

“PREVENTION AND MANAGEMENT OF OBESITY/ MEDOROGA: THROUGH AYURVEDA”**Dr. Vipin Kumar***

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ABSTRACT

Obesity is a common metabolic disorder. It is one of the oldest disorder documented in medical science. Its a global medical health problem today. Faulty life style is the chief culprit for it along with some other endocrines & other disorders. It is widely described not only in modern system of medicine but also elaborated described in most ancient system of medicine i.e. *Ayurveda*. In *Ayurvedic texts* it had been described as *Medoroga* or *Sthaulya*. Once upon a time when it was thought to be disease of metro cities & mostly sufferers were from high class groups. But now a days with changing scenario it is the disease of towns, villages & in the affected groups middle class also in the larger ratio. One important aspect is that the child & adolescent age groups are also in the obese, overweight group. This is a grave condition since number of complications, some of them are life threatening in the later stage/ uncontrol condition. In the present article description of disease in modern as well as in *Ayurvedic* text, preventive measures & treatment with *Ayurvedic* preparations. Since obesity/*medoroga* being a life style originated & metabolic disorder prevention is much effective than treatment.

KEYWORDS: Obesity, medorog/sthaulya, metabolic disorder.**INTRODUCTION**

Obesity now became a Pandemic affecting almost all the continents. The combination of Obesity, Dyslipidaemia, Hypertension & Impaired glucose tolerance, Often combined to the term ‘Metabolic syndrome’ affects now a days approximately more than 30% of population of young generation. Hence these are receiving much attention in medical field due to increasing morbidity & mortality in our society. Complications of obesity are follows Diabetes mellitus, hypertension, Coronary Artery Disease (CAD), Osteoarthritis, impotency, gall bladder stone, & different types of Cancers The mortality rate due to association of Obesity & Diabetes mellitus increasing very fast in society. The death due to diabetes & its complications stand 4th in this table. Genetic predisposition as well saturated, high calorie over diet along with minimize energy expenditure have been regarded as the primary aetiological factors. In *Ayurveda* description of obesity (*medoroga*) also described in the same manner.

Epidemiology- WHO declared Obesity as the greatest health Problem of the present century. According to WHO, approximately 20-40 % of adult population & 10-20% of children are obese WHO in 1997 recognised obesity as a global epidemic In the ancient time prevalence of obesity was rare. In the 20th century it

become common. In 2005, WHO estimated that approximately 400 million adults (9.8 %) were obese with higher rates in women than men. The rate obesity also increases with age at least upto 50 or 60 yrs old. In India urbanisation & modernisation has been associated with obesity. In northern India obesity was most prevalent in urban population (male - 5.5%, female - 12.6%), followed by the urban slums (male - 1.9%, female - 7.2%). Obesity rates were the lowest in rural population (male - 1.6%, female - 3.8%). Socioeconomic class also had an effect on the rate of obesity. In women of high socioeconomic class rate were 10.4% while in lower socioeconomic class rate were only 0.9%. In India **Overweight** (female) - 47.5%, while (male) - 32% & **Obese** (female) - 14%, male - 03%, **Abdominal Adiposity** (female) - 35%, male - 49%, Approximately 01 Billion Population Overweight Worldwide & >350 million Obese. 2.5 Million Obesity related deaths/ yr. Childhood Obesity also increasing very fast in Delhi 28% children are overweight/ obese in the 14 - 18 yr. age groups.

“*Rasnimittmew sthaulyam karshyamch tatrashleshmalaahar sewinoadhyaashansheelasyaavyayaminodiwaswapanratasya cham evannraso madhurtarasch shariramanukramannati snehanmedo janyati tadati sthaulyamapadyati*” (Su.Su.15/31).

In *Ayurvedic texts*, there are two types of *meda*/fat are described in reference to *medoroga*/obesity.

1. Badha meda- The fat which is fixed & stored in the form of fat at various sites in the body as fat depot/muscles, is termed as *Badha meda*.

2. Abadha meda- this fat is circulating in the body along with the blood in the form of lipids (Cholesterol, Triglycerides, LDL, HDL & VLDL) termed as *Abadha meda*.

Excessive *abadha meda* got stored as *badha meda*/fat in the body as serum triglycerides in adipose tissues resulting in accumulation of adipose tissue & increased adiposity in the body.

Ayurveda is not only the most ancient system of medicine, but also a life science. *Ayurvedic* texts have vivid description for the management of number of disorders. But prior to its treatment description there is much more emphasis on the preventive aspects of so many diseases. Acharya Charak had justified the preventive aspects of disease. But now a days in our society there is increasing trends in some diseases like Obesity, hypertension, diabetes mellitus, Ischaemic Heart Disease (IHD), stress, anxiety, depression, impotency, acid peptic disorders, Irritable Bowel Syndrome (IBS), insomnia, cervical spondylitis, different types of cancers & much more can be added to this list.

All disorders can be mention as life Style disorders Our faulty Life style responsible for the origin & disaster of these diseases in our developing modern society. Many of them can be easily cured or controlled with healthy life style i.e. with positive changes in our daily routine Now a days we are facing epidemics of Diabetes mellitus, Ischaemic Heart Disease & Hypertension. The one of the most important factor responsible for it is the obesity. Obesity is of two types.

1. Android/ male type – Apple shaped or truncal obesity in which increase the girth of abdomen/trunk is the peculiar of Asiatic males, main presentation of this type obesity is metabolic syndrome / Diabetes mellitus, hypertension & Coronary Artery Disease.

2. Gyaenoid type/Female type- Pear shaped in which the increase the circumference of pelvic region & main complications of this type are Osteoarthritis, Gall bladder stone, impotency & varicose veins in calf muscles.

Modern system of medicine have many formulae for the diagnosis of the overweight/ obesity. Among them Body Mass Index (BMI), Ideal Body Weight & Lean Body Mass are more in practice. Among them BMI much practically used. A healthy person should have appropriate Body weight in accordance to his / her height. The relationship between body weight & height is known as Body Mass Index (BMI) which can be

calculated by the formula. $BMI = \text{Weight (kg)} / \text{Height (m)}^2$.

Where Wt is the weight in Kg and Ht is the height in meters. Normal range for the BMI in men is 20-25 and in women 18-24.

If index is <18 the person is considered thin & improvement in nutritional condition is required, If it is greater > 30, person is obese & weight reduction is advisable for the improvement of quality of health.

Disadvantages of Increased BMI (Obesity) Increased mortality rate, reduced quality of life, reduced physical fitness & mobility, diabetes mellitus, hypertension, Ischaemic heart Disease, Osteoarthritis, Cholelithiasis, hiatus hernia, increased risk of different cancer & increased surgical risks.

Charak established parameters of a healthy person in Sutra sthan 21. "*Ashto ninditiya*" *adhyay*.

In *Ayurveda atisthulya* (obese) & *atiksheer* (emaciated) have been primarily criticised among eight unfavourable body types because of the following drawbacks.

Doshas of Atisthulya (Symptoms of Obese Person)

"*Atisthulya tawadayshohrahso javoprodh krichchhavyavayta daurbalyam daurgandhyam swedabadha kshudatimatram pipasatiyogescheti bhawantyashto dosha*" (Ch.Su.21/4).

Decrease the longevity, lack of Joy, difficulty in performing sex, excessive weakness, foul odours from the body, excessive sweating, excessive hunger & thirst.

Among the eight faulty personalities *Atisthulya* (obesity) & *Atiksheer* (emaciated) are the main. And in between the two *Atisthulya* /obesity is more difficult to cure in comparison to *atiksheer*. It is clear from following version.

"*Sthulya karshye varam karshyam samopkarno hi tato*". (Ch. Su.21/17).

Management For Atisthulya (Obesity) Treatment of obesity is not a easy medical task, requires patience, skillfull understanding the cause of obesity & treatment strategy considering the factors diet, nutrition, education, exercise, change in behavior & determination of the patient. Based on the above said factors it will be much beneficial for the patient & much satisfactory to the physician.

- Line of treatment should be *Gur* & *Aptarpana*-Healthy to digest & less Calorie diet is recommended.
- In the treatment of *Atisthulya* 10 types of procedures causing *Langhana* (lightness) in the body are beneficial.

“*Chatusprakara sanshudhi pipas marutatapo pachnanyaupwasasch vyayamscheti langhanam*”
(Ch.Su22/18).

Four types of Body Purification Procedures remaining thirst, walking in Air & Sun, intake of digestive herbs, fasting & regular exercise are recommended.

Acharya Shushurut in the *Chikitsa sthan* 24 Vyayam/Exercise is the best procedure for the management of Obesity.

“*Aarogya chapi param vyayamadupjayate na chaste sadrasham ten kinchit sthaulyaapkrashanam*”
(Su.Chi.24/41).

Acharya Charak described the following sutra for the management /Prevention of the Obesity & all related disorders (*Santarpan janya vyadhiya*).

“*Vyayamnityo jeernaanshi yavgodhumbhojanam santarpankriterdosha sthaulyam muktarwa vimuchyate*”
(Ch. Su.23/25)

- Daily regular aerobic exercise
- Avoid eating without complete digestion of prior food taken
- Food predominant in wheat & barely with husk.

Obesity awareness programme may be more important in the control of obesity in initial step. There are so many guidelines by WHO as NCEP (National Cholesterol Education Programme) defined metabolic syndrome. WHO had documented related to obesity, diet, health, nutrition, preventing & managing the world wide medical problem.

Wholesome diet (*Pathya aahar*) (Do's):- *Yava* (Barely), *godhum* (wheat), *mudga* (*Phaseolus mungo*), *Takra* (Buttermilk), Lemon tea, Green tea, MUFA (Mustard & Olive Oils), PUFA (Sun flower & Saff flower oils), *old Jaggery*, *Stripped gourd*, *Cabbage*, *Bitter Gourd*, *Methi* (*Trigonella*), *Parwal*, *Garlic* (*Rasona*) (It corrects dyslipidaemia), Fish (It decrease atherosclerosis formation), Madhu, Papaya, Watermelon, Guava, Apple, Lemon, Orange, Spinach, Broccoli, Soya, Tomato, apricot, almond, *Hareetiki* (*Terminalia Chebula*), *Amla* (*Embelica officinale*), *Turmeric* (*Curcumma longa*).

Modified Life style (Vihar) (Do's):- Daily regular aerobic exercise such as- Cycling, swimming, brisk walking, jogging & badminton etc. Proper sleep at night, Regular aerobic physical exercise reduces hypertension, body fat, total cholesterol, Triglycerides, Low Density lipid & increase the high density lipid & insulin sensitivity.

Yoga & Meditation – different *Pranayam* & *aasan* as *Ardhmatsyendraasan*, *halaasan*, *mandookaasan*, *Trikonaasan*, *surya namaskar*, *Bhujangaasan* etc & meditaion to reduce stress & anxiety.

Unwholesome diet / Apathya aahar (Don'ts):- Dairy Products- milk Products (Curd, *Paneer*, Cheese, Butter etc.) **Animal Proteins:** meat of different birds & animals, chicken, mutton, pig, cow etc. **Vegetables & Rice** - Potato, Sweet Potato, Onion, Pumpkin, Rhaphonus, Arum, Raddish, Trunip, **Pulses** -*Rajma* & *Urad* (*Phaseolus mungo*), **Fruits** - Banana, Mango, fig, Grapes, Date palm, Plum, & Other which are rich in carbohydrate. **Fast Food-** Pizza, Burger, Cutlet, *Pavbhaji*, Sauce, gems & Other related food articals Sweets & Jaggery Products, Sugar & Chocolet.

Wine, Sura & Vineger - Excessive & Prolonged use of Alcohol increased blood pressure and ultimately increase in size of heart (Cardio megaly). Alcohol is beneficial for cardiac patients in smaller amount (<25 ml per day). Over dose/daily Consumption may cause- Dyslipidaemia, Obesity, Poor control of diabetes & Enlargement of chambers of the heart (dilated Cardiomyopathy).

Harmful Life style (Don'ts)- Day sleep, Sedentary life style- (Person whose work is mental with minimum / no Physical activity). Smoking—since it can cause Platlets Aggregation (Increases the chance of formation of atherosclerosis), Tension & anxiety (Causes sympathetic nervous system Stimulation & increase cortisol level).

Following Herbal formulations are Primarily used for the treatment of obesity

Navak Gugullu, Triphaladi Kwatha, Medohara Gugullu, Takrarishta, Vyoshadisaktu, Shilajitwadi .

Lauha, Punarnavashatakkwatha, Vrihta, Panchmula Kwatha, Triphalachurna, gomutra, Haetiki, amalki,

Gokshuradiguggulu, Twak (dalchini), musta, Rasanjana, Vidangarishta, Trikatuchurn, Dalchini (Cinnamom tamala) + musta (*Cyprus rotandus*) phant, panchkol phant.

Ritu Hareetiki- In our body different level of *dosha* (biological entities as *vat*, *pitta* & *kapha* as physiological concept of *ayurveda*) in different seasons & hence different *anupana* required in accordance to season for the intake of a single herb *Hareetiki* (*Terminalia chebula*) had been described in text.

enceconsumption of hareetiki with different anupan in accordance to ritu/ season is very much useful in controlling the obesity & other related diseases.

Panchakarma Therapy (biopurification of the body) should be wisely used for the same purpose. *Lekhan basti* with *Vacha* & *Manjistha kwatha* (*decoction*), *Udwartan* (*rubbing of dry herbs on the body*) & Avoid *snehan* (oleation), *anuvasan basti*.

CONCLUSION

Obesity/ *medoroga* now a days emerge as an epidemic in the medical field. It creates extra attention of medical science due to its adjoining complications as Diabetes mellitus, Hypertension are the most important among the others. Faulty life style along with stress are the main causes of increasing the disease incidences. So positive changes in life style with minimize the stress as much as possible may be important preventive measures. Education about the healthy life style & preventive measures in childhood will be beneficial in decline the obesity & other related disorders Besides the preventive measures in *Ayurveda* vivid description of the disorder. Numerous single & compound preparations are available in the treatment portion. By using the appropriate *herbomineral* preparation among the numerous described in *Ayurvedic* texts & adopting regular aerobic exercise along with suitable yoga (meditation) one can get free from the disease but with firm determination for it.

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