bijaswabhaba* or *sharir shaithilya* and combines with *kapha* and *meda*, decreasing the *medo dhatwagni* which in turn gives rise to augmentation of *meda*. Vitiated *vyana vayu* propels this *augmented meda dhatu* to its sites viz. abdomen (*udara*), hip region (*sphik*), breast (*stana*), neck (*gala*) et.al. resulting in *sthoulya* and *atisthoulya*, *chala sphika*, *chala udara*, *chala stana* and *atimedamansa vruddhi* are very obvious in all the patients of *sthoulya*. Manifestations of these *rupas* are associated with either excessive accumulation of *meda dhatus* or obstruction in various channels (*strotas*) by *medojanya margavrodha* or the *aama* or vitiation of *vata* and *shleshma dosha*, so excessive accumulation of *medo dhatu* produces various signs and symptoms in *sthoulya* patient. High intensity and severity of *sthoulya* due to increased appetite (*ati kshudha*) and increased thirst (*ati pipasa*) and manifestations of severe complications and even death due to its ignorance have been mentioned with example of *davanala* by *Chakra*.^[4] Obesity occurs when a person consumes more calories from food than burns. Obesity is caused by various series of factors like genetic factors carried by genes such as *Leptin*, *LepR*, *POMC* (*propiomelanocortin*), *MC4R* (*melanocortin-4 receptor*) and *PC-1* and environmental factors such as lifestyle, behaviour, diet, physical activity, social factors like poverty and lower level of education. Diseases like hypothyroid, cushing’s syndrome, polycystic ovarian syndrome and drugs like steroids, anti depressants can make a person obese. Pathophysiology of obesity seems simple, a chronic excess of nutrient intake relative to the level of energy expenditure.^[5] Obesity has also been defined as body content greater than 25% of total body weight for male, greater than 30% for female.^[6] Obesity is defined as BMI greater than 30kg/m².

The international classification of overweight and obesity according to BMI as per WHO.^[6]

Classification	BMI(kg/m ²)
Normal Range	18.50-24.99
Over weight	>25.00
Pre-obese	25.00-29.99
Obese	>30.00
Obese class 1	30.00-34.99
Obese class 2	35.00-39.99
Obese class 3	>40.00

Causes of vitiation of channels carrying adipose tissue (*medovaha srotas*) - Due to the lack of exercise, taking day sleep, excessive irritation, intake of fatty things and intake of various types of wines.

Pathophysiology of obesity (*sthoulya*)

Vayu due to passage having been obstructed with fat, moves about abundantly in belly and thus stimulates digestion and absorbs food. Hence the digest food quickly and desires excessively intake of food. In case of delay in taking food he is afflicted with some severe disorders. These two *agni* and *vayu* are particularly complicating and as such burn the obese like the forest-fire burning the forest. The person is called as over obese, who due to excessive increase of fat and muscles, has pendulous buttocks, abdomen and breasts and suffers from deficient metabolism and energy. Thus described the defects causes and symptoms of the obese.^[7] In the event of excessive increase of fat, *vayu* (*dohas*) etc. suddenly gives rise to severe disorders and thus destroy the life shortly.

In ancient texts of Ayurveda an elaborate description has been given relating to the causes of obesity (*sthoulya*). Those are not thinking much (*achinatanam*), sleeping at day time (*diwaswap*), diet and lifestyle which causes an increase in fatty tissues (*shleshmaj aahar vihar sevana*), always enjoying happiness (*harshanityam*), excessive intake of food which is difficult to digest (*atisampurna*), no sexual relation (*avyavaya*), lack of exercise (*avyayama*) and hereditary (*beejswabhava*).^[8]

According to Ayurveda in the context of body, eight persons are despicable such as- over tall, over short, over hairy, hairless, over black, over fair, over obese, over lean. Amongst them, the over obese and the over lean have other despicable features too. The over obese has eight defects- shortening of life span, hampered movement, difficulty in sexual intercourse, debility, foul smell, over sweating, too much hunger and excessive thirst.

Etiology of obesity according to modern science - A number of factors are responsible for obesity as^[9]

1. **Sedentary lifestyle-**: Physical inactivity is a major element in the development of obesity. Physical inactivity may be due to enforced job related, internet addiction or due to aging. Prolonged sitting in comfortable seat which is very common in businessman, government job holder and most of the white collar jobs. That's why role of obesity is increasing day by day.
2. **Stress or psychological cause-**: Emotional disturbances caused by stress. Stress may be induced by a number of routine disturbances as out burst activities like fighting, arguing, family events, marriages, deaths, travelling long distances et.al. These factors are directly or indirectly responsible for weight gain.
3. **Dietary intake-**: The increased prevalence of obesity in recent decades may be more due to the excess intake of food than the physiological needs, rapid eating habit and increased consumption of high fat foods or sweetened drinks. In *Ayurveda* excess food intake in a single meal (*ati sampurna*) and frequent food intake before digestion of previous meal (*adhyashna*) are recognized as the basic factors for the development of obesity (*sthoulya roga*).
4. **Age, sex and Race-**: However, obesity may occur at any stage of life, but the persons of middle age group are more prone to be obese. Adolescent and middle aged female are more sufferer than that of male due to hormonal changes in their body during puberty, menstrual stage, pregnancy, menopausal phase and hormonal deficiency of thyroid, pituitary and ovarian glands.
5. **Socioeconomic status-**: Usually it is seen that the person of higher socioeconomic status prefers more luxurious and sedentary lifestyle. Therefore, obesity is much more frequent among them.
6. **Drug induced-**: Long term use of some of the modern medicines induces obesity, i.e. anti-epileptic corticoids, oral contraceptive pills, antidepressants, hypoglycemic antihypertensive drugs etc.

Prevention of obesity according to *Ayurveda*

In *Ayurveda*, it has been described systematically concerning the symptoms and complications of obesity. Following preventions should be undertaken^[10]

- An obese person should be well aware regarding the cause of obesity and the person should be careful about to reduce the fat instead of losing of weight.

- Although an obese person has an extreme desire for hurried loss of weight, but this tendency should be discouraged. If weight loss is rapid, not only the fat metabolism and electrolyte disturbances occur and the muscles and liver are also affected.
- One should keep himself away from the sedentary and lethargic lifestyle such as more watching television, continuous sitting in a single posture, eating at late nights etc.
- Excess intake of high caloric and fatty diet should be avoided. A diet containing moderate amounts of salads, fresh fruits and vegetables, cereals and other fibrous food should be consumed. The bulk of vegetables and fruits containing few calories but high cellulose and fibers help in filling of the stomach and relieving from hunger.

Management of obesity according to Ayurveda

According to Charak *Acharya*, the principle of treatment for obese is “Heavy and non nourishing diet” (*guru apatarpana*) Because by virtue of their heaviness such diets would minimize the force of the aggravated power of digestion and due to their non nourishing nature they would help to reduce fat.^[11]

Ayurveda emphasizes the holistic care and treatment in any disease. Spiritual, psychological and physical, these all three aspects are given importance in the management of disease. Minimal intake of food and exceed expenditure of energy would be the basic rule to get rid of obesity. Now a day *Ayurvedic* management is recognized as the better option for those whom are suffering from the remedy of obesity (*sthoulya*).

- Diets and drinks that alleviate *vata* and *kapha* and which can reduce fat.
- Enema with drugs that are sharp (*tikshna*), ununctous (*ruksha*), and hot.^[11]
- Uction with ununctous (*ruksha*) drugs.^[11]
- Intake of *guduchi* (*tinosporia cordifolia* Miers), *musta* (*cyperus rotundus* Linn), *haritaki* (*terminalia chebula* Linn), *bibhitaka* (*terminalia belerica* Roxb) and *amalaka* (*emblica officinalis* Gaertn).
- Administration of *takrarishta*.^[11]
- Administration of honey.
- Intake of *vidanga* (*embella ribes* Burm F.), *nagara* (*zingiber officinale* Rose.), *yavaksara* (a preparation of *barley* containing among others sodium and potassium bicarbonate), powder of black iron along with honey and powder of *yava* (*Hordium vulgare* Linn.) and *amalaki* (*Emblica officinalis* Gaertn).

- Administration of *bilvapanchamula* (roots of *Aegle marmelos* corr, *Oroxylum indicum* vent. *Gmelina arborea* Linn. *Sterospermum suaveolens* DC. *Clerodendrum phlomidis* Linn.f.
- Administration of *silajatu* (mineral pitch).
- Intake of *prasatika* (*setaria italic* Beauv), *priyangu* (*Aglaia roxburghiana* Mig.), *syamaka* (*Echinochloa frumentacea* Linn.), *yavaka* (small variety of *Hodeum vulgare* Linn.) *kullatha* (*Dolichus biflorus* Linn.) seeds of *adhki* (*cajanas* millsp) along with *patola* (*Trichosanthes cucumerina* Linn.) as food, followed by honey water. ^[12]
- Alcoholic preparations that help to reduce fat, muscle and *kapha* may be used as post-prandial drinks.
- Use of emaciating drugs such as *musta*, *kustha*, *haridra*, *daruharidra*, *vacha*, *ativisha*, *katuka*, *chitraka*, *chirbilwa* and *hemvati*.

Asana and *pranayama* such as *Paschimottanasana* (the back stretching pose) *Bhujangasana* (the cobra pose) *Pawanmuktasana* (the wind releasing pose) are helpful in the reduction of body fat.

Regular exercises like brisk walking, running and swimming in morning hours for the duration of 30-45 minutes and this duration should be extended day by day as possible.

CONCLUSION

Prevention is better than cure, you must take precautions rather following treatment after increase in weight. Once you are obese it is very difficult to treat yourself. The person suffering from obesity or prone to the obesity should be encouraged to avoid the foods with high calories, high sugar contents. Follow up of proper *dinacharya*, proper *vyayama*.

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