

A LITERARY STUDY OF *STHAULYA* IN MODERN ERA- A BRIEF REVIEW STUDY

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Abstract: One of the dietary lifestyle diseases that impact both developed and developing nations is obesity. Obesity is a disease characterized by elevated body weight and the accumulation of extra fat. Obesity is the underlying cause of calorie overconsumption and decreased physical activity, resulting in significant health problems. Multifactorial in nature, in which etiology plays an equally significant role in environmental, lifestyle and genetic influences. *Ayurveda* is one of the world's most ancient scientists, explaining the fundamental and applied concepts of wellbeing, illness and management. The word *Medasvi* is indicative of the individual's nutritional state, suggesting a well-nourished condition rather than sickness. The *Medovridhi* includes *Sthaulya*, which deals with the study of traditional obesity that represents endocrine imbalance, not rational adiposity. The most prominent dietary condition in affluent cultures is obesity. For social as well as medical purposes, *Sthaulya* is discouraged by society. Obesity is typically attributed to unhealthy food and a lack of regular exercise

Keyword: *Sthaulya*, *Medodhatu*, *Obesity*.

Introduction

A healthy state of our body's *Dosha and Dhatu*, *Agni*, *Mala Kriya*, happy and balanced condition of *Atma* and *Indriya*, this plays an important role in our body if they are in equilibrium condition, there is no illness, if they are in vitiation condition, they trigger several diseases.

Sthaulya

Sthaulya is induced by *Nidana Sevan* such as over satiation, high sweet, cold, fatty food intake, lack of physical activity, day sleeping, enjoyment etc. contributes to *Medodhatu* vitiation, which is expressed by abdominal & flank region enlargement and also responsible for condition such as *Swasa*, *Kasa* etc. *Anutsaha*, *Swedaadhikyata*, *Ayasenswasa*, *Nidradhikya*, *Adhika Kshudha*, *Atipipasa*, *Alpa Vyayama*, *Angagourava*, *Angasithilata*, *Gatrasada*, and *Dourgandhya* are *Sthaulya Lakshanas* that are seen because of vitiated *Medo Dhatu* and if it is not regulated, it leads further to a diseased state. Therefore, with *Ahar and Vihar*, their management is very important. *Ushnodaka* is one of the Special *Dravadravya* clarified by *Yogratnakara* under *Jala Prakrana*, which plays a beneficial function with *Lekhana*, *Deepan*, *Medoghna*, property in the management of *Sthaulya Ushnodakpana*, eliminates the excess of *Meda* through the excretory method and also recommended to have to be regular. *Vyayama* practice brings lightness, ability to work, stability, resistance to pain and *Doshas* (particularly *Kapha*) relief under *Vihara* in *Charaka Samhita*.¹with *Aptarpan Karma*, *Laghu Karma*, *Deepan Karma*, *Medoghna Karma*, *Vyayama* eliminates the extra *Meda* through the excretory mechanism from the body and improves compactness.

Aim and Objective

To evaluate the Study of *Sthaulya* According to *Ayurvedic Classics*.

Methodology

Different newspapers, ayurvedic and modern text books, authoritative pages, reputed journals, literature, manuscripts, *Sanskrit Shabdakosha*, etc. were supplied with materials pertaining to *Sthaulya*

Historical retrospection of *Sthaulya*

Vedas is believed to be the world's oldest and first literature available. Four of the *Vedas* are there, i.e. *Samaveda*, *Yajurveda*, *Rigveda* and *Atharvaveda*. It is considered that *Ayurveda* is *Atharvaveda's Upaveda*. The history of Indian medicine begins with *Veda*, so it is from *Veda* that the history of *Sthaulya* can be traced. Since *Sthaulya* was not a common term until the time of *Samhita* and *Sthaulya's* disease is closer to its pathogenesis, the historical aspects of *Sthaulya* and *Sthaulya* have been traced from the *Vedas* era until now. The specifics of the literature available suggest that the first text to use the word *Medo Roga*, which was later used by *Sharangadhara Samhita* and *Yogaratnakara*, was *Madhava Nidana*. The word *Sthaulya* along with symptoms, however, was used exclusively in *Sharangadhara's Deepika* commentary and was later defined by *Bhavaprakasha Samhita*.

Sthaulya

Etymology:

The term *Meda* comes from the "*Jhimida Snehana*" root, which stands for *Sneha*, fat, oil, etc². This suggests that the compound that has *Snigdhatu* property is called *Meda*. But there are so many compounds in the body that are property of *Snigdhatu*, e.g. *Vasa*, *Majja*, *Vapa* and so forth.

Composition of Meda in Ayurveda:

There are several tissues in the body that are abundant in Sneha, such as *Meda*, *Vasa* and *Majja*. While *Snehatwa* is a shared feature of all three, they vary in composition and function³. *Sneha* inside *Anu Asthi* is called *Sarakta Medas*, and the same is called *Majja* when it is present *Sthula Asthi*. *Vasa*⁴ is considered the pure form of *Sneha* present in *Mamsa (Peshi)*. *Medo Dhatu* is notable among these, as it plays an important role in the development of many metabolic diseases such as *Medoroga*, *Prameha*, etc. *Medhodhatwagnimandhya* pathology refers to the circulation of excess homologues *Poshaka Medo Dhatu* that can be attributed to disorders such as overweight.

Types of Meda Dhatu:

Two types of *Meda* are described in *Ayurveda*⁵:-

Baddha Meda

Fat that is not in circulation and is contained in different locations (fat depots/muscles in the body) in the shape of fat.

The other type is Abaddha Meda

In lipid type, the fat that circulates in the body along with blood (Cholesterol, Triglycerides, LDL, HDL & VLDL etc.). These are also known as, respectively, *Poshya* and *Poshaka Medo Dhatu*. In order to give *Poshya Medo Dhatu* nutrients, *Poshaka Medo Dhatu* circulates in the whole body along with the *Rasa Rakta Dhatu*, via multiple visualization methods, it can be visualized that the blood circulates lipids along with cholesterol⁶. Second, *Poshya Medo Dhatu*, which is contained in *Medodharakala*, is localized. *Udara* (abdomen) and *Anuasthi* are the sites of *Medodhara kala* (bones). The depots of *Poshya Meda* are also *Udara*, *Sphika* (busts), *Stana* (breast tissue).⁷

Formation of Medo Dhatu:

With suitable materials derived from *Poshak Dravya* from the time of creation to that of death, *Dhatu* is constantly being created, demolished and reformed. The seven forms of *Dhatwagnis* are responsible for the conversion into the corresponding *Poshaka or Asthaya Dhatu* (precursor Dhatu) of suitable nutrient substances present in a possible shape in the *Ahara Rasa*, so to speak, until the same is constructed as part of the *Poshyas or Sthayi Dhatu* concerned. The *Sthayi Ahara Rasa* circulates through the *Medo Dhatu* in this way and supplies this *Dhatu* with the nutrient, *Ahara Rasa*, particularly with the profuse amount of *Sneha*. That is rightly said in his '*Madhukosha*' commentary by *Acharya Kanthadatta-Snehat medo janayati*⁸. Subsequent improvements take place in *Sneha* by *Jatharagni Paka* and are addressed as—

1. Step: *Guru* into *Laghu* and *Sthula* into *Sukshama*, i.e. triglyceride with long chain into triglyceride with short chain.
2. Step: *Sara Bhaga*, created by *Jatharagni* at the end of digestion, undergoes *Bhutagni Paka*, where *Laghu Guna* is transformed into a *guru* again, i.e. Triglyceride re-esterification happens in the mucosa of the small intestine.
3. Step: *Dhatvagni Paka* is the topic of *Sneha*. According to *Nyaya Kedarikulya*,
4. *Sneha* goes to all the *Dhatu* and undergoes transformation according to the need, uptake and consumption by their respective *Dhatuagnis*. For example, the digestion of *Madhura Rasayukta Sneha* is carried out by *Medo-Dhatvagni*, going via *Rasadi Agni's* digestion.

Moola of Medovaha Srotasa:

In *Ayurveda*, the *Medodhatu* is transported on macro and micro channels in *Medovaha srotas*⁸. According to *Charaka*, as per *Sushruta*, *Vrikka & Kati* and as per *Vagbhatta Vrikka & Mamsa*, the source of the *Medovaha srotus* is *Vrikka & Vapavahana*. This difference is due to their distinct perceptions. The term *Moola* means root, it can be genesis root, manifestation root and diet root, etc. The adipose tissue is deposited into theca abdomen specifically omentum & subcutaneous area in the case of *Medoroga*, particularly central obesity, which is clearly stated by the adipose tissue.

Function of Medo Dhatu:

According to *Sushruta*, *Sneha*, *Sweda*, *Asthi Pusti* are the functions of *Meda Dhatu*⁹. *Snehana* is the primary feature of *Meda Dhatu* and *Snigdha Gatrata* is due to the over-functioning of *Meda Dhatu*, which is one of the signs of *Sthaulya*. *Netra and Gatra Snigdhatata* have been stated by *Asthanga Samgraha* as the additional functions of *Meda*¹⁰. Because of this *Sneha* property, it helps to maintain skin, hair, eye lustre, etc.

Derangement of Metabolism (Parinama) of Medas:

For all physiological processes in the body, *Agni* is accountable. Any rise or decrease in *Dosha*, *Dhatu* or *Mala* is solely responsible for it. Depending on the form of *Agni* involved, the vitiation of *Agni* has significant health implications at different stages. As *Agni* is reduced, it contributes at different levels to different metabolic diseases and releases "*Ama*" (undigested/partially digested molecules), i.e. *Agni* fails to transform the *Vijatiya* (non-assimilable) *Dravyas* into *Sajatiya* (assimilable) ones, and the *Dhatu* cannot assimilate the end products. These materials are toxic to the body and, based on their presence, can induce signs and symptoms at different physiological stages. If *Agnimandya* is present at the stage of *Dhatwagni*, then nutrients present in circulating *Ahara Rasa* or circulating *Poshaka Dhatu* cannot be assimilated by the individual *Dhatu*s. Thus, in *Ahara Rasa*, certain *Poshaka Dhatu*s will accumulate in irregular amounts and they may accumulate more at abnormal locations. *Leenatwa* (deep seated) of *Ama* in *Dhatu*s can be called this kind of method. A variety of disorders may cause *Leenatwa* of this type. There is no clear connection in *Ayurveda* to a particular disease agent that can be specifically associated with excess weight, obesity and hypertriglyceridemia. In addition, multiple researchers have varying views on the closest potential overweight condition that can also be considered for hypertriglyceridemia, such as

1. *Rasagata Sneha Vriddhi*,
2. *Raktagata Sneha Vriddhi*,
3. *Medoroga or Medodosha*,
4. *Ama Medodhatu and its advanced stage can be*
5. *Shonita Abhishyanda*,
6. *Kapha Medo Margavarana*,
7. *Kaphaja Hridroga*.

Nidana

The causative factors that result in the manifestation of the disease can be described as *Nidana*. As the first line of therapy of any illness is *Nidana Parivarjana* or discontinuation of the etiological causes, eliciting cause is an important part of diagnosis and treatment. There is an empirical definition of *Nidana* of *Sthaulya* (*Medoroga*) in *Charaka Samhita*. Much of them are exogenous factors (*Meda* increasing diet), resulting in the endogenous participation of variables such as *Dosha*, *Dhatu*, *Mala* and *Srotas*, etc.¹¹

Vishista Ahar Avastha:

It requires the use of specific nutritional, lifestyle and psychological variables that contribute to *Medo Roga*. These variables result in a direct increase of the *Medo Dhatu* by following *Samanya Siddhanta*, either because of a similarity in the attributes or similarity in the behaviour. The causative factors suggested by *Acharya Charaka* that contribute to over-nutritional disorders (*Santarpana janya vyadhi*) may also be regarded as overweight etiological factors.¹² Factors such as excessive intake of *Medya Ahara* and *Varuni* result in the *Meda Dhatu* condition of *Khavaigunya* being induced by *Medovaha Sroto dushti*.

2. Aharaja Nidana:

A). Gunataha: *Guru, Madhura, Sheeta, Snigdha, Shleshmala, Atipicchila, Abhishyandi* properties in *Ahara* that dominate *Prithvi* and *Apa Mahabhuta* can cause a direct increase in the *Kapha Dosha, Medo Dhatu* and *Pitta Dosha* due to the related *Bhautika* composition.

B). Dravyataha : Examples of those things that may boost *Meda Dhatu* are *Navanna, Navamadya, Gramya Rasa, Audaka Rasa, Mamsa Sevana, Paya Vikara, Dadhi, Sarpi, Ikshu Vikara, Guda Vikara, Shali, Godhuma, Masha, Varuni Madya*.

Bhojana Vidhana:

1. Aharaj Nidana:

Atisampurana, Adhyashana, Vishamashana, Samashana, Viruddhashana, Atyambupana, Jalapana Bhojanottara, etc. *Atisampurana* (overeating) results in excess energy storage which exceeds its consumption. As seen above, extra carbohydrates are processed in the form of butter, proteins or fats. Excessive calorie intake of any food source with a related weight gain can also contribute to a rise in VLDL overweight. Factors such as *Adhyashana, Vishamashana, Viruddhashana, and Samashana* result in the creation of *Ama*. *Ama* results in more aggravation of the disease caused by *Srotorodha*.

2. Viharaja Nidana:

Avyayama, Avyavaya, Divaswapa, Asyasukha, Swapnasukha, Bhojanottara Snana, Nidra Bhojanottara, etc. Both these factors contribute to lower energy expenditure than input, contributing to corpulence.

3. Manasa Nidana:

Achinatanat, Harshanityatva, is enumerated as the causative factors that are conducive to *Atisthaulya* by *Acharya Charaka*.

Shatkriya Kala:

It is also a prerogative to accept *Shatkriya kala* for detailed knowledge of the pathogenesis that occurs in every illness. Hence hereafter the details of it are given.

1. Sanchaya:

When the *Doshas* are stagnated in their own natural abodes, it represents the initial stage of the disease¹³ during digestion, the endogenous development of *Kapha* occurs, i.e. the first step of digestion; *Madhuravasthapaka* in *Amashaya*. The prolongation of this process results from unnecessary intake of food products with characteristics such as *Madhura, Guru, Abhishyandi, Sheeta, etc.* that are homologous to *Kapha Dosha*. This results in the quantitative rise of the *Kapha and Pitta* accumulating with the *Kapha and Pitta* in their natural abodes. *Acharya Charaka* has claimed that *Medo Dhatu* exists at the site of *Medo Dhatu* as one of the sites of *Kapha Dosha* and therefore a *Vriddhi of Kapha. Dravyatah Vriddhi*, or quantitative increase, is seen at this point.

2. Prakopa:

Dalhana has claimed that an increase in *Doshas* is known as *Prakopa* in the form of liquefaction¹⁴. There is increased vitiation of *Kapha Dosha* at this point, contributing to its morbidity at the *Medodhatu* site. Since the relationship between *Kapha* and *Medodhatu* is *Ashrayashrayee*, deficiency in the *Kapha Dosha* results in *Medodhatu's* impairment. *Doshas*, previously increased in this level,

become morbid in their attributes. Attributes such as *Snigdha*, *Guru*, etc. are increasingly expressed, which can lead to symptoms such as *Snigdhangata*, *Gaurava*, etc.

3. *Prasara*:

Dosha expands and applies to other parts, organs and systems of the body in *Prasara Avastha*. In this *Avastha*, according to *Sushruta*, the vitiated *Doshas* extend and overflow the boundaries of their respective sites. Here, in the other sites connected to it, the vitiated *Kapha and Pitta Dosha* are able to spread to other sections causing disability.¹⁵

4. *Sthana Samshraya*:

The localization of the vitiated *Dosha*, which marks the beginning of diseases unique to those systems, characterizes this point. In his commentary, *Dalhana* describes this process as the one in which, due to *Srotovagunya* or the pathological intervention of the associated *Srotasa* leading to an association between the *Dosha and the Dushya*, the vitiated *Doshas* have expanded and spread to other sections. This takes place at the stage of *Srotasa* and represents the prodromal phase or the *Purvarupa* phase.¹⁶

5. *Vyakti*:

This stage is the manifestation of all the signs and symptoms of an infection. Here, to understand the ongoing pathology, different symptoms of an illness are visible. Dependent on the localization platform, various manifestations of the disease can be appreciated. Signs such as xanthelasma, xanthomas, corneal arcus and even other systemic symptoms such as breathlessness, paresthesia and overweight fatigue can show circulating lipoproteins. The basic signs and symptoms of *Medo Roga*, *Prameha*, and *Dhamani Pratichaya* are also apparent.¹⁷

6. *Bheda*:

The chronicity of the condition where it becomes sub-acute or incurable is characterized by this stage¹⁸. It applies to the further development of obesity whether the unresolved chronicity ultimately progresses to serious disorders such as atherosclerotic diseases due to conditions such as myocardial infarction, cerebral strokes, etc.

Purva Roopa

Any premonitory signs and symptoms do not precede *Sthaulya*. *Sthaulya's Avyakta Lakshanas* would be considered as its *Purva Roopa*. However, the appearance of moderate *Ama/Sthaulyalike Lakshana* heaviness in the body, exercise dyspnoea, indigestion reported in patients can be called *Sthaulya's Purva Roopa*

Roopa

It is found that there are no complications in most patients with *Sthaulyamay*. It occurs when there is a lipid level elevated in the blood and a rise in B.M.I. However, *Sthaulya's* symptoms can be treated as exhaustion, paraesthesia, confusion and breathlessness.

Samprapti

Samprapti establishes the whole disease mechanism from the onset of the abnormality of *Dosha* to the full progression of the disease to the present state. The event of *Rakta Margavarana* is possible via the variant mode of etiological variables in which *Santarpana Ahara Vihara* plays a key role. In *Raktavahasrotasa*, which results in unnecessary accumulation of irregular *Kaphadosha* and *Medodhatu*. *Raktamarga* is obstructed by its specific characteristics such as *Picchhilatwa*, *Upalepakaratwa*, etc. It also triggers vitiation of *Vatadosha* when the regular motion of *Dhatu* is disrupted since the work of *Chalatwa* is primarily due to *Vata Dosha*. *Sthaulya Samprapti* also leads the same path in which obesity is caused by abnormal accumulation of *Kapha* and *Meda*. Due to constant and unhealthy indulgence in *Sleshma* dominant *Ahara* and even due to bad exercise, morbid *Sleshma* rises, which shapes *Ama*, i.e. *Dhatugata Ama*, when combined with *Apakwa Annarasa*. Thus, the food taken does not turn all tissues correctly and uniformly (*Dhatu*). Although the properties of consumed food and *Medodhatu* are identical, the *Ahara Rasa* is directly transformed to *Medodhatu*, surpassing other *Dhatu*s at the level of *Medodhatu*, contributing to impaired bio-transformation. Because of this, ample nourishment is not obtained by other body tissue. There is rare and extreme accretion of morbid *Medodhatu* in different channels of the body as the path proceeds. The channel blockage causes barriers in the direction of *Vatadosha* (Normal movement of *Vata* is indispensable for preserving homeostasis of body). Both of these inevitably result in a pathological disorder called *Medasavrita Vata* (encapsulation). The morbid *Vata* that gets stuck in the gastrointestinal tract intensifies the *Jatharagni*, allowing all nutritional substances taken to be digested early and quickly; resulting in an overwhelming appetite for food and beverages¹⁹.

Upadrava

If *Sthaulya* is not treated, it contributes to additional illnesses such as *Sthoulya*, *Atisthoulya*, *Prameha*, and is responsible for several complications.²⁰ *Ashta Doshasof Atisthoula Purusha*, which can be regarded as the overweight *Upadrava*, has been stated by *Acharya Charaka*:

Pathya-Apathya:^{21, 22}

Acharya Charaka has established that food products, medications and regimens that do not adversely affect the body and mind are treated as *Pathya* and are regarded as *Apathya* in the same way as those that adversely affect the body. One of the special aspects of *Ayurvedic* science is the tradition of appropriate *Pathya-Apathya* along with disease management.

With respect to *Medoroga's Pathya Ahara*, it should be remembered that whenever *Ahara Kalpa* is to be given, it should be *Kaphahara* and *Medohara*.

Discussion

Life style and behavioural modifications:

The most significant etiology of all diseases caused by *Kapha Medo Marga varana* is, as stated earlier, the difference between energy intake and expenditure. Such improvements in the way of life from which this inequity may be reduced must be adopted by the obese person. Therefore, the most significant part of it is proper bodywork. As per *Ayurveda's* recommendation, certain exercises

that are necessary for his strength and endurance should be chosen. One of the best choices for achieving weight loss is sufficient indulgence in sexual intercourse. The essence and extent of sexual interaction must be dependent on the season and structure of the individual. It's also helpful to do night outs and stop day sleep in this respect. In relation to the operation of the mind, another big aspect is. The person is always made idle by a lazy and gloomy mind. So, by indulging in positive and realistic ideas, overweight individuals and individuals with the history of *Kapha Medo Margavarana* must strive to be mentally active.²³

Sadhyaasadyata:-

As a *Krichhra-Sadhya Vyadhi*, *Medoroga* is identified. *Acharya Charaka* has related to *Medoroga's* weak prognosis as, if an obese person is not adequately treated, due to extreme hunger, thirst and complications, he is vulnerable to death. Also, *Sahaja Medoroga* is recognized as *Asadhya*. As per the *Vagbhata Medogata* disease enumeration, only uncomplicated patients with more *Bala* and less chronicity are curable. So, due to its relapsing and demanding nature, *Vagbhata* has listed *Medoroga as Asadhya Vyadhi*.²⁴

Chikitsa:-

Acharya Vagbhata claimed that *Karshya* is better than *Sthaulya*, since *Sthaulya*²⁵ does not have a perfect remedy. In the *Samprapti* two variables, *Tikshna Jatharagni* and *Medo Dhatvagni mandya* are of primary significance. Irrationality between two stages of *Agni* makes *Krichhra Shadhya* disease, but for this problem, *Panchkarma* therapy may provide a better solution. Different *Shodhna* procedure in *Ayurvedic* texts, i.e. for the care of *Sthaulya*, *Vamana*, *Virechana*, *Lekhana Basti*, *Raktamokshana* are quoted. *Shamana Chikitsa* can be executed in seven different ways.²⁶ In *Samtarpanajanya Vyadhi*, in *Amashyotha Vikara*, in *Shleshmika Vikara*, in *Rasaja Vikara*, and it is the perfect treatment for the disease's *Sama* condition, *Deepana*, *Marut sevana*, *Kshudha Nigraha*, *Pachana*, *Atapa sevana*, *Trusha Nigraha*, *Vyayama*. *Langhana* is suggested. Thus, all seven forms of *Langhana* can, according to *Rogi -Roga Bala*, are added to *Sthaulya* patients.²⁷

Conclusion

Sthaulya is the dominant *Vyadhi* of *Dushya*. Etiological element *Vitiata Vata Kapha-Meda*. This raises the severity of the disease and allows the *Sthaulya Kritch sadhaya* to grow. *Vyana Vayu* could not transport nutrients to other *Dhatu* due to obstruction by *Meda*; thus *Medadhatu* is increased and *Uttar dhatu* increased. *Sthaulya* is the prevalent metabolic condition identified by *Charaka in Ashta nindita Purusha*. Sedentary life, lack of exercise, defective dietary habits, urbanization, psychological causes such as *Harshanitya*, *Manasonivrita* etc. Along with hereditary predisposition, *Sthaulya* etiopathogenesis plays a significant role. *Acharya Charaka* has proven that *Krishata* is stronger than *Sthaulya* because the disease-affected *Sthula purusha* struggles more when compared to *Karshya*. *Kapha Prakriti* are more vulnerable to becoming *Sthula*. Obesity happens more in women than in men and rises after marriage, light work, IUCD use, contraceptive pills, after delivery and in the menopausal era, etc. In the *Samprapti* of *Sthaulya Medo dhatvagni mandya*, *Ama Rasa*, *Kapha-Vata Pradhana Tridosha* play important role. The treatment modality of *Meda*, *Kapha* and *Vata*. *Lekhana Basti* and *Virechana Karma* are among them should be scheduled. *Basti* provided better outcome because it removes *Doshas* from the body and at the same time ingested drugs achieve their action of *Samprapti Vighatana* at cellular level.

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