ROLE OF AYURVEDA IN THE MANAGEMENT OF OBESITY (STHOULYA)

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ABSTRACT

Obesity is most common disorder in developed countries or affluent societies but now it is also seen in developing countries. It is clinical condition in which there is an excessive body fat. This condition is common in rich family and especially in women. Obesity has reached epidemic proportions in the 21st century with morbid obesity affecting 5% of the country’s populations. Acharya Charak has mentioned Medasvi purush as one of the type of Astonindita in Astoninditiya adhyay. Obesity is treated in line of treatment of Ayurveda as Medovridhi or “sthaulya”. The line of management is based on manipulation/correcting the diet, lifestyle, yoga, exercises, Panchkarma therapy (sanskrodhan) and use of Hypolipedimic/lekhana drugs like: haritaki, vacha, vidang, triphla etc.

Keywords: Obesity, sthaulya, lifestyle, yoga, lekhan

INTRODUCTION

In recent years, India has managed to control communicable diseases like malaria, cholera and polio. However, the nation now has to deal with a new breed of developed world that is obesity. Coupled with a sedentary lifestyle and faulty diet, the urban youth are particularly prone to the lifestyle diseases. Obesity and overweight are defined as abnormal or excessive fat accumulation that presents a risk to health1. Modern drugs for treatment of obesity have a list of its side effects along with high cost. On contrary Ayurveda is not only a medical science but also a way of healthy living. Ayurvedic diet plan is more effective than standard diet plan in the management of obesity.

AIM & OBJECTIVE- The aim of present article is how to prevent obesity by Ayurvedic management. Obesity is increasingly being observed with the changing lifestyle due to sedentary lifestyle. The WHO has described obesity as one of today’s most neglected public health problem. Information about maintaining and controlling weight, dietary modification and regular exercise is provided through health education programmers, as well as by Ayurvedic practitioners.

BODY MASS INDEX (BMI) –

A crude population measure of obesity is the body mass index (BMI), a person’s weight (in kilogram) divided by the square of his or her height (in meter). A person with a BMI of 30 or more is generally considered obese.

BMI CLASSIFICATION
<18.5 Underweight
18.5-24.9 Normal weight
25.0-29.9 Overweight
30.0-34.9 class I obesity
35.0-39.9 class II obesity
>40 class III obesity
IDEAL WEIGHT ACCORDING TO HEIGHT BY WHO-

<table>
<thead>
<tr>
<th>Height in feet</th>
<th>Height in cm</th>
<th>Wt. in kg(male)</th>
<th>Wt. in kg(female)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5´</td>
<td>152</td>
<td>56-58</td>
<td>50-54</td>
</tr>
<tr>
<td>5´1˝</td>
<td>154</td>
<td>56-59</td>
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</tr>
<tr>
<td>5´2˝</td>
<td>157</td>
<td>56-60</td>
<td>53-56</td>
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<tr>
<td>5´3˝</td>
<td>159</td>
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<td>54-58</td>
</tr>
<tr>
<td>5´4˝</td>
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<td>59-63</td>
<td>56-59</td>
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<tr>
<td>5´5˝</td>
<td>165</td>
<td>60-65</td>
<td>55-61</td>
</tr>
<tr>
<td>5´6˝</td>
<td>167</td>
<td>62-66</td>
<td>58-63</td>
</tr>
<tr>
<td>5´7˝</td>
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<td>5´9˝</td>
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<td>67-72</td>
<td>64-68</td>
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<td>5´10˝</td>
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<td>67-71</td>
</tr>
<tr>
<td>6´</td>
<td>182</td>
<td>73-78</td>
<td>68-72</td>
</tr>
</tbody>
</table>

INCIDENCE-
Obesity has reached epidemic proportions in the 21st century with morbid obesity affecting 5% of the country’s populations. In Northern India, obesity is most prevalent in Urban population (Male=5.5%, Female=12.6%) followed by the Urban slums (Male=1.9%, Female=7.2%)

ETIOLOGICAL FACTORS- Modern life (Sedentary habits with little exercise), Faulty diet, Alcohol consumption, Emotional distress, Hereditary, Less outdoor activities, Pregnancy.

SHORT TERM PROBLEMS | LONG TERM PROBLEMS
---|---
Breathlessness | Hypertension
Increased sweating | High cholesterol levels
Snoring | Coronary Heart disease
Difficulty sleeping | Stroke
Feeling very tired every day | Back and Joint pains

RISK FACTORS OF OBESITY- Obesity increases the risk of many physical and mental conditions such as Osteoarthritis, Obstructive sleep apnea, Social stigmatization, Diabetes, Cancer and Cardiovascular disease.

MODERN TREATMENT AND ITS LIMITATIONS-
1. Dietary plan
2. Physical exercise
3. Use of anti obesity drugs
4. Bariatric surgery

So it is better to seek safe and effective treatment measures to prevent obesity by applying Principles of Ayurveda.

OBESITY IN AYURVEDA-
Obesity has been described as Sthaulya or Medoroga in Ayurvedic texts. It is described under the caption of Santarpanotthavikar (diseased caused by over nourishment). Medo dhatu (adipose tissue) is the site of metabolic disturbance in an obese individual. Meda becomes increased due to ingestion of excessive sneha and Madhur rasa. Sthaulya (obesity) is considered as one of the eight types of undesirable conditions as described by Acharya Charaka. A person is whom there is excessive accumulation of Meda (fat/adipose tissue) and Mamsa (flesh/muscle tissue) leading to flabbiness of hips, abdomen.
and breast has been categorized as *Atisthula*. *Medas* is body tissue predominant in *pruthvi*.

**NIDAN (CAUSATIVE FACTOR) OF STHOULYA**- Classified into 4 groups-

| Aharatmakaniidana<sup>4,5</sup> | Santarpana (over nourishing), Adhyasana (over eating), Excessive consumption of guru (heavy), madhur (sweet), sheeta (cold) food, Dadhi, Sarpi etc. |
| Viharatmakanidana | Aryayam (Lack of physical exercise), Aryavaya (Lack of sexual life), Divas-wapit (day’s sleep), Asana sukha (luxurious sitting), Bhojanottar snana, nidra, aushadha sevana etc |
| Manas nidana | Achintanat (lack of anxiety), Manasonivritti (relaxation from tension), Priyarshan (observation of beloved things) etc |
| Anya nidana | Amarasa, snigdha, madhur, basti sevan (administration of unctuous and sweet enema), Taila abhyanga (massaging of oil) etc |

**IMPACT OF STHOULYA**-
1. *Ayurhrasa* (decrease of life span)
2. *Javoparodha* (decrease in enthusiasm and activity),
3. *Krichravyavayata* (difficulty in sexual act),
4. *Dourbalya* (decrease of strength),
5. *Dourgandhya* (bad odour),
6. *Swedabadha* (excess perspiration),
7. *Kshutpipasadhiya* (excessive hunger and thirst),
8. *Atisnigdham* (excessive intake of fatty substance),
9. *Mahashana*<sup>6</sup> (excessive eating)

**AYURVEDA MANAGEMENT OF OBESITY**- According to Acharya Charak, *Sthoulya* (obesity) is more dangerous than *Karshya* (emaciation). So treatment for obese person has to be done very carefully. In Ayurveda management of any disorder is divided into 3 parts-

1. **Nidana Parivarjan**
2. **Shodhan**
3. **Shaman**<sup>7</sup>

**NIDANA PARIVARJAN**- It is the 1<sup>st</sup> line of treatment of any disease. *Nidana* must be avoided for best management of the disease.

**SHODHAN**-
Meaning of *shodhan* is *Apakarshan of doshas*. Therapies in which the aggravated *doshas* or the excretory product of digestion are eliminated after mobilizing them from their respective sites by are *Urdhva or Adhah marg* from the body.

2 main parts- *Bahya* (Udavartana, Avagah, Parisheka, Lepana) Abhyantar (Vaman, Virechan, Nasya, Niruha)

**DIFFERENT MEDICAMENTS FOR STHOULYA**-

**Single Drugs**-

<table>
<thead>
<tr>
<th>Sanskrit name</th>
<th>Botanical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>vidanga</td>
<td>Embelia ribes</td>
</tr>
<tr>
<td>vacha</td>
<td>Acorus calamus</td>
</tr>
<tr>
<td>haritaki</td>
<td>Terminalia chebula</td>
</tr>
<tr>
<td>madhu</td>
<td>Commiphora mukul</td>
</tr>
<tr>
<td>nirgundi</td>
<td>Vitev negundo</td>
</tr>
<tr>
<td>chitraka</td>
<td>Plumbago zeylanica</td>
</tr>
<tr>
<td>katuki</td>
<td>Picrorhiza hurroa</td>
</tr>
<tr>
<td>haridra</td>
<td>Curcuma aromatica</td>
</tr>
<tr>
<td>musta</td>
<td>Cyperus rotandus</td>
</tr>
</tbody>
</table>

**Compound drugs**-

Medohara guggul, Navak guggul, Triphala, Trigunadi guggul, Arogyavardhini vati, Chandraprabha vati, Punarnavadi kwatha, Shilajatvadi vati
YOGA AND PRANAYAMAS -
Pacchinottanasana, Halasana, Dhanurasana, Chakrasana, Bhujangasana, Sarvangasana etc.

ROLE OF DIET AND EXERCISE -
Obesity results from an energy imbalance. This involves eating too many calories and not getting enough physical activity. Maintaining a healthy weight is all about balancing the number of calories you take in with the number you burn off through exercise. A healthy diet emphasizes fruits, vegetables, cooked dry beans and peas, whole grains, nuts and seeds. One should make exercise a part of daily life - exercising regularly like walking, jogging, running, swimming, cycling and other physical activities can help to lose weight safely and keep it off.

DISCUSSION
Derangement of Agni or digestive power leads to production of ama which disturbs agni of fatty tissue and blocks the proper formation of further tissues. Accumulated fat causes disturbance to movement of vata which in turn increases appetite. Person therefore eats more and the entire food is then converted into proper fat tissue. As per the line of treatment of obesity, the diet prescribed should be Guru (heavy to digest) and Aptarpana (non-nourishing). The Aptarpan quality of food will help in the reduction of fat in the body. Heavy quality, the food normalizes the aggravated vata and also reduces teekshnagni. Food should be katu, tikta, kashaya rasa pradhan which decreases kapha. Raksha guna helps to reduce fat and lekhaniya guna helps to remove obstruction in the channels due to its sroto cleansing property. Raksha guna, kashaya rasa and grahi guna are mainly concerned with medoshoshan. Yava is having the properties like ruksha, guru, and mrudu gunas which act as medohara. Ayurveda always follows prevention is better than cure. For prevention nidan parivarjan is very important. We can follow dincharya, ritucharya and ratricharya. In shodhan chikitsa, purva karma increases agni and pradhan karma removes sanga and vimarggaman. Ushna and teekshan drayyas reduces sanga or avarodh and cleaned all the margas and srotas. After pradhan karma we can follow Sansarjan karma, for this agni deepan occurs gradually.

CONCLUSION
In conclusion, the first step in obesity treatment starts with a comprehensive management of the lifestyle (i.e. diet, physical exercise, behaviour modification) and should be maintained as an effective and safe obesity management measure. Modern drugs are not advisable as they have lots of complications hence it is better to follow Ayurveda principles for healthy lifestyle. We can continue this healthy lifestyle with safe and effective treatment of Ayurveda to prevent and manage obesity.

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