A Review on Ayurvedic Niidanatmak 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

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-Dhatvagni 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 Santarpananjanya 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, Atithula 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 Harsanityatva 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 Chalatva of the various organs, Kshudrashswasa, 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 MamshaDhatu 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 > 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 “Dhatawagnimandya”. Sthaulya is considered as the physical condition of the body (Su.su 35/40), result of vitiated MedoDosha (Su.su 24/13), as symptom of disrupt MedovahaStrotasa (Su.sha.9/12) and a Rasa
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) Aharatmaka & Ashtanga Hridaya: VridhhaVagabhata and Vagabhata have elaborated aetiopathogenesis of Sthaulya on basis of formation of Dhatus. 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 (Aharthaalya) (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.

Aharatmaka Nidana

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

Viharatmakaniadana

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Viharatmaka Nidana (Lifestyle causes )</th>
<th>CH.</th>
<th>SU.</th>
<th>AS.</th>
<th>AH.</th>
<th>MN</th>
<th>BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Ayayama (Lack of physical exercise)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>02.</td>
<td>Ayayaa (Lack of sexual activity)</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>03.</td>
<td>Divaswap (Day’s sleep)</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>04.</td>
<td>Asana Sukhath Directed sitting</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
lifestyle, a person has reduced his physical activity, which aggravates Kapha and plays a major role for the increase of MedaDhatu. Hence Ahararasa plays a major role for the increase of Meda Dhatu in Sthaulya. So Acharya Sushruta as mentioned all AharatmakaiNidana 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; Arshanityatvata 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 Charaka Samhita in which there is just increased Jatharaagni which causes maximum ingestion and leads to maximum absorption of Prithvi and Jala Mahabhuta 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.

The pathogenesis of Sthaulya, due to MedaDhatvagniMandya there is excessive accumulation of fat that leads to obstruction of Medovaha Srotas. Due to this there is Vimargagaman of VataDosh. 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 AharatmakaiNidana 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; Arshanityatvata 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 Charaka Samhita in which there is just increased Jatharaagni which causes maximum ingestion and leads to maximum absorption of Prithvi and Jala Mahabhuta 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 Medovahasrototo Dusti Lakshanas which are also mentioned as Purvarupa of Prameha (Ch.Su. 28/18). So, Shleshma Sanchya and Medodusti Lakshana related Purvarupa of Prameha and MedovahaSrotodusti Lakshanas described by Acharyas can be considered as Purvarupa of Sthaulya. The symptoms related with MedaDhatu leads to Sanchaya of Ama which ultimately increases the Jatharagni which causes maximum ingestion and leads to maximum absorption of Prithvi and Jala Mahabhuta 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.

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

1. Ayusohrasa
2. Javoparodha
3. KricchaVyavaya
4. Daubalya
5. Daugandhya
6. Svedabadhya
7. Khushhatimatrata
8. PipasaAtiyoga.

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

### Manipak Nidana

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Manipak Nidana</th>
<th>CH.</th>
<th>SU.</th>
<th>AS.</th>
<th>AH.</th>
<th>MN.</th>
<th>BP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Harshanityatvata (uninterrupted cherish fullness)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>02</td>
<td>Achintanat (lack of anxiety)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>03</td>
<td>Manasonivritti (relaxation from tension)</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>04</td>
<td>Priyadarshana (observation of beloved things)</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>05</td>
<td>Saukhyaena</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Samprapti Ghatakas:

- Udabhavasthana - Amasaya
- Sanchar - Rasayani
- Adhisthana - Whole body specifically Udara, Sphika, Stana
- Vyakti - Whole body
- Dosha - Tridosha, Samana-Vayu, Apana-Vayu, Vyan-Vayu, Pachak Pitta, Kledakakapha
- Dushya - Rasa and Meda
- Srotasa - Annava, Rasavaha, Mamsavaha, Medovaha
- Srotodushthi - Sanga, Vimargagaman, Avarana
- Agnimandyaka - AtiBhojana, Madhura, Snidgda 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

05. Swapnaprasangata (Excessive sleep) + - + - - -
06. GandhamalamuSevanat (use of perfumes and garlands) + - + - - -
07. BhojanottaraSnama (Bath after meals) + - - - - -
08. BhojanottaraNidra (Sleeping after meals) - - - - - +
09. BhojanottaraAushadhiSevanam (Drugs after meals) - - + - - -
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 to 10 are agreed by most of the Acharyas. 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 Chalativa of the various organs, Kshudrashwas, 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 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) Atisthaulya (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) Enviable
   b) Regal
   c) Pitable.
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
c) Idiopathic: where no cause is detected.

6) On basis of etiological factors:
   a) Generalized: Usually seen in exogenous obesity
   b) Centralitype: Involving trunk and neck.
   c) Superiortype: Involving face, neck, arm and upper part of trunk.
   d) Inferiortype: Involving lower part of trunk & legs with wasting of muscles in upper half.
   e) Girdle type: Involving hip, buttocks & abdomen.
   f) Breaches type: Involving only buttocks.
   g) Lypomatoustype: Localized deposits of fats overthe body associated with tenderness and pain over fatty lumps.

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

Regarding the differential diagnosis of the disease, Stahulya can be easily spotted by just DarshanaPariksha. In the disease Stahulya, Tikshnagni is occurs. Here, Jatharagni is found in excessive condition whereas Medodhatvagni is found in Manda condition. It is due to Avarana of Vata in Kostha. So person indulges more food, which produce excessive Meda and vitiated cycle go on. This cycle is broken (Samprapti dushti) by Katu-Rasa, Ushna-Viryapradhana & Laghu Gunatmaka Ahara Dravyas used in the—

Pathyakara Ahara” which decreases Meda by its Lekhana, Shoshana and Kaphanshaka properties. The “Pathyakara Vihara” caused a great deal of difference in the Lakshanas of Sweda-Daurogadnya, Chalatva in various parts of the body as well as helped in increasing the strength and stamina of the patients.

UPADRAVA: These Upadras of Stahulya have been presented in the table.

<table>
<thead>
<tr>
<th>Upadrava</th>
<th>Su A.S.</th>
<th>A.H.</th>
<th>M.N.</th>
<th>B.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AmaRoga</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Apachi</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Arsha</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Atisara</td>
<td>- -</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Bhagandara</td>
<td>+ +</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Jvāra</td>
<td>+ +</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Jantuvaha (parasiticdisease)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Kamala</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Kasa</td>
<td>- -</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Kshudha</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Mutrakrichhata</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Prameha</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Pramehapsidika</td>
<td>+ +</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Shleepada</td>
<td>- -</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Sanyasa (coma)</td>
<td>- -</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>UdaraRoga</td>
<td>- +</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Urustambha</td>
<td>- +</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>VataVikara</td>
<td>+ -</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Visarpa</td>
<td>- -</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Vridhhi</td>
<td>+ +</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
</tbody>
</table>

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

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

Upadras due to MedaVikriti: Granthi, Arbuda, Galganda, Vridhdi etc. disorders resulting due to vitiation of Meda can be taken as upadras of Stahulya. Granthi and Vrana are narrated as symptoms of Medoga Vata (Su.Ni. 1/26).Daha, MedojaGranthi and Vamana are the symptoms ofMedoga Pitta which can manifest as Upadras in patients of Stahulya (A.S.Su.19/26).

Upadras due to Avarana: Jvāra, Urustambha, Vatavyadhi etc. Upadras may occur due to obstruction of Vata by Meda, in patients of Stahulya.

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

Due to Pranavikriti and OjaDushti: Obese persons are more susceptible of Svasa, Kasa, Sanyaslike Upadravas 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 increasedtendency to develop a variety of disease which are all classified in following mentioned systems.

Cardio vascular system:
(a) Hypertension
(b) Coronary Heart disease
(c) Myocardial infarction
(d) Left ventricular hypertrophy
(e) Generalized Atherosclerosis
(f) Peripheral vascular disease
(g) Atheroma
(h) Premature cardiovascular death.

Respiratory system:
(a) Chronic bronchitis
(b) Hypoxaemia
(c) Alveolar hypoventilation
(d) Obesity hypoventilation syndrome
(e) Pulmonary hypertension
(f) Pulmonary embolism
(g) Obstructive sleep apnoea

Gastro Intestinal system:
(a) Gall stone
(b) Hiatus hernia
(c) Cholecystitis
(d) Pancreatitis
(e) Dyspepsia
(f) Diverticulosis of colon
(g) Reflux oesophagitis

Endocrine and Metabolic system:
(a) Diabetes mellitus
(b) Hyperlipidemia
(c) Hypercholesterolemia
described by Charaka in Ashtaunindita

Sthaulya is a predominant metabolic disorder, which is

which were in accordance to

Kapha

4.

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

Skin:

(a) Ulceration
(b) Fungal infection
(c) Erythema intertigo
(d) AcnathosisNigricans

Muscloskeletal:

Sthaulya can be constructed on the basis of general

KricchaSadhya.

Asadhya:

Kricchasadhya:

Sahaja Sthaulya is Asadhya. JatotarAd

35) which are as below.

Sukhasadhy: Jatator Hina Shthaulya having duration of 1
to 5 years, without any complications or secondary
disease, can be considered as Sukhasadhya.

Kricchasadhy: Jatotara Madhyama Shthaulya having
duration of 5 to 10 years with least complications but
without secondary diseases can be considered as
KricchaSadhya.

Asadhyas: Sahaja Shthaulya is Asadhy. JatatorAdhika
Shthaulya having duration of more than 10 years, in the
presence of complication and secondary diseases can be
considered as Asadhy.

4. Discussion and Conclusion

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

a Dushya Dominant Vyadhi. Nidanas of Shthaulya mentioned
in classics are now changing. Increasing stress, faulty
dietary habits and decreased awareness regarding exercise
are becoming the prominent causative factors for Shthaulya.
Kapha Prakri persons were found more prone to Shthaulya
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
Shthaulya. So NidanaParivarjana has always proved to be an
effective method to manage and treat patients suffering from
Shthaulya .The basic emphasis is laid on avoiding ‘Hetu-
Sevana’ and regulating the lifestyle of an individual which
in a way will help in the Puchan of VikrutMeda (fats) and thus
enhance the Poshana of other Dhatu to maintain the body
equilibrium or establish Swasthya.

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

In the different Hetus mentioned in different Ayurveda
Samhitas “Beejasawhavat” 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 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 Aydshana
mentioned in texts and it put forth’s the importance of
“Ashttau-Aharavidhi-Visheshayatane”.

As we see Due to all these factors Acharyas have described
Shthaulya as hard to cure, rather its management is
“Chikitsaupkram asadhya” hence in Ayurveda as well as
according to modern science the control of Shthaulya
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 Shthaulya
.
The basic emphasis is laid on avoiding ‘Hetu-Sevana’
and regulating the lifestyle of an individual which in a way
will help in the Puchan of VikrutMeda (fats) and thus enhance
the Poshana of other Dhatu to maintain the body
equilibrium or establish Swasthya.

References

MotilalBanarasidas,Delhi, 1976.
[7] CharakaSamhita – Ayurveda Dipika and
JalpakalpataruTika.
[8] CharakaSamhita (Eng.) – R. K. Sharma and Bhagwan
Dash.

www.ijsr.net
Licensed Under Creative Commons Attribution CC BY
[16] Principles of Internal Medicine Harrison.
[18] Rakel – Conn’s current therapy.
[21] Clinical Nutrition - Dr. Kirti C. Patel, Dr. Nitin M. Rathod