# Title name- “A Review Article on Various Ayuvedic Approaches in The Management of Sthaulya (Obesity)”

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**A REVIEW ARTICLE ON VARIOUS AYUVEDIC APPROACHES IN THE MANAGEMENT OF STHAULYA (OBESITY)**

**ABSTRACT-**

 A person having heaviness and bulkiness of the body due to extensive growth especially in *Udaradi* region is termed as *"Sthula"* and the state *(Bhava)* of *Sthula* is called *"Sthaulya". Sthaulya* or *Medorog* (obesity) is commonest metabolic disorders in affluent societies caused by irregular diet and sleep patterns, lack of physical activities, stress etc, and it is a direct result of modernization combined with lifestyle changes by exposing oneself to these factors. we unknowingly invited several diseases out of which *Sthaulya* is one which affects someone’s social, physical, and mental features. *Acharya Charaka* has mentioned *Sthaulya* under *Santarpanajanya Vyadhi*. The present study deals with all the details of *Sthaulya* according to ayurvedic classics and its preventive methods like *Nidan Parivarjan*, therapeutic management along with medicine, diet, *Pathya* and *Apathya.*

**KEY WORDS** *– Sthaulya, Santarpanjanita Vyadhi, Nidan Parivarjan,Pathya-Apathya.*

**INTRODUCTION –**

*Acharya Charaka* has included *Atisthoola* in eight varieties of impediment which are designed as *Astha Nindita purusha.*1 *Atisthaulya* comprises one of them.

*Acharya Charak* mentioned that a person in whom excessive and abnormal increase of *Medodhatu* along with *Mamsadhatu* is found which results into pendulous appearance of buttocks, belly, breast and whose increased bulk is not matched by a corresponding increase in energy is called *Sthula purusha*.2 *Sthaulya* is a *Dushya* dominant *Vyadhi,* plays a major role in pathogenesis of *Sthaulya,* therefore it is important to know different aspects of *Meda*. Substance which has *Snigdha* property is called *Meda.* There are many oily substances in the body like *vasa Majja*.etc.

*Sthaulya roga* of *Ayurveda* comes under the heading of *Medoroga* which results due to dysfunction of *Medodhatvagni* (factors responsible for metabolism / nourishment of *Medo dhatu*). *Ayurveda* also described *Sthaulya* as 1. *Kapha Pradhanaja* – predominantly caused due to vitiated *Kapha Dosha* 2. *Meda Pradoshaja – Meda* is *dhatu*/tissue which is predominantly affected 3. *Bahudosa Avastha* – Multi factorial conditions. 4.*Santarpanjanya Vyadhi* – Disease caused by due to defected anabolism/overnutrition.

***Sthana* and *Swarupa* of *Meda Dhatu -***

1. *Poshya* (Immobile in nature) – which stored in *Medodharakala* ie; in its sites like., *Udara, Sphika, Stana, Gala,etc* and *Vasa (Mamsagata)* According to modern science, it can correlated with adipose tissue / fat.
2. *Poshak* (Mobile in nature) - which is circulated in whole body along with *Gatiyukta Rasa-Rakta Dhatu* for nourishing the *Poshya Meda Dhatu/Sneha*. According to modern science it can be correlated with cholesterol and lipids which are present in circulating blood.

***NIDANA* (ETIOLOGICAL FACTORS) –**

The knowledge of *Nidan* not only aids the physician towards therapeutics but also in advising about *Pathyaapathya*. For easy management It is very important to know the *Nidana* of diseases.

*Acharya Sushruta* and *Vagbhat* have mentioned endogenous type of cause, *Vagbhat* has mentioned “*Ama”* as a causative factor. only *Charaka* has define *“Beejadosha”* as one of the causes besides other. In context with *Sthula,* exogenous causes are diet and whereas *Dosha,* *Dhatu, Mala, Srotas* etc. comes under the endogenous causes. Mainly four type of *Nidana* described in ayurvedic *Samhitas-* 1.*Aharatmaka Nidan* (Dietary factors) 2.*Viharatmak Nidan* ( Functional factor) 3.*Manas Nidan* (psychological factor) 4.*Beejadosha* (Hereditary factors )

**Role of *Aharatmaka Nidana* in *Sthoulya* –** On the basis of ***“Samanya Vishesh Siddhant’’*** that is ‘‘***Sarvada*** ***Sarvabhavanam Samanyam Vruddhi Karanam***’’**3** The excessive food consumption of similar substance *(Dravya Samanya),* similar quality *(Guna Samanya)* or similar in action *(Karma Samanya)* help in the over production of *dhatu.* In the same manner increase intake of these *Aharatmaka Nidana* which are described above over production of *medodhatu. Acharya Sushrut* has mentioned ‘’***Rasnimmitameva Sthoulya Karhyam Cha’***’**4** means *Sthaulya* and *Karshya* depends upon the quantity and quality of *Ahararasa. Ahararasa* plays a major role for increasing *Meda Dhatu* in *Sthaulya.*

**Role of *Viharatmaka Nidan* in *Sthaulya –*** All the *Aharatmaka Nidana* ultimately decrease physical activity, which aggravates *Kapha* and leads to *Meda* deposition. *Viharatmaka Nidan Avyayam, Sukhasana* etc. which possesses the qualities same as *Meda* which increases *Meda* in the body, *Divaswap* having *Snigdha* property leads to blockage of the micro channels of the body.

**Role of *Manas Vyapara* in *Sthaulya –*** *Acharya Charak* mentioned some psychogenic causes of *Sthaulya.* *‘****‘Tatra Atisthoulya … Harshanityatvat Achintanat’’*5** *Harshnitya and Achinta* are two psychological factors mentioned by *Acharya Charaka* which are responsible for *Meda Vriddhi*. These factors are responsible for *Meda Vriddhi*. this type of psychological wellbeing and jolliness that person indulge more in worldly pleasure and excess energy stored in the form of *Meda*. Due to adaptation of modern lifestyles, a person has reduced his physical activity and instead of that the mental work is increased, as a result now a days the diseases caused by psychogenic factors are seen extensively more.

**Role of *Beejadosha* in *Sthaulya –*** *Acharya Charaka* has mentioned that *Beejadosha* plays a major role for *Medovriddhi****6.***defect of *Beejabhagavayava* that is the part of *Beeja* which resembles with genes may lead to defective development of that organ. also*, Bhavamishra* has mentioned that increased proportion of *Meda* and decreased development of *Sthool* but weak body. Moreover, overnutrition particularly with *Madhura* rasa during pregnancy is as a causative factor for birth of obese child which indicate role of hereditary factor in genesis of *Sthaulya.***7**

***SAMPRAPTI* (PATHOGENESIS)** –

**Role of *Agni* in *Sthaulya According* to *Ayurveda -***

*Jatharagni* is main responsible factor for digestion of food. In *Medoroga (Sthaulya)* due to obstruction of *Meda,Vata* remains in *Koshta* and causes *Tikshnagni.* here the question arise,how *Ama* formation can occur in the presence of *Tikshnagni.* *Chakrapani* and *Dalhana* have clarify this by giving explanation that in the stage of *Tiksnagni*,person goes for *Adhyasana* and *Akal Bhojan Seven*,which leads to disturbance in *Agni* and subsequently formation of *Ama* may take place. Moreover, *Dalhana* has explained that in the *Sthaulya* formation of *ama* is more due to decrease level of *Medodhatavagni* than *Jathragni.*

As per *Vagbhata Pachakansa* present in each *Dhatu* is refered to *Dhatvagni.* *Usma* present in *Dhatu* is part of *Jatharagni* and is controlled by it. *Dhatavagnimandhya* of specific *Dhatavagni* causes *Vriddhi* of that *Dhatu* and vis.a.vis. In the state of *Hatavagnimandya Kshaya* of *Uttar Dhatu* take place.**8**

 In the case of *Sthaulya Medodhatvagni Poshkansh* started at *Jathragni* level is vitiated, this *Poshak Ras* which comes in large quantities to *Meda Dhatu* slow down the *Medadhatavagni*. Due to continuous excess of nutrient, the work of *Medadhatvagni* reaches almost to its lowest level, which leads to the increases of *Meda* dhatu in their depot. In addition due to decreased production of *Sukshma* and *Sara* part at *Medadhatvagni* level the further *Asthi,Majja,Shukra* dhatu get less *Poshak Ras* due to this *Uttarottar Dhatu (Ashthi Majja Shukra)* is not formed properly.

 In another word, due to etiological factors, there is increase in the fatty tissue in the body. This increased fatty tissue produces obstruction in various system. Specifically, this causes obstruction to *‘Vata’*. This obstructed *Vata* starts wandering in abdominal cavity. It gives hyperstimulation to the digestive power *(Jatharagni).* This causes more and quick digestion and absorption of food. As a result of this appetite is increased to satisfy this increased hunger the person goes on eating more and more. This leads to increase in fatty tissue and vicious circle goes on. Even though the digestive power in the stomach *(Jatharagni)* is increased, there is reduced digestive power at the tissue level. The digestive power responsible for the production of fatty tissue *(Medo Dhatwagni)* from the muscle tissue into fatty tissue does not take place properly. This causes excess faulty deposition of fat in the body and *Medoroga* is produced.**9**

 Excess food intake

 Increase hunger Increase in fatty tissue fat deposition.

Fast digestion and absorption of food Obstruction of vata

 Hyperstimulation of digestive power in stomach

***LAKSHANA OF STHAULYA* (SIGN AND SYMPTOMS)** -

According to Charak, *Chala Sphika, Chala Udara, Chala Stana, Ayathopcayotsaha,* and *Atimeda Mansavruddhi* are obvious in all the patient of *Sthaulya.* hence these may be considered as cardinal symptoms or *Pratyatm Lakshan.***10**

In *Astang Sangrah Vagbhata* also mention these *Lakshan of Sthaulya* **11**

1. *Kshudhavridhi* (Excessive hunger)
2. *Atitrishna* (Excessive thirst)
3. *Atishevida* (Excessive Sweating)
4. *Sharamjanya Swasa* (Breathlessness on mild exertion)
5. *Aatinindra* (Excessive sleep)
6. *Karyaodourblyata* (Difficulty to perform heavy work)
7. *Jadyatha* (Stishness)
8. *Alpaayu* (Short life span)
9. *Alpabala* (Decreased bony strength)
10. *Uatshahahani* (Inertness)
11. *Sharir Durgandhta* (Foul odour of the body)
12. *Gadgadtava* (Unclear voice)
* ***ASHTADOSHA* OF *STHULA***

Eight consequences of Sthaulya as described in *Charaka Samhita****12***

* 1. *Aayushohrasa* (Decreasing life span)
	2. *Javoparodha* (Slowness in movement)
	3. *Kricchavyavayata* (Difficulty in sex)
	4. *Daurbalya* (Weakness)
	5. *Daurgandhyam* (Bad odour)
	6. *Svedabadha* (Excessive sweating)
	7. *Kshudatimatra* (Excessive hunger)
	8. *Atipipasa* (Excessive thirst)
* ***COMPLICATIONS13 –***
1. *Visarpa* (Erysepellas)
2. *Bhagandara* (Fistula in Ano)
3. *Jwara* (fever)
4. *Aatisar* (Diarrhoea)
5. *Prameha* (Diabetes)
6. *Arsha* (Piles)
7. *Shlipada* (Filariasis)
8. *Apachi* (Indigation)
9. *Kamla* (Jaundice)
* ***CLASSIFICATION -***

In *Ashtanga Hridaya* and *Ashtanga Sangraha Vagbhata* have been mentioned three types of *Sthaulya* i.e., *Adhika, Madhyama* and *Hina*with management point of view.

This classification can be correlated with modern as given below -

1. ***Hina Sthaulya* (overweight) -**

B.M.I. 25-29.90 kg/m2

Mild degree of overweight,

without any complication or secondary disease

less than four undesirable symptoms

duration of less than 1 year

1. ***Madhyam Sthaulya* (Obese) -**
	* + - * B.M.I. 30-40 kg. /m2
				* Moderate degree,
				* least complications without secondary disease,
				* less than 8 undesirable symptoms
				* within duration of 1 to 5 years
2. ***Adhika Sthaulya* (Very Obese)**
	* + B.M.I. > 40 kg. /m2 –)
		+ Excessive degree, with complication and secondary disease
		+ all 8 undesirable symptoms
		+ more than 5 years duration
* ***CHIKITSA OF STHAULYA (MANAGEMENT OF OBESITY)* –**

 In *Ayurveda, Sthoulya* comes under *Santarpanajanya, Medo Pradoshaja* and *Kapha Pradhana Vyadhi* where *Apatarpana* is the line of treatment.

 ***‘‘Guru Cha Aptarpan Chestham Shtaulanam Karsanam Prati’’14***

***Nidan parivarjan –***

 ***‘‘Sankshepta Kriyayoga Nidan Parivarjanam’’15***

*Nidan Parivarjan Chikitsa* means avoiding all the *Aharatmaka, Viharatmaka, Manasika* and *Anya Nidan* responsible for the manifestation of diseases. Both *Charaka* and *Sushrut* have laid great emphasis on the principle of *Nidan Parivarjana. Sushrut* in particular has recommended *Nidan Parivarjan* as essential component in the management of any disorder.

***Samshodhana Chikitsa* (Purificatory procedures) –**

* ***Vaman* (Therapeutic emesis) –***Vaman Karma* is specifically indicated to cure *Kapha* related diseases and disorders like obesity.
* ***Virechan* (Therapeutic purgation).** – *Virechana* is beneficial for *Sthaulya. Virechana* helps to initiate the weight loss mechanism in the body. *Virechana* being an appropriate *Shodhan* procedure is not only specific for the elimination of vitiated *Pitta Dosha* but also helps in the elimination of vitiated *Kapha* and *Vata* a where it is also indicated in *Sthoulya*
* ***Lekhan Vasti* (Medicated enema) -** *Lekhan Vasti*, the name is self-explanatory hence *Lekhan* property reduces med and simultaneously pacifies *Vata Dosha* by affecting its main seat i.e *Pakvashaya.* Due to *Laghu, Ushna* and *Tikshna* properties of *Basti Dravya*, obstruction of channels may be broken down thus the morbid material from all over the body will expelled out breaking the pathogenesis of obesity*. Acharya Charaka* has mentioned ***Lekhaniya DashemaniDravyas16*** – a group of 10 drugs, these drugs are 1*. Mustaka 2. Kustha 3. Haridra 4. Vaca 5. Ativisha 6. Katu Rohini 7. Chitraka 8. Chirabilva 9. Daruharidra 10. Haimvati (Karanj).*

***Shamana Chikitsa (Palliative Treatment)***

•***Langhan* (Fasting).** - Only in initial stage if *Stha+*

*ulya* caused due to *Adhyashan,* then *Langhan, Laghu* *Aahar, Alpa-Aahar* should be taken

• ***Ama Pachan* (oral use of digestives to augment the fat metabolism).**

• ***Ruksha Udwartan* (Dry medicated powder massage). -** Dry powder of herbs is used hence it is known as *Ruksha Udvartana.Udvartana* opens the circulatory channels, facilitates the metabolic activity and improves the complexion of skin.

***common classical preparations used in Sthaulya (obesity)17 -***

1. *Vati - Aarogyavardhani Vati, Bhedani Vati*
2. *Churna - Triphala Churna, Trikatu Churna, Vidangadi Churna, Vacha Churna*
3. *Kwath -Mustadi Kwath, Agnimantha Kwath, Phaltrikadi Kwath*
4. *Asav Arista - Vidangasav, Lodhrasav*
5. *Loha - Vidangadi loha, Trayaushan loha*
6. *Guggul - Navak guggul, Amritadya guggul, Medohar Guggul*
7. *Rasayan - Shilajatu Rasayan, Guggulu Rasayan, Amlaki Rasayan*
8. *Akal Aushadh - Guggul, Shilajatu, Vacha, Haritaki, Bhivitaki,Amalaki, Guduchi, Nagarmoth, VIdang, Shunthi, Agnimantha.*

***Yoga and exercise -***

***Yoga Asana18 -***  *Suryanamaskar, Pawanmuktasana, Bhujangasana, Shalbhasana, Dhanurasana, Pachimottanasana, Ardha Vakrasana, Halasana, Ardhachakrasana, Naukasana, Trikonasana, Veerbhadrasana, Ustrasana etc.*

**Yogic breathing or *Pranayama*18 -** It is said in the yogic text *Hatha Yoga Pradeepika* and others that practice of pranayama make the body slim and fit*. Pranayama* can help to burn excessive fat in the body. There are two *pranayama* practices that are good for weight reduction *– Kapalabhati* and *Anulom Vilom Pranayama*.

***Pathya-Apathya 19*** *-*

*Pathya Apathya Ahara -*

|  |  |  |
| --- | --- | --- |
| ***1.Aharavarga***(food)*ShukaDhanya*(Food grain)*ShamiDhanya*(Pulses)*ShakaVarga*(Vegetabbles) *Drava* (liquid stuff)*Mamsa*(meat) | ***Pathya* (Suitable)** *Yava,Venuyava, Kodrava, Nivara* *Mudga,Rajmasha,Kullatha, Masura, Adhaki* *Vrintaka, Patrashaka, Patola* *Takra, Madhu, Ushnodaka, Dugdha, tiltaila, Asava, Arishta* *RohitaMatsya*  | ***Apathya* (Unsuitable***)* *Godhuma, Navanna, Sali ShamiDhanya* (Pulses) *Masha, tila* *Madhuraphala* *Ikshu, Navnita, Ghrita, Dadhi* *Anup,Audaka* |

***Pathya Apathya Vihar -***

|  |  |
| --- | --- |
| **Pathya** *Shrama*(Hardwork)*Jagarana*(Late nights)*Vyavaya*(Sexual activity)*Nitya Langhana* (Regular use of Reducing therapy)   |  ***Apathya***  *Sheetal Jala* *Divaswapa* (Day sleeping)*Avyavaya* (less exercise and less indulgence in sexual activity)*SwapnaPrasanga* (Excessive sleeping) *Sukhashaiyya* (Comfortable bedding) |

* ***DISCUSSION -***

*Sthaulya* is considered as one of the *Santarpanjanya Vyadhi* with the involvement of mainly *Medodhatu* and *Kaphapradhanatridosh*. Excessive accumulation of *Kapha* and *Meda* with other factors eventually leads to *Sthaulya Roga*. line of treatment for *Sthula* is *Apatarpana* and *Langhana*, which can be done by *Shodhana* and *Shamana* Yoga therapy, Vyayam proper dietary and lifestyle modification can play crucial role in prevention of *Sthaulya. Acharya Charaka* has illustrated that *Krishata* is better than *Sthaulya* because when *Sthula Purusha* affected by disease suffers more due to it as compared to *Karshya. Kapha* *Prakriti* persons are more prone to become obese *(Sthula).*

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