A Review of Obesity and its management in Ayurveda

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ABSTRACT

Ayurveda is originated from the Atharvaveda and was preached by Lord Brahma. Its Prayojana is to maintain the health of healthy and to cure the diseases of diseased. In Ayurveda, Sthaulya has been described in all the literatures. Acharya Charaka has described Sthaulya Purusha mong one of the Ashta Nindita Purusha. Sthaulya is caused due to Medovriddhi which includes abnormal and excessive accumulation of Medodhatu in the body. This is caused by frequent and excessive intake of Madhur and Snigdhaahara, lack of physical and mental exercises. These all results into the increase in Kapha Dosha and Medo Dhatu results in the Sthaulya. In modern science, Sthaulya can be compared to the obesity. Obesity is one of the metabolic disorder. WHO considers obesity as a Global epidemic and a public health problem. It is estimated that more than 300 million adults are obese and many are overweight. Sthaulya (obesity) is discouraged by the society for social as well as on the medical grounds. Three main causes have been described in modern literature viz. Dietetic, Genetic and Hormonal. Person of every age and sex is suffering by this widely spreaded epidemic i.e. obesity. It is the major chronic disease in developing as well as in developed countries. The line of treatment includes the treatment of Dhatvagnimandya. In pathogenesis of Sthaulya, Kledaka Kapha, Samana and Vvana Vayu, Meda (fat /lipid) and Medodhatvagni Mandyata are main responsible factors. So the proper treatment should be selected, that can effect on all these factors.

Key words: Medodhatu, Obesity, Sthaulya, Sthaulya Chikitsa.

INTRODUCTION

In modern era, Every person is very busy in his daily routine. No body have time to think for the healthy life. None of us follow Dinacharya and Ritucharya even after knowing the importance of it . Due to this artificial living life-style, person is suffering from various life style disorders. Sthaulya is one of them. Sthaulya is a condition where there will be Atyaopchaya of Shareera associated with abnormal increase in Medodhatu. Sthaulya is one of the most effective disease which affects someone social, physical and mental features. Acharya Charaka⁴ listed eight defects underlying Sthaulya Purusha - Ayuhrasa, Javopradha, Alpa-Vyavayita, Daurbalya, Daurgandhya, Swedabadha, Ati-trisha, Ati-kshudha. The patients are looking towards Ayurveda with a great hope as other system of medicines has merely insufficient management for this. Management of obesity (Sthoulya) is becoming a challenging problem for healthcare professionals, patients and their families. According to W.H.O. Obesity is listed under the 10 top selected risks to the health disorders.

LITERATURE REVIEW

Sthaulya

A person having pendulous appearance of Sphika (Hip), Udara (Abdomen) and Stana (Chest) due to excess deposition of Meda (Fat) along with Mamsadhatu and also having unequal an abnormal
distribution of Meda with reduced enthusiasm towards life is called Atisthula.\cite{1} According to the modern science, Obesity is defined as increase in body weight beyond the limitation of skeletal and physical requirements as the result of excessive accumulation of body fat.

**Classification**

Vagbhata has mentioned three types of Sthaulya i.e. Adhika, Madhyama and Hina with management point of view.

1. **Hina Sthaulya**: (B.M.I. 25-30 kg/m\(^2\) – Over Weight) - Mild degree of overweight, without any complication or secondary disease, with less than four undesirable symptoms and with duration of less than 1 year – can be considered as HinaSthaulya.

2. **Madhyam Sthaulya**: (B.M.I. 30-40 kg./m\(^2\) - Obese) - Moderate degree, with least complications without secondary disease, with less than 8 undesirable symptoms and duration of 1 to 5 years can be considered as Madhyam Sthaulya.

3. **Adhika Sthaulya**: (B.M.I. > 40 kg./m\(^2\) – Very Obese) - Excessive degree, with complication and secondary disease with all 8 undesirable symptoms and duration of more than 5 years can be considered as Adhika Sthaulya.\cite{3}

**Nidana (Etiological factors)**

All the etiological factors can be classified into four groups:

- **Atisampuranat**: Excessive and uncontrolled diet habits.
- **Avyayamat**: Less physical activities.
- **Manasaja**: Psychological factors.
- **Beejadoshaja**: Genetic / Hereditary defect.

**Role of Aharatmaka Nidana**

Ahararasa plays an important role in increasing Medadhatus in Sthaulya. Acharya Sushruta has mentioned that Sthaulya and Karshya depends upon the quality and quantity of Ahararasa.\cite{2} All the Aharatmaka Nidana ultimately decreases physical activity, which increases Kapha and leads to Meda deposition.

**Role of Viharatmaka Nidana**

Viharatmaka Nidana like Divaswapna having Abhishyandi property leads to blockage of the micro channels of the body, specifically in Medovahasrotas. During sleep, metabolic rate is reduced.

**Role of Manas Vyapara**

Sthaulya is also considered under the group of psychosomatic diseases Acharya Charaka, mentioned two psychological factors: Harshantya (Excessive pleasure) and Achintana (Jolliness).\cite{1} With this type of psychological well being and jolliness that person indulges more in worldly pleasure and leads to the accumulation of excess fat.

**Role of Beejadosha**

Acharya Charaka has described that Beejadosha plays a major role in Medovridhi. Defect of Beejabhagavayava i.e. part of Beeja, which resembles with Genes, may lead to defective development of that organ.\cite{1} Bhavamishra also mentioned that increased proportionate of Meda and decreased proportion of Shukra in Beeja at the time of conception predisposes towards development of fleshy but weak body. This indicates role of hereditary factor in genesis of Sthaulya.

**Samprapti (Pathogenesis)**

Few components of body is required for manifestation of any diseases are as follows,

1. **Dosha**
2. **Dushya**
3. **Srotas**
4. **Agni**
5. **Ama**

**1. Dosha**

In pathogenesis of Sthaulya, all three Doshas are vitiated.
a) **Vata:** In this disease, Vata has been mentioned in the state of Avrita in Kostha, which makes the Agniivaishamya, ultimately increases the demand of food. The involvement of Samana Vayu\(^1\) can be clearly postulated with the evidence of Agni Ssandhukshana and improper distribution of fat in the body proves the involvement of Vyana Vayu.

b) **Pitta:** In Pitta Vridhdi as well as in Sthaulya, the symptoms like Atikshudha, Atipipasa, Swedadhikya, Daurgandhya\(^2\) have also been mentioned. Pachaka Pitta is mainly involved in the aetiopathogenesis of the disease.

c) **Kapha:** In the pathogenesis of Kaphadosha, excessive consumption of Ahara like Guru, Snigdha, Madhura, Sheeta, Picchila; Vihara like Avyayama, Divaswapna etc. Most of symptoms of Sthaulya come under the category of Kapha Vridhhi (Prakopa),\(^3\) i.e. Alasya, Gatrasadana, Angagaurava, Nidradhikya etc. The Sthaulya Rogi usually belongs to Kapha Prakriti so they may have slow and lethargic physical activity with Sthula Anga by nature and also they have more pleasure and less tension - anxiety, so Kapha Prakriti persons are more prone to become obese (Sthula).

2. **Dushya**

Acharya Sushruta\(^2\) has mentioned Sthaulya as a Dusya dominant disease and in this disease the excessive production of abnormal Meda Dhatu is clearly visualized. Kapha is seated in Meda along with other Dhatus. In Sthaulya excessive intake of Guru Snigdha, Madhuradi Guna dominant diet, increase accumulation of Medodhatu.\(^2\)

3. **Srotas**

In the Sthaulya, involvement of Medovaha Srotasa is the main factor along with the involvement of other Srotas. According to Acharya Charaka,\(^1\) Avyayama, Divaswapna excessive intake of Madhura Dravyas and Varuni, are the Nidana of Medovahastrotodushti.\(^1\) It indicates clear involvement of Medovahasrotas along with Rasavahasrotas. Atisweda and Daurgandhya indicate the involvement of Swedavahasrotas. Presence of Atipipasa indicates the involvement of Udakahasrotas. In the pathogenesis of Sthaulya, increase fat deposition inside the muscle (Vasulya), increase fat deposition in the body proves the involvement of Vyana Vayu.

4. **Agni and Ama:**

According to Vagbhata,\(^3\) Mandagni is considered as root cause of all disease. Due to Mandagni, formation of Ama occurs. Sthaulya results from derangement of Dhatvagni. In Sthaulya, due to vitiation of Vata by obstruction of Meda, Tikshnagni is a prominent feature. Chakrapani and Dalhana gives explanation, that in the stage of Tikshnagni, person go for Adhyashana, Kalavyatitaaharasevana again and again, which leads to disturbance in Agni and subsequently formation of Ama may take place. It has been further explained by Dalhana that in the Sthaulya, formation of Ama is more due to decrease of Medodhatvagni than Jatharagni.

According to ‘Dhatu Parinama concept’, (at Dhatvagni level) Vridhdi of previous Dhatu and Kshaya of further Dhatu take place. In cases of Sthaulya, excessive consumption of Guru, Madhura, Snigdhaguna dominant diet produces excessive and inferiority Medodhatu Poshaka Annarasa, this makes Medodhatvagnimandya. So as per above concept in the state of Medodhatvagnimandya, previous i.e. Medodhatu increase and further/Uttaradhatu i.e. Asthi, Majja, Shukra are decreased.

According to Ayurveda: There are 7 basic tissue elements in the human body known as Dhatus. These are present in every human body in a particular proportion and any change in the equilibrium leads to diseases. Fat or the Meda is one of the Dhatus.

According to modern: Obesity can be assessed by following tools:

- Body Mass Index
- Waist circumference
- Waist / Hip ratio
- Relative Weight (Rw)
- Skin fold thickness

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Body Mass Index

The B.M.I. is the actual body weight divided by the height squared (kg/m²). This index provides a satisfactory measure of obesity in people who are not hypertrophied athletes.

The classification of obesity is:[5]

- Under weight - <18.5 kg/m²
- Normal weight - 18.5 - 24.9 kg/m²
- Over weight - 25 - 29.9 kg/m²
- Obesity (Class-I) - 30 - 34.9 kg/m²
- Obesity (Class-II) - 35 - 39.9 kg/m²
- Morbid Obesity - > 40 kg/m²

Signs and Symptoms

- Reduction of longevity
- Unpleasant of body odour
- Excessive sweating
- Breathlessness on exertion
- Difficulty in walking
- Tiredness
- General deability
- Loss of vitality
- Excessive hunger

Chikitsa of Sthaulya

Depending on the body type, the chikitsa varies.[3] If the person is diagnosed as Vaata type, then purification procedures for Vaata like cleansing enemas. After that mild oil application and fomentation is used. Only minimum oil application is used for treating obesity.

External oil application is carried out with oil containing hot herbs like calamus, ginger and mustard. External fomentation can be done by various methods like whole body fomentation via. steam box.

After fomentation oil enemas will be given. Later, usually contains a decoction of Dashmoola, Honey, Salt, some specific herbs and water.[3]

If the person is diagnosed as Kapha type, then external message with powders of agaru, calamus, ginger or mustard will be done.[8] These substances help to remove excess fat deposited under the skin.

In obese persons, the digestive fire may be optimum. To improve its power herbs like Trikatu, Shilajit, Katuki, Barberry, Calamus, Chitraka, Karanja, Haridra, Guggulu, Arjuna, Neem, Apaamarga, Brahmi, Bilwa are used.

In Ayurvedic texts different Shodhna procedure i.e. Vamana, Virechana, Lekhana Basti, Raktamoksha are mentioned for the treatment of Sthaulya. Lekhana Vasti with Varaadikkwath produced statistically significant improvement in obesity. Lekhana Vasti with Varaadi Kwatha’ by virtue of its ingredients Katu, Tikta, Kashaya rasa, Laghu, Ruksha, Tikshna Guna, Ushna virya, Katuvipaka, Lekhana, Kapha-vatahara, Deepana-pachana and Sroto-shodhaka properties.

Shamana Chikitsa can be implemented through seven different ways. Deepana, Marutsevana, Kshudha Nigraha, Pachana, Atapasevana, Trusha Nigraha, Vyayama. Langhana is advisable in Samtarpanajanya Vyadhi, in Amashyotha Vikara, in Shleshmika Vikara, in Rasaja Vikara. So, all seven types of Langhana can be applied for the patients of Sthaulya according to Rogi Roga Bala.

Nidana Parivarjana is also important measure for Sthaulya.

Ayurveda is an alternative natural herbal treatment to cure overweight condition by balancing the body. The medicine for weight reduction is;

- Guduchi helps in the proper canalization of fats in the body thus used as effective ayurvedic treatment for fat reduction.
- Guggulu reduces fat accumulation in the body and gives a leaner physique.
- Indian Gooseberry contains vitamin C that disintegrates fatty buildup in the body.
Use of *Devadaru, Musta, Triphala, Takrarishta* and honey is recommended as a natural herb cure for overweight.

Powder of *Yava* and *Amalaki* is an excellent formulation for reducing fat in the body.

### Table 1: Diet Chart

<table>
<thead>
<tr>
<th>Time</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>At 10 AM</td>
<td>Salad vegetable/ Fruit / Puffed Rice</td>
</tr>
<tr>
<td>At 11 AM</td>
<td>Soup/ Yush/ Saktu</td>
</tr>
<tr>
<td>At 12:30 PM</td>
<td><strong>Lunch</strong>&lt;br&gt;Roti- barley(yava)/ Bajra/ Jwari/ Ragi&lt;br&gt;Vegetable&lt;br&gt;Chutney&lt;br&gt;Butter Milk&lt;br&gt;Pickle, Amla/kumara (Aloevera)/ Bittergourd(Karvelak)</td>
</tr>
<tr>
<td>At 4 PM</td>
<td><strong>Snacks</strong>&lt;br&gt;Puffed rice, murmura, puffed rajgira, puffed jowar</td>
</tr>
<tr>
<td>At 7 PM</td>
<td><strong>Dinner</strong>&lt;br&gt;Krushara, dallya</td>
</tr>
</tbody>
</table>

### Table 2: Vegetables

<table>
<thead>
<tr>
<th>Name</th>
<th>Rasa</th>
<th>Veerya</th>
<th>Vipaka</th>
<th>Gunna</th>
<th>Doshaghta</th>
<th>Rogaghtna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottol Gaurd</td>
<td>Katu</td>
<td>Ushna</td>
<td>Madur</td>
<td>Laghu</td>
<td>Snigdha</td>
<td>Tridoshghan, Pachan, Ruchiya.</td>
</tr>
<tr>
<td>Ridg Gaurd</td>
<td>Tikta</td>
<td>Ushna</td>
<td>Katu</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Kapha-Pittahara, Deepna, Vamaka</td>
</tr>
<tr>
<td>Gre</td>
<td>Madh</td>
<td>-</td>
<td>-</td>
<td>Laghu</td>
<td>Medog</td>
<td>Kapha-Medog</td>
</tr>
</tbody>
</table>

### Table 3: Sthoulyahara Capsules and Medicated Water

<table>
<thead>
<tr>
<th>Dravya</th>
<th>Rasa</th>
<th>Veerya</th>
<th>Vipaka</th>
<th>Gunna</th>
<th>Doshghta</th>
<th>Rogaghtna</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amalaki</td>
<td>Panc</td>
<td>Sheen</td>
<td>Madur</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Tridosaghna, Rasayana, Jwaraghna, Pramehaguna</td>
</tr>
<tr>
<td>Haritaki</td>
<td>Panc</td>
<td>Ushna</td>
<td>Madur</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Tidosaghna, Rasayana, Jwaraghna, Kurthaghana</td>
</tr>
<tr>
<td>Bibhita</td>
<td>Kash</td>
<td>Ushna</td>
<td>Madur</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Jwaraghna, Kantastambhaka</td>
</tr>
<tr>
<td>Chitra</td>
<td>Katu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Kapha-Vata Shamaka, Jwaraghna, Shothahara, Kantha</td>
</tr>
<tr>
<td>Haridra</td>
<td>Tikta</td>
<td>Katu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Laghu</td>
<td>Kapha – Vata Shamaka, Pittavardhaka, Kushtthagha, Vishagha</td>
</tr>
<tr>
<td>Katu Jeeraka</td>
<td>Katu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Laghu</td>
<td>Ruksha</td>
<td>Kapha-Pittarsh aka, Kushtthagha, Vishagha</td>
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**CONCLUSION**

As various methods are described above, therefore these methods are very helpful to reduce fats and to overcome the problem of obesity. Although the body nature of everyone is different from each other so the effects of the treatment may vary from individual to individual. The 

<table>
<thead>
<tr>
<th>Muthika</th>
<th>Katu</th>
<th>Ushna</th>
<th>Katu Laghu, Snigdha</th>
<th>Vatashamaka</th>
<th>Deepana, Pachana, Anuloman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usheera</td>
<td>Madhur, Tikta</td>
<td>Sheeta</td>
<td>Katu Ruksha, Laghu</td>
<td>Pittashamaka</td>
<td>Trishna Nigrahana, Stambhana</td>
</tr>
</tbody>
</table>

So the person have to adopt above method strictly to get better results.

**REFERENCES**


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