

A Review on Ayurvedic Niadanatmak Concept of Sthaulya Vyadhi (Obesity)

Dr. Sanjay A. Dhurve

(M.D., Ph.D.) Assistant Professor, Department of Kayachikitsa, Bharati Vidyapeeth Deemed University College of Ayurved, Pune -Satara Road, Pune-411043

Email: [dr.sanjaydhurve\[at\]gmail.com](mailto:dr.sanjaydhurve[at]gmail.com)

Abstract: *Sthaulya is widely regarded as a pandemic with potentially disastrous consequences for human health. It is one of the most common nutritional disorders. Although it is regarded as a disease, but it is only an exaggerated form of the normal physiological process. In Ayurveda Sthaulya is referred to as "Medoroga" which is primarily caused by malfunctioning of Meda-Dhatwagni and is included in "Ashtau-Nindit-Purusha" by Acharya Charaka meaning who are been criticized by the society due to their inappropriate body parameters. It is also counted as one amongst the "Kapha-NanatmajaVikaras" and is Santarpanajanya Vyadhi.*

Keywords: Sthaulya, Medoroga, Nidana, Aharatmaka, Viharatmaka, Manasa

1. Introduction

The disease Sthaulya is a well-recognized disease from the Samhita period. It has been mentioned by Acharya Charaka in Ashtau-Nindita-Purush-Adhyaya (Su. 21). Sthaulya is another term, which is used for the disease Medoroga. Madhavakara has described Medoroga under the individual entity in 34th chapter of Madhavanidana and used Medosvina, Atisthula and Sthula words as synonym. Charaka has mentioned the BeejadoshaSwabhavata as one of the important etiological factor besides other for the disease. In person having hereditary predisposition disease becomes quickly incurable due to the short circuit in the metabolic pathway. Patient starts to convert most of the food nutrients in to fat irrespective of body requirement. Nidana of Sthaulya is divided in 4 categories Aharatmaka, Viharatmaka, Manasa and Anya. Besides these Nidanas, nowadays it can be seen that due use of highly refined oils it is found with maximum percentages of carbohydrates & high-tech machineries which makes a person less active & prone to Sthaulya. Nowadays Nidanas of Sthaulya are changing e.g. Manasonivritti and Harsanivriti were said to be the Nidanas of Sthaulya but these are now changing to increasing stress which causes episodes of binge eating leading to Sthaulya has become prominent one. Acharya Charaka had mentioned the Bijadosha as an important etiological factor. Most of the symptoms of Sthaulya occur due to excessive accumulation of Meda in fat depots leading to Chalatra of the various organs, Kshudrashwasa, Angagauravata and other various signs and symptoms.

Aim and Object:- To study the NidanaPanchak of Sthaulya Vyadhi

2. Definition of Sthaulya

Ayurvedic review: Acharya Charaka mentioned that a person in whom excessive and abnormal increase in MedoDhatu along with MamsaDhatu is found, which results into pendulous appearance of the buttocks, the belly, the breasts and whose increase bulk is not matched by a corresponding increase in energy is called as a "Sthula" person.

Modern review: Obesity is an abnormal growth of the adipose tissue. If obesity is caused due to an increase in the number of fat cells it is said to be "Hyperplastic Obesity". If obesity is caused due to enlargement of fat cells it is said to be "Hypertrophic Obesity". A condition in which there is excessive amount of body fats is called Obesity. A person is called Obese if his/her "Body Mass Index" (BMI) is $>$ or $=$ 30 kg/ sq.m.

3. Historical Review of Sthaulya

Sthaulya has been described since ancient period which can be understood in the following manner:-

- 1) Vedic Period:** In Yajurveda (12/97) a disease named Upachita has been described similar to Sthaulya. Veda appreciated exercise and hard work and slashed upon laxity, in the context of health (AtreyaBrahmana 33, Rigveda 8/12/18). Atharvaveda has advised to strengthen and hardened the body like a stone, in other words indicated hazards of flabbiness of the body and Obesity (1/2/2).
- 2) SamhitaKala:** CharakaSamhita (2B.C):- Sthaulya has been described under "Ashta-Nindita-Purusha" (8 despicable personalities). According to CharakaSutrasthana 21, its causative factors mainly exogenous and heredity components along with its pathology, Sign's & Symptoms are described. Prognosis & management have been narrated in detail. Besides that other aspects of Sthaulya and line of treatment have been described at various places in Charaka Samhita. It is also mentioned as disorder of Sleshmananatmajavikara (Ch.su 20/17), Santarpana Nimittaja Vikara (Ch.Su 23/6), Atibruhana Vikara (Ch.Su22/24) and Samshodhana Yogya Vikara (Ch.Su 16/16). Detail anthropometry is described in Charaka Vimanasthana (8/17).
- 3) Sushruta Samhita:** Sushruta (Su.su15) has narrated the aetiopathogenesis of Sthaulya Roga on the basis of an endogenous entity being caused by "Dhatwagnimandya". Sthaulya is considered as the physical condition of the body (Su.su 35/40), result of vitiated MedoDosa (Su.su 24/13), as symptom of disrupt MedovahaStrotasa (Su.su.9/12) and a Rasa

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NimittajaVikara (Su.Su 15/37). Further elaboration of line of treatment has been done by Sushruta with so many remedies at many places indicating the fulminating condition of the disease at that time in the society (Su.Chi 24/40 & 79).

- 4) **Ashtanga Samgraha & Ashtanga Hridaya:** VriddhaVagabhata and Vagabhata have elaborated aetiopathogenesis of Sthaulya on basis of formation of Ama and disturbances in the process of Dhatu Parinama. i.e. intercellular metabolism and mechanism of respective Agni, which later on was understood as process of metabolism in modern era. In Ah.Su 14 & As.Su.24, they have mentioned various therapeutic & prophylactic measures to cure and prevent the disease. Rasanjana is considered as drug of choice for Sthaulya. But after observing challenging & relapsing nature of the disease they concluded that there is no treatment for excessive obesity (AtiSthaulya) (Ah.su 14/31). Types of Sthaulya and their management have been described for first time by Vagabhata in SU.24/14-16.
- 5) **Kashyapa Samhita:** Kashyapa has given some new aspects of the disease while narrating Medasavidhatri Chikitsa and suggested Raktamokshana (bloodletting) as one of the best treatment for Medasvidhatri i.e. obese frostier mother.
- 6) **MadhavaNidana:** Madhava has elaborated pathophysiology of Sthaulya on basis of the fat tissue and fat depot site. Natural tendency of the disease towards developing android obesity is described in MA.NI. 34/4.

- 7) **Chakrapani:** Acharya Chakradatta has presented with his own views under the heading of Medorogadhikara. He has advised a dietary recipe to reduce the abdominal girth of an obese individual.
- 8) **Dalhana:** Dalahana has given valuable explanation about Production of Medadhatu, by passing the Rakta Dhatu & Mamsa Dhatu have been described by him. He has also elaborated the Medakrita Marga Avaranna Nimittaja Vata Vikarasin Sthula person (Su.su.15/32 Tika).
- 9) **Indu:**Indu has given explanation of Saktu, Lohadaka, Phulaka etc. words used in the line of treatment of Sthaulya, in his commentary Sashilekha on As.Su 24/20.
- 10) **Hemadri:** Hemadri advised to take Churna of Yavanal, Madhukajalam as Madhu Mishrit Udaka, Dandahataasa Takra & Agnimantha as Tarkari, Kshara as Yavakshara in the management of Sthaulya, in his commentary Ayurveda Rasayana on A.H.
- 11) **Yoga Ratnakara:** In MedorogaAdhikara, Rasa preparations have been mentioned for treatment of Medoroga and management of Medadushtjanya Vyadhi in detail.

Nidana of Sthaulya: -All the causative factors described in various Ayurvedic texts can be classified into 4 groups viz. AharatmakaNidana, ViharatmakaNidana, ManasNidana and Anya Nidana. Only Charaka has defined "Beejadosh" as one of the cause of Sthaulya. For better understanding the causes are tabulated as below:

Aharatmaka Nidana

S. No.	AharatmakaNidana (Causative diet factors)	CH.	SU.	A.S.	A.H.	MN	BP
01.	Ati-Sampurna (Over- eating)	+	-	+	-	-	-
02.	Santarpana	+	-	+	+	-	-
03.	Adhyashana (Untimely eating)	-	+	-	-	-	-
04.	Guru AharaSevana(Heavy diet consumption)	+	-	-	-	-	-
05.	Sheeta Ahara Sevana (Excess consumption of cold food products)	+	-	-	-	-	-
06.	Madhura Ahara Sevana (Excessive consumption of sweets)	+	-	+	+	-	+
07.	Snigdha Ahara Sevana (Excess unctuous food consumption)	+	-	+	+	-	+
08.	Sleshmala Ahara Sevana (Kapha increasing food consumption)	+	+	-	-	+	+
09.	Navanna Sevana (Use of fresh grains)	+	-	-	-	-	-
10.	Nava MadyaSevana(Use of fresh alcohol preparation)	+	-	-	-	-	-
11.	Gramya Masa Sevana (Domestic animals meat and soups consumption)	+	-	-	-	-	-
12.	Audaka Rasa Sevana (Aquatic animal meat and soup consumption)	+	-	-	-	-	-
13.	Mamsa Sevana (Excess meat intake)	+	-	+	+	-	-
14.	Paya Vikara Sevana (Excess use of milk and its preparations)	+	-	+	+	-	-
15.	Dadhi Sevana (Excess use of curd)	+	-	-	-	-	-
16.	Sarpi Sevana (Excess use of ghee)	+	-	-	+	-	-
17.	Ikshu Vikara Sevana (Excess use of sugarcane preparations)	+	-	-	+	-	-
18.	Guda Vikara Sevana (Excess use of jaggery preparations)	+	-	-	-	-	-
19.	Shali Sevana (Excess use of rice)	+	-	-	-	-	-
20.	Godhuma Sevana (Excess use of wheat)	+	-	-	-	-	-
21.	Masha Sevana (Excess use of phasiloumungo)	+	-	-	-	-	-
22.	Rasayana Sevana	+	-	-	-	-	-
23.	Vrushya Sevana	+	-	-	-	-	-
24.	Bhojanottara Jalapana (Consuming excess water after food intake)	-	-	+	-	-	+

Viharatmaknidana

S. No.	Viharatmaka Nidana (Lifestyle causes)	CH.	SU.	AS.	AH.	MN.	BP.
01.	Avyayama (Lack of physical exercise)	+	+	+	-	+	+
02.	Avyaya (Lack of sexual activity)	+	-	+	-	-	-
03.	Divaswap (Day's sleep)	+	+	+	-	+	+
04.	Asana Sukha(Luxurious sitting)	+	-	+	+	-	-

05.	Swapnaprasangata (Excessive sleep)	+	-	+	+	-	-
06.	GandhamalanuSevana(use of perfumes and garlands)	+	-	-	-	-	-
07.	BhojanottaraSnana(Bath after meals)	+	-	-	-	-	-
08.	BhojanottaraNidra(Sleeping after meals)	-	-	-	-	-	+
09.	BhojanottaraAushadhiSevanam(Drugs after meals)	-	-	+	-	-	-

ManasikaNidana

S. No.	Manasika Nidana	CH.	SU.	AS.	AH.	MN.	BP.
01.	Harshaniyatvat (uninterrupted cherish fullness)	+	-	+	+	-	-
02.	Achintanat (lack of anxiety)	+	-	+	+	-	-
03.	Manasonivritti (relaxation from tension)	+	-	+	+	-	-
04.	Priyadarshana (observation of beloved things)	+	-	-	-	-	-
05.	Saukhyena	-	-	-	+	-	-

Samprapti of Sthaulya

The etiological factors described by Acharya, can be categorized under four groups i.e.

- DoshaDushtikara : Guru, Madhura, Sheeta Gunadominant diet.
- DhatuDaurbalyakar / Khavaigunyakar - Avyayam, Avyavaya, Achintana, Nityaharsh etc.
- Agnimandyakara -AtiBhojana, Madhura, Snigdha Pradhan Bhojan.
- Beejadosha - It impairs Medodhatvagni Poshakansha, which ultimately provides the base to Sanchaya of Ama in Medodhatu leads to Sthaulya. The persons having genetic predisposition may develop both type of obesity - Hypertrophic and Hyperplastic obesity. The whole process of manifestation of Sthaulya can be described as below:

Samprapti Ghatakas:

Udabhavasthana - Amasaya

Sanchar - Rasayani

Adhithana - Whole body specifically Udara, Sphika, Stana

Vyakti - Whole body

Dosha - Tridosha, Samana-Vayu, Apana-Vayu, Vyan-Vayu,

Pachak Pitta, Kledakkapha,

Dushya - Rasa and Meda

Srotasa - Annavaaha, Rasavaaha, Mamsavaaha, Medovaha

Srotodushti - Sanga, Vimargagaman, Avarana

Agnimandya - Medodhatvagnimandya, Jatharagnimandya

Ama - Medodhatugata

Pradhanata - Dhatvagnimandya, Santarpanjanya

Swabhava - Chirakalin

The pathogenesis of Sthaulya, due to Meda-DhatvagniMandya there is excessive accumulation of fat that leads to obstruction of MedovahaSrotasa. Due to this there is Vimargagaman of VataDosha. The VimargagaVayu in Koshta ultimately increases the Jatharagni leading to an increase in appetite. This cycle goes on and on. But because of the obstruction created by Medovaha Srotas all other Dhatus remain malnourished and only MedaDhatu increases. According to modern science also the basic cause of overeating diet containing more fats and calories than required leads to prolonged postprandial hyperlipidaemia and deposition of triglycerides in adipose tissues results in weight gain. Hence Ahararasa plays a major role for the increase of Meda Dhatu in Sthaulya. So Acharya Sushruta as mentioned all AharatmakaNidana ultimately decreases physical activity, which aggravates Kapha and leads to Meda deposition. Due to adoption of modern lifestyle, a person has reduced his physical activity and

instead the mental work has increased. As a result now a days the diseases caused by psychogenic factors are seen extensively more. Acharyas also mentioned some of them; Arshaniyatvata and Achintanata are two psychological factors mentioned by Charaka causing Medovridhi. These factors are Kapha aggravating factor leading to Meda deposition. With such wellbeing and jolliness a person indulges more in worldly pleasures and hence excess energy is stored in the form of Meda in the body. So that Samprapti of Sthaulya can be divided in two categories: (1) This is according to CharakaSamhita in which there is just increased Jatharagni which causes maximum ingestion and leads to maximum absorption of Prithvi and JalaMahabhuta dominant factors in the body leading to increased Medodhatu in the body. (2) This is according to Dalhana in which there is a state of Medodhatvagni Mandya which leads to excessive formation of improper Medodhatu leading to Sthaulya.

Purvarupa of Sthaulya

Purvarupa of Sthaulya has not been described by any Ayurvedic texts. According to Charaka, the Medovahasroto- DustiLakshanas which are also mentioned as Purvarupa of Prameha (Ch.Su. 28/18). So, ShleshmaSanchya and Medodusti Lakshana related Purvarupa of Prameha and MedovahaSrotodustiLakshanas described by Acharyas can be considered as Purvarupa of Sthaulya. The symptoms related with MedaDushti like Atinidra, Tandra, Alasya, Visra Shariragandha, Angagaurav, Shaithilya etc. can be considered as Purvarupa of Sthaulya.

RUPA: Acharya Charaka has described 8 specific Rupas which are as follows

- 1) Ayusohrasa
- 2) Javoparodha
- 3) KricchaVyavaya
- 4) Daurbalya
- 5) Daurgandhya
- 6) Svedabadha
- 7) Kshudhatimatrata
- 8) PipasaAtiyoga.

All the symptoms of Sthaulya described in various Ayurvedic texts have been summarized in the following table

S. No.	RUPA	CH.	SU.	AS.	AH.	MN.	BP.	YR.
01.	ChalaSphika	+	-	+	+	+	+	-
02.	ChalaUdara	+	-	+	+	+	+	-
03.	ChalaSthana	+	-	+	+	+	+	-
04.	AyatahaUpachaya	+	-	+	-	+	+	-
05.	Anutsaha	+	-	+	-	+	+	-
06.	Ayushohrasa	+	-	-	-	-	+	-
07.	Javaparodh	+	-	-	-	-	+	-
08.	Kricchavyavayata	+	-	-	-	-	-	+
09.	Daurbalya	+	-	+	-	-	-	-
10.	Daugandhaya	+	+	+	-	+	+	+
11.	Swedhabadha	+	-	-	-	-	-	+
12.	KshudhaAtimatra	+	+	+	-	+	+	+
13.	PippasaAtiyoga	+	+	+	-	+	+	+
14.	KshudraShwasa	-	+	+	-	+	+	+
15.	NidraAdhikya	-	+	+	-	+	+	+
16.	Gatrasadh	-	+	-	-	+	+	+
17.	Gadgadvani	-	+	+	-	-	-	-
18.	Krathana	-	+	-	-	+	+	+
19.	Alpaprana	-	+	+	-	+	+	+
20.	Survarkriyasu Asamarthata	-	+	-	-	+	+	-
21.	Alpavyaya	-	+	-	-	+	+	-
22.	Kasa	-	+	-	+	-	-	-
23.	Shwasa	-	+	+	-	-	-	-
24.	Snigdhatta	-	+	-	+	-	-	-
25.	Udaraparshwa Vridhhi	-	+	-	+	+	+	-
26.	Alasya	-	-	+	-	-	-	-
27.	Ama	-	-	-	+	-	-	-
28.	Moha	-	-	-	-	+	+	+
29.	Saukumarata	+	+	-	-	-	-	-
30.	AnganamShaitiyya	+	+	-	-	+	+	-
31.	Alpabala	-	-	+	-	-	-	-

Clinical Features of Obesity

Its manifestation depends upon a variety of factors. The clinical manifestation of obesity as described in various text books of Modern Medicine are as under. The diagnosis will be apparent from the patient's appearance in most of the cases.

- 1) Obesity can be diagnosed from gain in weight B.M.I. – above 30 in males and above 28.6 in females are called obese.
- 2) Skin fold thickness – Obesity is indicated by a reading above 20 mm in a man, and above 28 mm in a woman.
- 3) Waist hip ratio – When W.H.R. is above 1.0 in males and above 0.8 in females, the type of obesity is android; i.e. man pattern obesity and when W.H.R. is below this it suggest ganoids type i.e. female pattern obesity.
- 4) Some disease which are produced as the complication of obesity are more often observed as clinical feature in an obese person like Hernia, Bronchitis, Dyspnoea.
- 5) Protuberant abdomen is a more common clinical feature of an obese person.
- 6) Development of skinfold around the axilla below the breast, peritoneal region.
- 7) Dyspnea on exertion and general lassitude.
- 8) Varicose veins and oedema of the ankles are most troublesome features of obese person.
- 9) In fatty women menstrual disturbance and sterility is also observed.
- 10) In obese person possibility of fungal infection is higher in the skin fold area.

Rupas of Sthaulya are compiled from various classics and these are 28 in number. Out of that 8 to10 are agreed by most of the Acharya's. Most of the symptoms are related to abundant growth of Medo-Dhatu in the body. Most of the symptoms of Sthaulya occur due to excessive accumulation of Meda in fat depots leading to Chalatra of the various organs, Kshudrashwasa, Angagauravata and other various signs and symptoms.

Classification of Sthaulya: For the purpose of diagnosis, prognosis and easy management disease should be classified as per severity as well as chronicity. Hence the classification of Sthaulya is essential, but there is no such classification found in our classical texts. AshtangaSamgraha, Ashtanga Hridaya and Sharangadhara have thrown little light regarding classification of Sthaulya as mentioned below;

In **AS.Su** 24/13-16 and **AH.Su** 14/14 three types of Sthaulya i.e. Hina, Madhya and Adhika have been described for better management while narrating the indication of Langhana Upakrama. As per Charaka, Vamana is contraindicated in Ati-Sthaulya (Ch.Vi 2/8). Sushruta has given contraindication of Vamana in Sthaulya, while it is indicated for Medoroga (Su.Chi. 33/14-18) and Sharangadhara also accepted the view of Sushruta. From the above references Sthaulya can be correlated with different types of obesity;

- 1) **Hina Sthaulya** (over weight/obese):- BMI = 25 kg/Sq.mts to 29.9 kg/sq.mts. Without any complications or secondary diseases with less than 4 undesirable effects. Duration of less than 1 year.
- 2) **Madhya Sthaulya** (moderately obese/ Class 1 & 2) BMI = 30 kg/Sq.mts to 34.9 kg/sq.mts. With least complications and secondary diseases with less than 8 undesirable effects. Duration of 1 to 5 years.
- 3) **Atisthauilya** (morbid obese/ Severe obese):- BMI > 40 kg/Sq.mts. With systemic complications or secondary diseases with all the 8 undesirable effects. Duration of more than 5 years.

According to modern science obesity has been described in many different types accordingly;

- 1) **On basis of onset:**
 - a) Insidious
 - b) Gradual
- 2) **On basis of severity:**
 - a) Mild
 - b) Moderate
 - c) Severe
- 3) **On basis of clinical condition:**
 - a) Enviably
 - b) Regal
 - c) Pitiably.
- 4) **On basis of BMI:**
 - a) Overweight
 - b) Class-1
 - c) Class-2
 - d) Severe.
- 5) **On basis of etiological factors:**
 - a) Physiological: Observed in puberty and pregnancy
 - b) Pathological: i. Exogenous: caused by overeating. ii. Endogenous: caused due to endocrine glands- Hypothyroidism, Cushing's syndrome, Hypothalamic, Hyperinsulinism, Polycystic ovarian disease.

- c) Idiopathic: where no cause is detected.
- 6) **On basis of etiological factors:**
- Generalized: Usually seen in exogenous obesity
 - Centralttype: Involving trunk and neck.
 - Superiortype: Involving face, neck, arm and upper part of trunk.
 - Inferiortype: Involving lower part of trunk & legs with wasting of muscles in upper half.
 - Girdle type: Involving hip, buttocks & abdomen.
 - Breaches type: Involving only buttocks.
 - Lypomatoustype: Localized deposits of fats over the body associated with tenderness and pain over fatty lumps.

On basis of **histopathology**: - a) Hyperplastic b) Hypertrophic.

Regarding the differential diagnosis of the disease, Sthaulya can be easily spotted by just DarshanaPariksha. In the disease Sthaulya, Tikshnagni is occurs. Here, Jatharagni is found in excessive condition whereas Medodhatvagni is found in Manda condition. It is due to Avarana of Vayu in Kostha. So person indulges more food, which produce excessive Meda and vitiated cycle go on. This cycle is broken (Samprapti Vighatana) by Katu-Rasa, Ushna-Virya Pradhana & Laghu Gunatmaka Ahara Dravyas used in the-“Pathyakara Ahara” which decreases Meda by its Lekhana, Shoshana and Kaphanashaka properties. The “Pathyakara Vihara” caused a great deal of difference in the Lakshanas of Sweda-Daurgandhya, Chalatra in various parts of the body as well as helped in increasing the strength and stamina of the patients.

UPADRAVA: These Upadravas of Sthaulya have been presented in the table.

Upadrava	Su	A.S.	A.H.	M.N.	B.P.
AmaRoga	-	-	+	-	-
Apachi	-	-	+	-	+
Arsha	-	+	+	-	+
Atisara	-	-	-	-	+
Bhagandara	+	+	+	+	+
Jvara	+	+	+	+	+
Jantuvaha (parasiticdisease)	-	-	-	-	+
Kamala	-	-	-	-	+
Kasa	-	-	+	-	-
Kshudha	-	-	+	-	+
Mutrakrichhata	-	-	+	-	-
Prameha	-	+	+	-	+
Pramehapidika	+	+	-	+	-
Shleepada	-	-	-	-	+
Sanyasa (coma)	-	-	+	-	-
UdaraRoga	-	+	+	-	-
Urustambha	-	+	-	-	-
VataVikara	+	-	-	+	-
Visarpa	-	-	-	-	+
Vridhhi	+	+	-	+	-

After thorough and conventional analysis these Upadravas can be subdivided into following pattern.

Upadravas due to Agni Vikriti :-Upadravas like Ajirna, Atisara, Arsa, UdaraRoga etc. can emerged due to malfunctioning of Agni and formation of Ama.

Upadravas due to MedaVikriti: Granthi, Arbuda, Galganda, Vriddhi etc. disorders resulting due to vitiation of Meda can be taken as upadravas of Sthaulya. Granthi and Vrana are narrated as symptoms of Medogata Vata (Su.Ni. 1/26).Daha, MedojaGranthi and Vamana are the symptoms of Medogata Pitta which can manifest as Upadravas in patients of Sthaulya (AS.Su.19/26).

Upadravas due to Avarana: Jvara, Urustambha, Vatavyadhi etc. Upadravas may occur due to obstruction of Vata by Meda, in patients of Sthaulya.

Due to Svedabadha :-Due to Svedabadha and ignorance of personal hygiene, BahyaKrimi can affect. So, Jantavah (Parasitic disease) has been mentioned as Upadrava of Sthaulya. Occurrence of Kushtha by BahyaKrimi is well known. Hence, Jantavah and Kushtha like complications may occur due to Swedabadha and vitiated Meda.

Due to Pranavikriti and OjaDushti: Obese persons are more susceptible of Svasa, Kasa, Sanyasalike Updravas due to Pranavikriti and Ojadushti. Sanyas may occur due to Dushti of Prana and Oja caused by excessive formation of Ama. We may take Sanyas as coma or syncope and after CHDand CVA coma is observed. CHD and CVA both are more common complications of obesity.

Complications of Obesity: In the presence of overweight, there is an increased tendency to develop a variety of disease which are all classified in following mentioned systems.

Cardio vascular system:

- Hypertension
- Coronary Heart disease
- Myocardial infarction
- Left ventricular hypertrophy
- Generalized Atherosclerosis
- Peripheral vascular disease
- Atheroma
- Premature cardiovascular death.

Respiratory system:

- Chronic bronchitis
- Hypoxaemia
- Alveolar hypoventilation
- Obesity hypoventilation syndrome
- Pulmonary hypertension
- Pulmonary embolism
- Obstructive sleep apnoea

Gastro Intestinal system:

- Gall stone
- Hiatus hernia
- Cholecystitis
- Pancreatitis
- Dyspepsia
- Diverticulosis of colon
- Reflux oesophagitis

Endocrine and Metabolic system:

- Diabetes mellitus
- Hyperlipidemia
- Hypercholesterolemia

- (d) Fatty liver
- (e) Gout
- (f) Polycystic ovarian syndrome

Musculo Skeletal:- (a) Osteoarthritis (b) Backache

Skin:

- (a) Ulceration
- (b) Fungal infection
- (c) Erythema intertigo
- (d) AcanthosisNigricans

Miscellaneous:

- (a) Varicose Veins
- (b) Delayed wound healing
- (c) Technical difficulty in surgery
- (d) Risk in general Anaesthesia

Obesity and its associated risks:

- 1) Insulin Resistance and Syndrome X
- 2) Diabetes Mellitus
- 3) Hypertension
- 4) Cardiovascular Disease
- 5) Blood Lipids
- 6) Respiratory Problems
- 7) Venous circulatory disease
- 8) Cancer
- 9) Gastrointestinal Disease
- 10) Arthritis
- 11) Skin

Sadhya-Sadhyata

Charaka has mentioned in Chi. 6/57 bad prognosis for Sahaja (hereditary) disease. Hence Sahaja Sthaulya can be considered as Asadhya. As per the enumeration of Vagbhat (AH. Chi. 22/5) Medogata diseases are curable only in uncomplicated patients with more bala and less chronicity. So, Vagbhat has mentioned Sthaulya as Asadhya Vyadhi due to its relapsing and challenging nature. Sudden drastic weight reduction is considered as Arishta (A.H. Sa. 5/12). Yogaratnakar has clarified that sudden weight loss or gain could be fatal within six months. Therefore Sadhyasadhya of Sthaulya can be constructed on the basis of general principles of Sadhyasadhya depicted in Ayurvedic Texts (Ch. Ni. 8/33-35) which are as below.

- **Sukhasadhya:** Jatotar Hina Sthaulya having duration of 1 to 5 years, without any complications or secondary disease, can be considered as Sukhasadhya.
- **Kricchasadhya:** Jatotara Madhyama Sthaulya having duration of 5 to 10 years with least complications but without secondary diseases can be considered as KricchaSadhya.
- **Asadhya:-**Sahaja Sthaulya is Asadhya. JatotarAdhika Sthaulya having duration of more than 10 years, in the presence of complication and secondary diseases can be considered as Asadhya.

4. Discussion and Conclusion

Kapha Dosha Dushti, Medovaha and Rasavaha Srotodushti, which were in accordance to pathogenesis of Sthaulya. Sthaulya is a predominant metabolic disorder, which is described by Charaka in Ashtaunindita Purusha. Sthaulya is

a Dushya Dominant Vyadhi. Nidanans of Sthaulya mentioned in classics are now changing. Increasing stress, faulty dietary habits and decreased awareness regarding exercise are becoming the prominent causative factors for Sthaulya. Kapha Prakrti persons were found more prone to Sthaulya so they should be advised proper diet regimens and exercise. In condition of Medo-Dhatvagni Mandya which leads to excessive formation of improper Meda-Dhatu leading to Sthaulya. So NidanaParivarjana has always proved to be an effective method to manage and treat patients suffering from Sthaulya .The basic emphasis is laid on avoiding 'Hetu-Sevana' and regulating the lifestyle of an individual which in a way will help in the Pachan of VikrutMeda (fats) and thus enhance the Poshana of other Dhatus to maintain the body equilibrium or establish Swasthya.

In the different Hetus mentioned in different Ayurveda Samhitas "Beejaswabhat" Hetu is mentioned lastly, but more importance is given to dietary habits (Ahara) and sedentary lifestyle (Vihara) which is increasing at a rapid rate in today's biochemical world. Various research studies have found out that there is an increased prevalence of obesity in young growing adults in developed countries as they spend hrs. Before T.V enjoying their breakfast, lunch and meals, providing one more Hetu of Adyashana mentioned in texts and it put forth's the importance of "Asthtau-Aharavidhi-Viseshayatane".

As we see Due to all these factors Acharyas have described Sthaulya as hard to cure, rather its management is "Chikitsaupkram Virodhi". Hence in Ayurveda as well as according to modern science the control of Sthaulya achieved by lifestyle control and dietary advice have proven more effective as all other interventions by use of medicines have proven more effective to reduce weight in well conducted studies, but also have shown to ameliorate cardiovascular risk factors.

So Nidana Parivarjana has always proved to be an effective method to manage and treat patients suffering from Sthaulya .The basic emphasis is laid on avoiding 'Hetu-Sevana' and regulating the lifestyle of an individual which in a way will help in the Pachan of VikrutMeda (fats) and thus enhance the Poshana of other Dhatus to maintain the body equilibrium or establish Swasthya.

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