

## ROLE OF GAUMUTRA IN THE MANAGEMENT OF OBESITY W.S.R TO STHAULYA: A REVIEW STUDY

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### Abstract

Obesity is a common and preventable disease of clinical and public health importance. It is often a major risk factor for the development of several non-communicable diseases, significant disability and premature death. In *Ayurveda*, Sthaulya is described in all the literatures. *Acharya Charaka* has described *Sthaulya Purusha* among one of the *Ashta Nindita Purusha*. *Sthaulya* is caused due to *Medovridhi* which includes abnormal and excessive accumulation of medadhatu in the body. This is caused by frequent and excessive intake of *madhur* and *snigdhaaahar*, lack of physical and mental exercises. These all results into the increase in *kaphadosha* and *medodhatu* results in the *sthaulya*. In modern science, *Sthaulya* can be compared to the obesity. Obesity is one of the metabolic disorders. 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. 1) Dietetic, 2) Genetic, 3) 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, KledakaKapha, Samana&Vyana Vayu, Meda (fat /lipid) and Medodhatvagni Mandyata are main responsible factors*

**Keywords:** *Medodhatu, Obesity, Sthaulyata, Gaumutra.*

### Introduction:

In modern era every person is very busy in his daily routine. No body has 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 distribution of *Meda* with reduced enthusiasm towards life is called

*Atisthula*. [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. *HinaSthaulya*: (B.M.I. 25-30 kg/m<sup>2</sup> – 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. *MadhyamSthaulya*: (B.M.I. 30-40 kg./m<sup>2</sup> - 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 *MadhyamSthaulya*.

3. *AdhikaSthaulya*: (B.M.I. > 40 kg./m<sup>2</sup> – 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 *AdhikaSthaulya*. [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 *Medadhatu* in *Sthaulya*. *Acharya Sushruta* has mentioned that *Sthaulya* and *Karshya* depends upon the quality and quantity of *Ahararasa*. [2] All the *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 Charaka* [1] listed eight defects underlying *SthaulyaPurusha* - *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.

**Role of Viharatma ka Nidana:** *ViharatmakaNindana* 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). [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 Beejadoshaja:** *Acharya Charaka* has described that *Beejadoshaja* plays a major role in *Medovridhhi*. Defect of *Beejabhagavayava* i.e. part of *Beeja*, which resembles with Genes, may lead to defective development of that organ. [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 are required for manifestation of any diseases is as follows: 1. Dosh 2. Dushya 3. Srotas 4. Agni 5. Ama

**1. Dosh:** 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 *Agnivaishamy*, ultimately increases the demand of food. The involvement of *SamanaVayu* [1] can be clearly postulated with the evidence of *Agni Sandhukshana* and improper distribution of fat in the body proves the involvement of *Vyana Vayu*.

**b) Pitta:** In *Pitta Vriddhi* 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 *KaphaVriddhi (Prakopa)*. [1] i.e. *Alasya*, *Gatrasadana*, *Angagaurava*, *Nidradhikya* etc. The *SthaulyaRogi* usually belongs to *KaphaPrakriti* so they may have slow and lethargic physical activity with *SthulaAnga* by nature and also they have more pleasure and less tension - anxiety, so *KaphaPrakriti* persons are more prone to become obese (*Sthula*).

**2. Dusya:** *Acharya Sushruta*[2] has mentioned *Sthaulya* as a *Dusya* dominant disease and in this disease the excessive production of abnormal *MedaDhatu* is clearly visualized. *Kapha* is seated in *Meda* along with other *Dhatu*s. In *Sthaulya* excessive intake of *Guru Snigdha*, *MadhuradiGuna* dominant diet, increase accumulation of *Medodhatu*. [2]

**3. Srotasa:** In the *Sthoulya*, involvement of *MedovahaSrotasa* is the main factor along with the involvement of other *Srotasa*. According to *Acharya Charaka*, [1] *Avyayama*, *Divaswapa* excessive intake of *MadhuraDravyas* and *Varuni*, are the *Nidana* of *Medovahasrotodushiti*. [1] It indicates clear involvement of *Medovahasrotasa* along with *Rasavahasrotasa*. *Atisweda* and *Daurgandhya* indicate the involvement of *Swedavahasrotasa*.

**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.

According to 'DhatuParinama concept', (at *Dhatvagni* level) *Vriddhi* of previous *Dhatu* and

*Kshaya* of further *Dhatu* take place. In cases of *Sthaulya*, excessive consumption of *Guru*, *Madhura*, *Snigdha* dominant diet produces excessive and inferiority *Medodhatu Poshaka Annarasa*, this makes *Medodhatvagni-mandya*. So as per above concept in the state of *Medodhatvagnimandyata*, 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 *Dhatu*s. 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 *Dhatu*s.

**According to modern:** Obesity can be assessed by following tools: 1. Body Mass Index 2. Waist circumference 3. Waist / Hip ratio 4. Relative Weight (Rw) 5. Skin fold thickness .

#### Signs and Symptoms:

1. Reduction of longevity
2. Unpleasant of body odour
3. Excessive sweating
4. Breathlessness on exertion
5. Difficulty in walking
6. Tiredness
7. General deability
8. Loss of vitality
9. Excessive hunger

#### MEDICATION:

In *Ayurveda*, there are many medicines made from cow urine, milk, dung, ghee, curds. This purifies, and clears all blocks in bodily channels (*Shroto- shodhaka*). It enhances the therapeutic actions of medicines taken along with it. It has been found to be very effective in worm infestations, skin diseases, urticaria and allergic rashes, pain abdomen due to indigestion, constipation, and ascitis etc. Cow's urine is widely used in the *Ayurvedic pharmaceuticals* for enhancing the properties of many drugs, by

giving *Bhavana* (repeated trituration). In *Shodhana* (purification) of metals, cow urine was extensively used. *Charaka*, *Sushruta* and all other ancient physicians have given prime importance to cow's urine. Milk or urine of cow of particular has been mentioned for a specific therapeutic use. Even though urine of many animals is used in preparing medicines, cow's urine has been

found to be the best among all. *Gomutra Rasa: Katu, Tikta, Kashaya, Lavana (Anurasa) Guna: Tikshna, Ushna, LaghuVirya: UshnaVipaka: KatuDoshghanta: KaphavataShamaka* Action and Uses: *Deepana, Lekhana, Pachana, Anulomana, MalshodhakAmapachana*, it is also used in *Virechana* and *Basti*.

**Table 1: Chemical Composition of Cows Urine:**

Water - 95%	Salts - 2.5%
Urea - 2.5%	Hormones, Minerals, Enzymes -0%

**Table 2: Chemical Constituents of healthy cow urine:**

Urine volume 17- 45ml/kg/day	Creatinine 15- 20mg/kg/day
Specific gravity 1.025- 1.045	Magnesium 3.7mg/kg/day
pH 7.4-8.4	Potassium 0.08-0.15 mmol/kg/day
Urea nitrogen 23- 28ml/kg/day	Sodium 0.2-1.1 mol/kg/day
Ammonia nitrogen 1- 1.7ml/kg/day	Sulphate 3-5mg/kg/day
Total nitrogen 40.45ml/kg/day	Uric acid 1-4mg/kg/day
Allantoin 20-60ml/kg/day	Uroporphyrin 1.5-7.0mg/dl
Calcium 0.1-1.4ml/kg/day	Leucocyte, < 15 micro It
Chloride 0.1- 1.1mmol/kg/day	Glucose & Protein Nil
Coproporphyrin 5- 14micogram/d	Hemoglobin Nil

1. Urea - Product of Protein metabolism. Strong antimicrobial Agent.
2. Uric acid - Antimicrobial Activity helps to control infections.
3. Nitrogen - Diuretic, Stimulates Kidney
4. Sulphur - Purifies blood, increases intestinal peristalsis
5. Copper - Controls fat deposition
6. Iron - Production of RBC in blood.
7. Sodium - Purifies blood, checks hyperacidity.
8. Potassium - Appetizer, eliminates muscles Fatigue
9. Other Salts – Antibacterial
10. Carbolic Acid - Antibacterial, prevents Gas Gangrenes
11. Ammonia - Helps to maintain Integrity of body tissue & blood.
12. Sugar-Lactose - Prevents thirst & Giddiness
13. Vitamin A,B,C,D,E - Prevent excessive thirst, infuse vigour and vitality
14. Creatinine – Antibacterial
15. Aurum hydroxide- Antibacterial improves immunity, acts as antidote.

Thus the biochemical analysis of cow's urine also indicates that by virtue of nitrogen and copper it helps to excreted out fat in the form of *Kleda* through urine by increasing kidney functions and diuretic action. Copper don't allow the fat to deposit in the body and organs.

**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 *Ahara* and *Vihara* also have direct effect on the treatment. Therefore, the result also varies on account of *Ahara* and *Vihara* of the person. So the person has to adopt above method strictly to get better results.

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