Sthaulya [Obesity]: A Critical Review

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Abstract:
Obesity is the gift of modern age of machines and materialism. It is physiological, psychological and social disorder, which is most disfavored by modern society for social as well as medical reasons. Acharya Charka has mentioned that a single Hetu (etiological factor) may produce single disease or group of diseases or many factors together produces single disease or group of diseases. Many etiological factors mentioned in the Ayurvedic texts but Diwaswapna is observed commonly in all housewives which cause obesity. Kaphavataj Prakriti H.W. were found more prone to Sthaulya so they should be advised proper diet regimens with exercise and made awareness about proper sleeping habits. Excessive indulgence of non-veg diet, nuclear family type, sedentary type of work, decreased awareness regarding exercise and food, faulty sleeping habits, Harshyanitya plays a major role in etiopathogenesis of Sthaulya.

Key words: Obesity, Diwaswapna, Sthaulya, Kaphavataj Prakriti

Introduction:
Ayurveda, the Indian system of medicine can be aptly defined as the “Science of life”. Today, in spite of development of various techniques in the field of diagnosis and medicine, Ayurveda is in high profile in saving mankind. Now a day, No one have time to think and act for the healthy life and not able to follow the proper Dinacharya, Ritucharya, Dietic Rules and Regulations. Due to the artificial living life-style, Persons have got so many disorders for themselves. Sthaulya (obesity) is one of them. Obesity is the gift of modern age of machines and materialism. It is physiological, psychological and social
disorder, which is most disfavoured by modern society for social as well as medical reasons. The present day society expects peak physical and mental performance from each of its member and obese person is unable to find out him physical and mental fit for it. It occurs as a result of lack of physical activities with increased intake of daily diet results into the clinical entity, which can be called as obesity. Sthaulya is such a disease which provides a platform for so many hazards like hypertension, coronary heart disease, diabetes mellitus, osteoarthritis as well as psychological disorders like stress, anxiety, depression etc. Obesity and Hyperlipidemia being the most common problems in all age group. Acharya Charaka has quoted Sthaulya under the eight varieties of impediments which designated as “Astha-Nindita Purusha“(Cha.su.21). Ati-sthaulya comprises one of them. Acharya Charaka also lists this problem under Samtarpanajanita vyadhi (Ch. Su. 23). According to Ashtanga Hridya (A. HNi.12/1), derangement of Agni or digestive power leads to production of Ama, which disturbs tissue fire of meda dhatu and blocks the proper formation of further dhatu.Hetu/Nidana is one of the most important factor for every disease. In nidansthana 8/24-25, Acharya Charka has mentioned that a single Hetu (etiological factor) may produce single disease or group of diseases or many factors together produces single disease or group of diseases. Many etiological factors mentioned in the Ayurvedic texts but Diwaswapna is observed commonly in all housewives which cause obesity. According to various Acharyas; Diwaswapna (Day time sleeping) is one of the cause of Sthaulya. It Aggravates the Kaphadosha. Kapha and Meda have similar properties. Sthaulya is counted as a disorder of Sleshma Dosha seated in Medodhatu (A.S.Su.19/26). On the basis of “Ashrayashrayeebhava”, vitiation of Kapha leads to vitiation of Medodhatu.

Ethymology (Vyutpatti) of word “STHAULYA” :-
The word “Sthaulya” is derived from Mula Dathu “Sthu” with suffix “ach”respectively which means “Sthaulya”.

According to Amarkosha, it stands for excessive growth of the body.

According to Hemachadra, it indicates the state of over nutrition of the body or dullness of intellect.

Meda Nirukti -

According to Amarkosha :

Meda: Medastu Vapa Vasa (2/6/64 Manushya Varga)
Medaha: Na, Vapa, Vasa (2- Stri), Charvi
|| Trini Sudha Mamsa Snehasya ||
Vapa Vivira Medosoha iti Hemaha 2/303.
HISTORICAL REVIEW SAMHITA KALA (200B.C.- 800A.D.) :
Charak Samhita (200 B.C.) : In Samhita kala, Charak Samhita has described Sthāulya in broad aspect. Charak described 20 type of Kapha Nanatmaja Vikara. He counted „Atisthāulya,„or (Medoroga) is one of them. Again Charak explained Atisthāulya in Sutrasthana, 21st chapter. He classified Sthāulya under “Asthā Nindita Purusha” as eight despicable personalities. The over-obese has 8 defects– shortening of life-span, hampered movement, difficulty in sexual intercourse, debility, foul smell, over-sweating, too much hunger and excessive thirst. Over-obesity is caused by over-saturation, intake of heavy, sweet, cold and fatty diet, indulgence in day-sleeping and exhilaration, lack of mental work and genetic defect. There is excess of fat in him and further only fat is accumulated and not the other Dhatus, thus the life-span is shortened; because of laxity, softness and heaviness of fat there is hampering in movement; due to non-abundance of semen and the passage having been covered with fat, there is difficulty in sexual intercourse due to disequilibrium of Dhatus there is debility; foul smell is due to defect and nature of fat and also sweating, due to association of Medas with Kapha, it”s oozing nature, abundance, heaviness and intolerance to physical exercise there is over-sweating; because of intensified Agni (digestion) and abundance of Vata in the belly there is excessive hunger and thirst (cha.su.21/4).
He also described etiology, pathology, Ashta Dosha of Sthāulya, complication of sthāulya along with its treatment i.e. Swedana Ayogya, Adhika Doshayukta Rogi, Tail Sevana Yoga etc.
Sushruta Samhita (2 A.D.) :
In Sushruta Samhita (Su.Su.15), Sushruta has narrated the etiopathogenesis of Sthāulya Roga on the basis of an endogenous entity being caused due to "Dhatvagni Mandya". Further, the course and complication of the disease with some different line of treatment are discussed at various places in Sushruta Samhita. Sthāulya is considered as the physical condition of the body (Su.35/40), result of vitiated Meda Dosa (Su. 24/13), as symptom of disrupt Medo Vaha Srotas (Sa. 9/12), Rasa Nimitaja disorders (Su. 15/37). A new synonym Jatharya has been used in Chi 12/11 for Sthāulya.
Ashtanga Sangraha (600A.D.) :
In 24th chapter of Sutrasthana, Vriddha Vagbhatt described the different aspects of Sthāulya. He explained that Sthāulya is because of excessive Brihan in 19th chapter of Sutrasthana, which results in Atisthulata.
Ashtang Hridaya (700 A.D.) :
In 14th chapter of Sutrasthan Vaghbatt has explained the Atisthaulya and the treatment of Atibrihana etc.

**Kashyapa Samhita (600 – 700 A.D.) :**
Kashyapa Samhita is more related with “Kaumarbhriitya” and “Prasuti Tantra”. Kashyapa has given some new aspect of “Medasvi Dhatri Chikitsa”. In Dhatri Chikitsa Adhyaya of Chikitsasthana he described Sira Karma (Raktamokshana) as one of the best treatment for Medasvi Dhatri i.e. obese frostier mother.

**Bhel Samhita :**
Bhel is one of the six brilliant disciples of Atreya. In 12th chapter of Sutrasthana he described Sthaulya as a disorder of vitiated meda.

**Madhava Nidana (700 A.D.) :**
He is the first author who elaborates this disease under the separate chapter called “MEDOROGA NIDANAM” in 34th chapter of Uttartantra. Madhava Nidana has described the pathophysiology of this disease on the basis of fat tissue and fat depot site. He has mentioned Hetus, Symptomatology, Causes of Bubhuksha Vridddhi, Asadhya condition in respect of Medovridddhi (Ma.Ni. 34/1-4).

**Sharangadhara Samhita (13th Century) :**
In 7th chapter of Madhyama Khanda Sharangadhara described the treatment of Medoroga. Jatharastha meda(Fat in abdomen and omentum) is nourished by Vrikka was first time observed by him. According to him Sthaulya is narrated as a characteristic of Shleshma prakr

**Vangasena Samhita :**
In 16th chapter of “Medovikar”, Vangasena has explained the treatment of Medoroga. In this chapter he described the Nidana, Lakshana, Samprapti and Chikitsa. Samprapti and Chikitsa are almost same as mentioned in Charak Samhita.

**Chakrapani (11th century) :**
Chakrapani is commentator of Charak Samhita. In 36th chapter, “Sthaulyadnikarah” he described the treatment of Sthaulya. In this chapter he has commented that Apatarpana property helps to reduce Meda and Guru property helps to alleviate Kshudha.

**Dalhana (12. th Century) :**
Dalhana is commentator of Sushrut Samita, he explained the phenomenon of Ama formation in Tikshna- Agni condition. He also gives line of treatment by Chhedaniya as Strotovishodhana and interpreting Virukshana as Medoghna.

**Indu (13th Century) :**
He has given explanation of Saktu, Lohodaka Pulaka etc. words used in the line of treatment of Sthaulya, in his Shashilekha commentary on (AS. Su. 24/20).
Arundatta (13th Century) :
Arundatta is commentator of Ashtang Hridaya and Sangraha. In his Sarvang Sunadari Commentry he has used the word “Sthvima” for Sthaulya and explained it on the basis of etymology.

Hemadri (13th Century) : Hemadri is commentator of Ashtanga Hridaya Samhita. In his Ayurveda Rasayana Commentary he has advised to take Agnimanta as Tarkari, Dantahata as Takra, Madhukajalam as Madhumishritaudaka, Kshara as Yavakshara while describing management of Sthaulya.

Shrikanthadatta and Vijay Rakshita (12th Century) :
According to them in broad aspect, Medodusti word is indicated for Sthaulya and Madhura Annarsa is explained as Madhura Praya Ama Iva Annarasa i.e. Madhura rasa dominant vitiated Annarasa, Shrikanthadatta has indicated Vishamagni in place of Tikshnagni as main pathology in genesis of Sthaulya (Ma.Ni.34/1-9).

Bangasena (12th century), In Medorogadhikara Sodhala (11th century), in 36th Chapter of Gadanigraha and Vrunda (7th century), in 34th Chapter of Siddhyog. They have elaborated the management side of the disease and narrated various remedies for it.

Bhava Prakash (16th Century) :
In 36th Chapter of Madhya Khanda, Bhavamishra has given more emphasis on morbidity, risk factor and behavioral therapy. Furthermore he has explained distressing symptoms like Abdominal Adiposity, Svedabadha and Gatradaurgandhya.

Yoga Ratnakara (17th Century) :
In Uttarardha of Yogaratnakar; Medoroga is explained under separate chapter. He has mentioned Medoroga Nidanam, Chikitsa and Pathyapathy separately (Yo.Ra.Ut/Me/p.N.1-3). He has mentioned Tikta Rasa as Meda Pravardhaka, drink water after meal is also a cause of increasing Sthaulya and so seat after meal is mentioned as predisposing factor for development of Tunda (Abdominal Adiposity).

Bhaishajya Ratnavali :
Bhaishajya Ratnavali is written by Govind Das Sen. In 55th chapter “Sthaulyadhiyarakah” he has described; Sthaulya Chikitsa, Arishta, Pathyapathy etc.(Bh.Ra.55|5/1).

Adhmalla (14th century) and Kashiram (17th Century) :
In Dipika commentary of Sharangdhara Samhita, Adhamalla has thrown light osn consideration of Meda as Dosha, due to” Karya Karan Bhava “concept and the
efficacy of Meda to obstruct the channel and to produce the disease independently (Sha. Pu. 7/65). In Gudhartha Dipika commentary, Kashiram Vaidya has tried to explain about controversy and given solution that Medodosha is enumerated of one type due to aggravation and dominancy of Vata Dosha hence, Meda is not considered as Dosha.

**SAMPRAPTI**

ALL the physiological consequences from commencement fill manifestation of any disease are known as „Samprapti”. Though Sthaulya is a dushya dominant disorder, in pathogenesis of Sthaulya, all the three doshas are vitiated especially Kledaka Kapha, Saman and Vyana Vayu, Pachak pitta which are responsible factor for proper metabolism and digestion of food at the level of alimentary tract. Sushruta has explained a general pathogenesis of all diseases in six stages. In healthy individual, the Tridoshas are in equilibrium in respect to their Guna, Karma, Pramana. When the equilibrium is disturbed due to this Doshas decreases or increases quantitatively, qualitatively or functionally, the disease is formed. Sushruta has explained this process in six stages known as „Shatakriyakala”. They are –Chaya, Prakopa, Prasara, Sthanasanshraya, Vyakti and Bheda.

**Sanchayavastha:**

It represents the inceptive stage of disease when the Doshas are stagnated in their own natural abodes. According to Sushruta Sthaulya is „Rasa Nimittaja Vyadhi”. The Samprapti of Sthaulya begins with the Sanchay of Kapha Dosha. The causes by which Medovaha srotas gets vitiated are excessive intake of fatty food, day sleep, lack of exercise etc. these are similar to that of Kapha Vriddhikar Bhav. Sanchay of Kledak Kapha in Amashaya because of excessive consumption of Guru, sheet, snigdha, Madhur Ahar and Kaphakar Vihar leads to formation of Ama-annarasa. Charak has stated that Meda Dhatu, Kapha dosha sitted in Medo Dhatu and hence, a Vriddhi of Kapha dosha occurs in the site of Meda Dhatu. Therefore Kapha sanchaya and Meda Dhatu vriddhi are the footsteps of Sthaulya. Due to Kapha Sanchaya the person feels Alasya and Gaurav. In Sanchaya avastha, there is formation of Ama-Annarasa because Pittadhara Kala is unable to secrete Pachaka Rasa which results in Jatharagnimandya leading to Strotovaigunya. In this stage the Dravyatah Vriddhi or quantitative increase is seen. **Prakopavastha:**

Dalhana has said that an increase in Dosha due to liquefaction is known as Prakopa. While undergoing through these Kriyakala Kapha Dosha in Sanchaya stage is accumulated in its chief site
i.e."Urapradesh". In Prakopavastha it spreads to its other site i.e. Rasa, Meda, Amashaya, Sheera, kloma, Kantha etc. In this stage there is increased vitiation of Kapha Dosha leading to its morbidity in the site of Medo Dhatu. This Prakopa is of two types, Achaya and Chaya. Achaya Purvak Prakopa is due to Viharatmaka causes i.e. sleeping at day time and lack of physical exercise. Chaya Purvak Prakopa it’s due to frequently eating habits and excessive consumption of Sleshmahar.

**Prasaravastha:**
According to Sushruta in this Aavstha, the vitiated Doshas expand and overflow the limits of their respective location. In the next „Prasar” stage Kapha is so increased that it occupies the site of other Doshas. Here the Kapha Dosha increases qualitatively as well as quantitatively. During these first three Shatkriyakala, two major incidences occur. Medadhatu is continuously being produced in more amounts and gets deposited mainly at its original sites-Vapavahana and Kati, Kapha from normal stage, reaches upto Prasar stage. At the same time, excessive production and deposition of Medadhatu leads to sthanavaigunya in Medovaha strotas. Charak has explained 4 types of vitiation of strotas. They are-Atipravruttii, sangha, siragranthi and vimarga Gamana. In Sthaulya, the Khavaigunya

**Sthanasanshrayavastha :**
In this stage of Kriyakala, the pathogenesis becomes more morbid and Medovaha strotas gets vitiatiated functionally. The Khavaigunya exists at Medovaha strotas and Dosha-Dushya sammurcchhana occurs. Meda-Kapha sammurcchhana results in Ama which is neither similar to kapha nor Meda. It is sticky, raw like and possesses very bad odour. This Ama disturbs the metabolism of Medo dhatu and Apakva, Apachit Meda is formed, which only gets deposited and has no fate in the body. This excessive deposition leads to strotasavarodha. Due to strotasavarodha, vimarga gamana of Vayu take place and it accumulates in Koshta resulting in Jatharagni Pradeepana. The deposited undigested raw Meda dhatu is not in a position to supply nutrition to Asthi Dhatu. So, the further Dhatus deprived of nutrition. The Medovaha strotas which was vitiatiated functionally now also vitiatiated structually. This takes place at the Strotas level and represents the prodormal phase or the phase of Purvarupa(Su.Su.21/33).

**Vyakti Avastha:**
In this stage the manifestation of all the signs and symptoms of a disease occurred (Su.Su.21/34). Hence, this stage is also called as “Rupa Avastha”. All the symptoms (Rupa) of Sthaulya are seen in this isAvaddusthauitya, Aparthitya, excessive production of Kshudrashwas, Atisthaulya, Atisweda,
Bheda Avastha:
This stage marks the chronicity of the disease where it becomes incurable or sub-acute (Su.Su.21/35). The pathology of disease becomes more and more morbid as chronicity increases. At this stage the patient still follows the Nidanas. According to „Khalekapot nyaya” only meda Dhatu gets inadequate nutrition. The excessive Meda Dhatu formation goes on increasing and this vicious cycle continues. Over nutrition Meda dhatu and at the same time poor nutrition of other Dhatus is a basic pathology of Sthaulya.

Samprapti Ghataka:
The following factors play major role in Samprapti of Sthaulya.

- **Dosha:**
  - Kapha: Kledaka
  - Vata: Samana, Vyana
  - Pitta: Pachaka

- **Dushya:** Meda, Rasa Dhatu

- **Strotas:**
  - Medovaha Strotas
  - Rasavaha Strotas

- **Strotodushti:**
  - Margavarodha (Ch.Su.21/5-9)
  - Sanga - Amatah (A.H.13/25)

- **Agni:**
  - Jatharagni
  - Rasa and Meda Dhatvagni

- **Ama**
  - Dhatvagni Mandyajanita Ama
  - Jatharagni Mandyajanita Ama

- **Adhisthsana:**
  - Udara, sphika and stana.
  - Particular Vapavahana and Medodhara Kala

- **Vyaktisthana:** Sarvanga

Samprapti of Sthaulya:

STHAULYA

DISCUSSION
In the present era, today”s lifestyle includes less exercise, use of machineries” for each and every small work, changed regular diet which contains junk food, high calorie food and non-vegetarian food and sedentary habits. In concern with H.W. lot of time for chillaxing at home, no outdoor workloads, less time and energy consuming machineries for household work, these group of ladies are more prone to Sthaulya. The disease Sthaulya is a well recognized disease from the Samhita period. It has been mentioned by Acharya Charaka in Ashtauninditapurushadhyaya (Cha.Su. 21).

In today”s era we observe growing popularity to Ayurveda globally. The need is to provide modern parameters for everything which we study. Dosha, Dhatu, Mala, Agni are no exception to this. The first line treatment advised by Ayurveda is
the “Nidana Parivarjana” which is one of the best methods to stop further progress of the disease (Su.U.1/25).

CONCLUSION:
Kaphavataj Prakriti H.W. were found more prone to Sthaulya so they should be advised proper diet regimens with exercise and made awareness about proper sleeping habits. Excessive indulgence of non-veg diet, nuclear family type, sedentary type of work, decreased awareness regarding exercise and food, faulty sleeping habits, Harshyanitya plays a major role in etiopathogenesis of Sthaulya. With continuing the habit of Diwaswapna, there is no reduction on sthaulya parameters. This shows that Diwaswapna is an aggravating factor for Sthaulya and dislipidemia.

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