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AYURVEDA - IN THE PREVENTION AND MANAGEMENT OF OBESITY (REVIEW ARTICLE)

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ABSTRACT

Obesity is a blessing of the Modern age of Machines and Materialism. It occurs as a result of lack of physical activity with increased intake of food. The industrialization, stress during the work. dietary habits, lack of exercise & various varieties among the daily diet e.g. fast food, Freeze fruits, increased amount of soft drinks and beverages, canned foods results into the clinical entity which we can call as Obesity. Obesity is a non communicable disease which becomes a very serious problem in the society. Due to the faulty life style and diet pattern the incidence of Obesity increasing day by day all over the world. Sedentary habits and lack of exercise are also the main reasons behind the increased incidence of Obesity. Obesity can leads to many health problems like Diabetes, Cardiovascular disease and Arthritis. Obesity reduces the average life expectancy and affects the quality of life. Hence, prevention of Obesity during its starting stage should be considered a priority for overcome the risk of Diabetes, Cardiovascular, Arthritis and other serious diseases. There are many drug, medicinal preparations, *Yoga* and *Panchkarma* described in the *Ayurveda* having wonderful preventive and curative effect on the Obesity.

KEYWORDS: Non communicable disease, Obesity, *Ayurveda*.

INTRODUCTION

Today the incidence of Obesity is increasing at an alarming rate due to change in life style, faulty diet pattern and decrease interest in the exercise.

Overweight and Obesity are the fifth leading risk of global deaths world wide, Obesity has more then doubled since 1980. In 2008, more than 1.4 billion adults 20 years and older, where overweight of those 200 million man and nearly 300 women where obese. In 2012 more than 40 million children under 5 year of age where overweight one considered a high-income country problem, Overweight and obesity are now rising in low and middle income countries, particularly in urban setting. Close to 30 million overweight children are leaving in developing and 10 million in developed countries.

At least 3.4 million adults die each year as a result of being overweight or obese In addition 44 of the Diabetes burden, 23 of ischemic heart disease burden and between 7-41 of certain Cancer burdens are attributable to overweight and obesity.

Obesity is the only one disease which is gaining more and more attention of scientists at global level. Many institutions and Medical schools are making efforts to find a perfect remedy for this burning problem. Curiosity is one of the noblest instincts of man, the endless desire of man for his knowledge. By this time, many countries are making an effort into this field of research. Many theories have been put forward with many new hypothesis describing the exact aetiopathogenesis of Sthaulya or Obesity.

As obesity is a key risk factor in natural history of other chronic and non communicable disease, the typical time sequence of emergency of chronic disease following the increased prevalence of Obesity is important in public health planning. The first adverse effect of Obesity to emerge in population in transition are hypertension, hyperlipidaemia and glucose intolerance, while coronary heart disease and the long term complication of Diabetes such as renal failure.^[1]

Changes in diet pattern, life style and lack of physical exercise has increase the incidence of Obesity in the society. From the past time *Ayurveda* is known for serving the society. Prevention and cure of Ayurveda is exactly applicable on the Obesity There are many drugs, medicine preparation, *Yoga*, *Pathya-Apathya* are

described in the text of *Ayurveda* which have good result in the prevention and cure of obesity.

MATERIAL AND METHODS

Different *Ayurvedic* classical book, research paper and journals were referred to fulfill this part, its comprise of subsection dealing with prevention and management of Obesity in *Ayurveda*.

Quantifying obesity with body mass index.^[3]

BMI (kg/m ²)	Classification	Risk of obesity comorbidity
18.5 - 24.9	Normal range	Negligible
25.0 - 29.9	Overweight	Mildly increased
> 30.0	Obese	
30.0 - 39.9	Class 1	Moderate
35.0 - 39.9	Class 2	Severe
> 40.0	Class 3	Very severe

Obesity can be correlate with *Sthoulya*. *Achrya Charcka* described *Sthoulya* in eight despicables in *Sutrasthan* chapter-21.

In the context of body, eight persons are despicable such asovertall, overshort, overhairy, hairless, overblack, overfair, overobese, overlean. The person is called as over-obese who, due to excessive increase of fats & muscles, has pendulous, abdomen & breasts & suffers from deficient metabolism & energy.^[4]

Eight defects of over-obese

Shortening of life-span, hampered movements, difficulty in sexual intercource, debility, foul smell, over sweating, too much hunger & excessive thirst.^[4]

Etiology of Obesity (*Sthoulya*) Diet related

- 1. Excessive intake of *Guru*, *Shanghta Ahar*.^[5]
- 2. Intake of excessive food.^[6]
- 3. *Adhyasan*.^[7]

Obesity

Obesity may be defined as an abnormal growth of the adipose tissue due to an enlargement of fat cell size or increase in fat cell number or combination of both.

Obesity is often expressed in term of body mass index (BMI) but can arise from other cause such at abnormal muscle development and fluid retention.^[2]

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5. Pesthaana seven.^[9]

Life style related^[10]

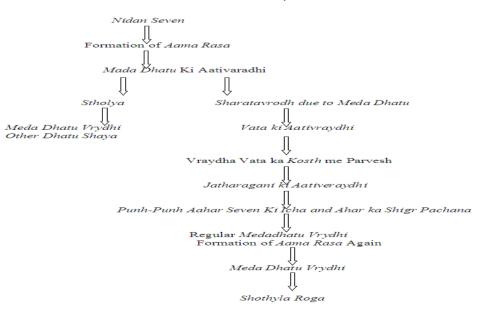
- 1. Lack of exercise.
- 2. Devasavpan.
- 3. Mathun nhi krna.
- 4. Excessive sleeping.
- 5. Excessive happiness
- 6. Sukhkarak Aasan.

Other causes^[11]

Shagaj and kulaj.

Pathogensis of Obesity^[12]

Consumption of various *Nidan seven* such as *guru*, *Sheeta*, *Snigdha*, *Madhuradi Kaphavardhaka* along with lack of exercise and sedentary life style result in excessive nourishment of *medas* while other bodily element are deprived of nourishment resulting in *Sthoulya*.



Symptoms^[13]

- 1. *Ati Shevida*[Excessive Sweating]
- 2. *Sharamjanya Swasa*[Breathlessness on mild exertion]
- 3. Aati Nindra [Excessive sleep]
- 4. Karya Dorblyta [Difficulty to perform heavy work]
- 5. Jadyatha [Stuggishness]
- 6. Aalapaayu [Short life span]
- 7. Aalapbala[Decreased bony strength]
- 8. Uathashahani[Inertness]
- 9. Sharir Durgandhta [Foul odour of the body]
- 10. Gadgadtava [Unclear voice]
- 11. Sudha vrydhi [Excessive hunger]
- 12. Ati Trishna [Excessive thirst]

Complication^[14]

- 1. Visarap [Erysepellas]
- 2. Bhangandher [Fistula in Ano]
- 3. Jwara [fever]
- 4. Aatisar [Diarrhoea]
- 5. Prameha [Diabetes]
- 6. Arsha [Piles]
- 7. *Salipada* [Filariasis]
- 8. Apachi [Alands]
- 9. Kamla [Jaundice]

Prevention^[15]

We can prevent *Sthoulya* by the preventive measures of the *Ayurveda*.

- 1. Nidan parivargana
- 2. Use of healthy food
- 3. Regular excereise
- 4. Chintan, Dhyana are also effective on obesity.
- 5. Rasanya
- a) Guggulu Rasanya
- b) Loha rasanya
- c) Aamalki Rasanya
- d) Yoga
- e) Surya Namashkara
- f) b)Myurasana
- g) Shrshrasana
- h) Halasana

Treatment of Obesity^[15]

Sanshaman therphy [Chiktsa] Rasa/ Bhasama

- a) Parad Bhasama
- b) Trimurti Rasa
- c) Vadaraagni Rasa

Vati

- a) Bhidani Vati
- b) Kutki Vati
- c) Aaroyga vardhani Vati

Churna

- a) Triphala Churna
- b) Vacha Churna
- c) Trikatu Churna
- d) Puskharmula Churna

Kwath/Asava

- a) Musthadi Kwath
- b) Fhlatrikadi Kwath
- c) Agnimanth Kwath
- d) Lohasava

Gugglu Yoga

- a) Navak gugglu
- b) Madohara Gugglu
- c) Amaritadh Gugglu

Akal Drugs

- a) Gugglu
- b) Vasha
- c) Haritki
- d) Gomutra
- e) Shunti
- f) Nagarmotha
- g) Patala
- h) Aamalki
- i) Apamarga
- j) Guduchi

Shaara Yoga

- a) Yava Shaara
- b) Apamarga Shaara
- c) Erand Shaara

Pathya-Apathya^[16]

Pathya Aahar

Purana shaali-Chawal, Munga, Yuva, Kondo, Chana, Bajara, Maaaka, Masoor, Parwal, Shijan, Takra, Aavala, Katu, Tikta, Kashya Rasa vale dravya, Gugglu, Bhojan k purav Jaal Pina etc.

Apathye Aahar

Gahu, Naye Shali dhanya, Chawal, Aalu, Dudh, Kheer, Dahi, Mash, Anda, Guda, Bhojan k baad Adhik jala pina etc.

Pathye Vihar

Chinta, ratri, jagran, Langhan karna, Paedal chalna, Duph seven, Vyaam karna etc.

Apathya Vihar

Sheetal Jaal se snana karna, Devasayana, Sukhpurvak sada Aaramdyak bister par rehna etc.

Some studies which shows the effect of Ayurvedic drugs in treatment of obesity.^[17]

- 1. *Mustak*: The tubers of *Mustak* are commonly known as Nut Grass, Cyperine is the active ingredient, working as a hypotensive agent, anti-inflammatory & diuretics, as well as reducing fat in body. It helps clearing the blocked channels. An experimental study was performed on Rats shows Cyperus Rotundus stopped weight gain & in vitro, stimulated lipolysis in 3T3F442 adipocytes.
- 2. *Kutki*: The root of Kutki is the source of Scrophulariaceae, is the active ingredient. *Kutki*

improves gallbladder secretions, yhus aiding in the digestion & metabolism of fats. In a study of hyperlipaemic mice on a high diet, daily doses of water extract of *Kutki* significantly reduced total cholesterols, triglycerides, & LDL levels after 12 weeks.

- **3.** *Gurmer*: The anti-obesity effects of the leaves of *Gurmar* were investigated in Wister rats fed with high fat diets. The saponins-rich aqueous exact administered to Wister rats, suppressed increases in body weight, organs weight, & plasma lipids. *Gurmer* can be used to treat obesity as well as alter lipid & glucose metabolism.
- 4. *Palash*: the phytochemical analysis showed that major chemical constituents of Palash were sterols, polyphenols, flavonoids, ascorbic acid and saponins are useful in treatment of obesity, phytosterols have beneficial effect on hyperlipidaemia, and polyphenols, flavonoids have potentials antioxidant properties.
- 5. *Apamerga*: The seeds of *Apamarga* have shown to reduce blood glucose levels & stimulate the production of thyroid hormones in animal models. Both these actions would help combat obesity & promote weight loss.

DISCUSSION

Due to faulty diet pattern, lack of physical exercise the incidence of Obesity is increasing all over the world. Obesity is the very common risk factor for the cardiovascular disease and Diabetic Balance diet plan and life style can play a good role in the prevention and cure of Obesity. In the text of Ayurveda Pathya Aahar-Vihara, Yoga, Rasavana, Dincharva, Ritucharva are described which have good role in the prevention and managements of Obesity. Different studies has been showed that drugs have effective role in obesity. If someone adopt the diet pattern, life style according to the Ayurveda it can be helpful in the decrease the incidence of Obesity. In text of Avurveda there are number of drugs, formulation are described which have very effective result on the Obesity as mentioned above in details.

CONCLUSION

It seems that we need to reassess entire lifestyle if we want to prevent and manage obesity. In *Ayurveda Ahara, Vihara, Dincharya, Ritucharya, Yoga, Rasayana* are described which have good role in prevention & cure of the obesity. The prevention and management of obesity can be done successfully in *Ayurveda*. Moreover *Ayurvedic* treatments are safe & affordable by everyone.

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