

Ayurveda and *Sthaulya* (obesity) : a review Vinod S.Koravi^{*1}, M. M. Godbole²

1. M. D. (Swasthvritta), Ph. D. (Scholar), Associate Professor,

2. Guide, Dean & Professor,

Dept. of Swasthvritta, Yashawant Ayurved College, Kodoli, Kolhapur, Maharashtra, India *Corresponding Author: <u>vinod4ursmile@gmail.com</u>

ABSTRACT -

Obesity is the complex, multifactorial type of nutritional metabolic disease. occurs due to imbalance between intake of energy and its expenditure resulting in positive energy balance, which is characterized by the abnormal growth of the adipose tissue, resulting in an increase in the body weight to the extent of 20% or more of the standard weight for the person's age, sex and height. There are more than 1 billion overweight adults and of them, at least 300 million are obese. Prevalence of overweight and obesity is increasing worldwide at an alarming rate developed and developing in both countries. Obesity is normally caused by a sedentary lifestyle. Till now no perfect solution is available for its cure, so its study at different prevention levels is necessary.In present review article etiopathology of sthaulya, its sign & symptoms, preventive methods like nidan parivarjan, dinacharva. therapeutic management along with medicine, diet, apathya, nonpharmacological pathya methods like exercise and yogic krivas have been studied in detail. Ayurveda being a holistic health science constitutes preventive aspects as well as treatment aspects of disease *Sthaulya*. The preventive aspects of obesity have been taken under the heading *Swasthavritta*.

Keywords: *Sthaulya*, Prevention, *Nidan parivarjan*, *Pathya-Apathya*, *Vyayam*, *yogic kriyas*

INTRODUCTION-

In India obesity is emerging as an important health problem, paradoxically co-existing with significant malnutrition prevailing in different sections (classes) of the population. In today's scenario, food is plenty and majority of the world's regularly, population overeats with resultant fat storage. Sthaulya is included under eight undesirable conditions(AshtauNindita),Shleshma

Nanatmaja, Santarpana Nimittaja, Atinindita, AtiBruhmana Nimit- taja, and Bahu Dosha Janita Vikara. More over Sushruta has given emphasis on metabolic disturbances (Dhatvaagnimandya) in the etiopathogenesis of Sthaulya.⁷ The patient of Sthaulya exhibits very strange phenomenon. Their appetite is excessive⁸ and whatever they eat is quickly digested, which indicates hyper- functioning of the Jatharaagni. Besides this, the patient suffers from laziness, may be due to under supply of energy, which may be due to hypo-functioning of Bhutaagni. Further Dhatvaagni also seems to be disturbed, as in Sthaulya patient mainly Medo-Dhatu is formed and there is deficiency of other Dhatu.⁹ Hence, it can be inferred that in Sthau- lya, Jatharaagni is Tikshna, Bhutaagni is Manda and Dhatvaagni is disturbed in their respective functions. The Obesity is a physical state where Hypertension, Osteoarthritis, Diabetes Mellitus, Cardio Vascular accidents, impotency and manv other grave complications frequently converge. Many institutions and Medical schools are making efforts to find a perfect remedy for this burning problem.

MATERIAL AND METHODS

Literature regarding obesity is reviewed from various classical texts of Ayurveda (Samhitas), research journals, web sites and from western medical books and prevention levels of diseases mentioned in community medicine sci- ence in context with obesity are correlated with *Ayurvedic Swasthavritta* with reference to *sthaulya* (Obesity). Data has been collected. Matter is also collected regarding the *pathya Apathya* and *Vyayam*, *yoga* in Sthaulya and all Compiled matter is reorganized and criti- cally analyzed for the discussion and trial has been made to draw conclusions

Problem Magnitude:

According to the Centre for Disease Control and Prevention (CDC), more than 72 million adults are obese and no state has an obesity rate less than 15 % - the national goal. Among U.S. adults, obesity has ballooned exponentially from forty-six percent to sixty-four per- cent of the population between 1980 and 2000. Etymology (Vyutpatti) of Word Sthaulya The word Sthaulya is delivered from root "Sthu" with suffix "Ach", which stands probably for thick or solid or strong or big or bulky. According to Vachaspatyam, the word Sthaulya means heaviness of the body.10 Ac- cording to Amarakosha, it stands for exces- sive growth of the body.11 As per He- machandra, Sthaulya indicates the state of over nutrition of body or dullness of intellect. According to Kautilya, the word "Sthulata" means largeness or bigness or bulkiness or stoutness of body.

NIRUKTI OF STHAULYA:

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".12

Definition (Vyakhya) of Sthaulya

Sthula is defined as a person, "who on account of the inordinate increase of fat and flesh, is disfigured with pendulous, buttocks, belly and breasts and whose increase bulk is not matched by a corresponding increase in energy".13Sthaulya can be correlated to obesity. Excess deposition of adipose tissue is obesity. A recent National Institute of Health consensus conference defined obesity as BMI

> 27 kg / m². Now a day's obesity is defined as BMI > 25 kg / m².

BMI = Actual weight in kg. / (Height in metre) 2

According to Parks, obesity may be defined as an abnormal growth of the

adipose tissue. It is in three ways

- Enlargement of fat cell in size i.e. Hypertrophic obesity.
- Increase in the number of fat cell i.e. Hyperplastic obesity.
- ➤ A combination of both.

Nidana (etiological Factors) of Sthaulya Various causative factors of Sthaulya related to different aspects of life that affect the body from outside and inside are described in clas- sical texts of Ayurveda. The hereditary (Beeja Dosha), dietetic, regimen and psychological factors cause Sthaulya as per Charaka Sam- hita14.

Aetio-pathogenesis of Sthaulya:

All the *Nidana* described by various *Acharyas* for *Medoroga* can be classified under four broad categories as follows15,16

1) Aharaj Nidana (dietary):

Madhura Aharasevana (excessive sweat in- take), Guru Aharasevana (heavy digestible food),Santarpana, Adhyashan, Snigdha Aharasevana, Navanna sevana (new seed), Nava Madyasevana (new alcohol), Mamsa Sevana, (Non vegetarian), Dadhi

Sevana, (yoghurt), Ikshu Vikara Sevana, Guda Vikara Sevana etc. Viharaj Nidana (life style related): Avyavaya (lack of sexual life), Avyayama (lack of physical exercise), Diwaswaap (day time sleep), Swapnaprasangat (long sleep), Gandhamalyanusevana (using perfumes, garlands). *Bhojanottara* nidra (sleeping after meal), Asana Sukham (excessive sitting), Bho- janottar snaana (bathing after taking the meal) etc.

2) Manas Nidan (Psychological factors):

Achintanat (lack of tension), Harshnityatvata (uninterrupted cheerfulness), Manasonivritti (mental relaxation), Priyadarshana (watching of beloved), Saukhyena (complete happiness) etc.

3) Anya Nidana (other causative factors): Amarasa (free radicals), Bijadoshaswabhava (hereditary), Snigdh Madhur Basti Sevana (administration of Unctuous & Sweet enema), Snigdha Udvartana (unctuous unction), Tailabhyanga (oil massage).

The causes of obesity are distributed in three main groups according to modern medicine.

Exogenous: Where the chief causes are exces- sive appetite or over eating, dietary habits, drinking habits and smoking.

Endogenous: Where endocrine factors are also important.

Miscellaneous: A number of factors are known to be associated with obesity like age, sex, occupation, socioeconomic factors, psy- chogenic factor, environment factors, consti- tution, drugs, hypothalamic trauma, physical activity, caloric balance and heredity.

The etiological factors described by Acharyas can be categorized broadly under 4 categories-

- 1. Guru, Madhur, Snigdha and Sheeta Guna predominant diet.
- 2. Avyayaam, Avyavaya, Achintana, etc are the Khavaigunyakara (Srotodushtikara) entities.
- 3. Atibhojana, Atimadhura, Atisnigdha etc are the Agnimandyakara entities.
- 4. Beejadosha.

SAMPRAPTI:

In Samprapti (pathogenesis) of Sthaulya, all the three Doshas are vitiated especially Kle- daka Kapha, Pachaka Pitta, Samana and Vyana Vayu are the responsible factors for proper digestion and metabolism of food at the level of alimentary tract and body tissue. Dushti of these Tri-Dosha components results in indigestion metabolic deformity and forma- tion of Ama at tissue level as well as alimentary tract. Sthaulya is a dushya dominant disorder. Due to excess Agni more Annarasa is produced and the quality of diet i.e. Guru, Madhur, Snigdha, Sheeta Guna dominance Dhatu Poshakansha is formed in more quantity. At start the Rasagata, Raktagata and Mamsagata Sneha also increase production of Medodhatu. But due to medodhatwagni- mandya this condition worsens and nourishment of further dhatus doesn't happen prop- erly. Due to binge eating, rasa, rakt, mamsa-gat sneha tends to increase. Patient shows the symptoms of *rasavriddhi and kaphavriddhi. eg. angagaurav, alasya, tandra* and *nidradhi- kya. Medadhatu* gets increase with physical signs like *chalsphik-udar-stana, kshudra shwas, swedadhikya* etc. and finally lands into *Sthaulya.*

SAMPRAPTI GHATAKA:

Table 1: The factors playing vital role in Samprapti of Sthaulya

Dosha	Kapha – Kledaka, Pitta - Pachaka, Vata - Samana and Vyana.	
Dushya	Rasa and Meda Dhatu	
Agni	Jatharagni, Bhutagni, Rasa and Medadhatvagni	
Srotasa	Medovaha, Mamsa, Rasavaha, Swedavaha Srotasa	
Srotodushti	Sanga (Margavarodha) ¹	
Adhisthana	Sarvanga ⁷	
Udbhavasthana	Amashaya	
Prasara	Rasayani	
Roga Marga	Bahya	
Vyakti Sthana	Sarvanga specifically Udara, Sphika, Stana and Gala pradesha.	

PURVARUPA OF STHAULYA

There is no any clear evidence of *Purvarupa* of *Sthaulya* in our classics. As per basic prin- ciples of Charaka, the weak manifestation of *lakshana* should be supposed as *Purva rupa* of the corresponding disease.¹⁸ Based on this view, features of *Kapha vriddhi* like *Alasya, Angashaithilya, Madhurasyata, Atinidra,*

Atipipasa etc. may be considered as Purva-rupa.

ASHTAUDOSHA OF STHULA

Acharya Charaka has described eight despicable personalities (*Doshas*) of obese which are as follows19:

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)

LAKSHANAS OF STHAULYA

According to different Acharyas, Lakshanas of Sthaulya are Chala Sphika (Excess fat on buttocks), Chala Udara (Excess fat on ab- domen), Chala Stana (Excess fat on chest), Ayatha Upachaya (Disproportionate body)²⁰, Anutsaha (Lack of enthusiasm), Kshudra shwasa (Dyspnoea), Nidradhikya (Excessive sleep), Gatrasada (Numbness of limbs), Gadgadadhvani (Slurred speech), Krathana (Sudden catch of breath), Alpaprana (Less energy), Sarvakriyasu Asamarthata (Incapa- ble of doing any work), Alpavyavaya (Lack of sexual urge), Kasa (Cough), Shvasa (Asthma), Snigdhangata (Unctousness in body), Udaraparshva vriddhi (Excess accumulation on abdomen and chest), Alasya (Laziness), Ama (Free radicals), Moha (Delu- sion), Saukumarata (Cannot

sustain diffi- culty), *Anga shaithilya* (Looseness in parts) and *Alpabala* (Lack of power).

Signs of Obesity

5

- Weight 20 % increased above desired weight.
- B.M.I. above 30 in males and above
- 28.6 in females are called obese.
- Skin fold thickness Obesity is indicated by a reading above 20 mm in a man, and above 28 mm in a woman.
- Waist hip ratio When W.H.R. is above
- 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.
- In obese person possibility of fungal in- fection is greater in the skin fold areas.
- In fatty women menstrual disturbance and sterility is also observed.

Symptoms of Obesity

General lassitude, day time hypersomalism and dyspnoea on exertion are the main symp- toms of obesity

Pathogenesis of Obesity:

Obesity is a state of excessive accumulation of adipose tissue; it is difficult to draw sharp demarcating line between the physiological and pathological states. Obese individuals have an increase in number and / or size of adipose cells which suggests hyperplasia and/or hypertrophy of adipocytes either due to functional demand in particular age or sex or due to increase in energy intake decrease energy expenditure or in influenced by hypotha- lamic, genetic, endocrine, behavioural, psy- chological or iatrogenic component. Adult onset obesity is predominantly characterized by adipose cell hypertrophy with minimum hyperplasia. Apart from the increase in size of normal depots like the tissue subcutaneous the omentum retroperitoneal tissues and epicardium and adipose tissue, the fat may get deposited in the tissues, where it is nor- mally absent. Excessive lipid deposition, di- minished lipid mobilization and diminished, lipid utilization are the three main compo- nents in pathogenesis of Obesity

Classification of Sthaulya:

For diagnosis, prognosis and easy manage- ment of disease classification is essential but no exact classification of Sthaulya is found in the classics. In Ashtanga Hridaya and Ash- tanga Sangraha three types of Sthaulya i.e. Adhika, Madhya and Hina have been men- tioned in the context of indications of Lang- hana upakrama.21

Vagbhata's classification can be correlated with modern as given below -

- 1. Hina Sthaulya (Over weight)
- BMI 25 to 29.90 Kg / m²
- Duration of less than 1 year.
- Without any complications or

secondary diseases

- with less than four undesirable effects
- Madhyam Sthaulya (Obesity Class 1 & 2)
 - BMI 30 to 34.99 kg / m²
 - With least complications without any sec- ondary diseases.
 - With less than 8 undesirable effects.
 - Within duration of 1 to 5 years.
 - Ati Sthaulya (Severe or morbid obese)
 - BMI > 40 kg / m^2
 - With systemic complications or secondary disease.
 - With all eight undesirable effects.
 - With more than 5 years duration.

Sadhya – Asadhyata(Prognosis):

In case of Sthaulya, most of the Acharyas have described bad prognosis Sahaja Sthaulya is considered and untreatable. Charak also empha- sized the fact that the management of Sthaulya is more difficult than Karshya22. As per mod- ern, the prognosis is poor, if untreated it tends to progress. It is easy for an obese person to decrease up to 5 kg of weight, (this accounts for short time success of number of different slimming cures) it is difficult to gain further losses. The researches have shown that it is difficult for the patients to maintain their reduced weight. Upadrava of Sthaulya (Complications)

Even though Acharya Charaka has not de- scribed the Upadravas separately, he mentions that untreated Sthaulya can lead to many dis- eases. Other Acharyas also have mentioned different complications like Prameha (Diabetes), Pramehapidika (Carbuncles), Jvara (Fever), Bhagandara (Fistula), Vidradhi (Ab- scess), Vatavikara (Diseases due to Vata dosha), Udara roga (Ascitis), Urustambha (Stiffness of thigh), Shwasa (Tumour), (Asthma), Apachi Kasa (Cough), Sanyasa (Coma), Kushtha (Skin disorders), Visarpa (Erysipelas). Atisara (Diarrhoea), Arsha (Piles), Shlipada (Filariasis), Kamala (Jaundice), Mutrak- ricchra (Dysurea) and Ajirna of (Indigestion).23 Management Sthaulya

1. NIDANPARIVARJAN

a) AharajaNidanaprivarjan

The base line treatment for sthaulya is to avoid factors (Hetus) which are responsible for the causation of the disease. Nitya langhan ther- apy and langhana even in shisira ritu is ad- vised for obese patients by Vagbhata24. Sthaulya and Karshya depend upon the quality and quantity of Ahararasa. On the basis of Sama- nya Vishesh Siddhanta25 the excessive food consumption of similar substance (Dravya Samanya), similar quality (GunaSamanya) or similar in action (Karma Samanya) results in over production of Dhatu. In the same pattern increased intake of Aharatmaka Nidana which is mentioned above causes over production of Medodhatu.

B) VIHARAJANIDANPARIVARJAN

All the Aharaja Nidana finally decreases physical activity, which increases Kapha and leads accumulation of Meda. Viharaja Nin- dana like Divaswapna having Abhishyandi quality leads to blockage of the micro chan- nels (Srotas) of the body, specifically in Me- dovaha srotas. Moreover, reduced metabolic rate during sleep is a crucial factor in producing excess fat.

C) AUSHADHI PARIVARJAN

Frequent use of Rasayan (Rejuvenating) and Vrushya Dravya (Aphrodisiacs) causes sthau- lya. It has been clear from different research studies that through rectum and large intestinal mucosa amount of nutrients may be absorbed and is assimilated. Hence, over use of Brum- hana and Vrishya Basti may cause Sthaulya. Hence to prevent obesity one should restrict its use.

Table 2: Diet regimen	(pathya apathya) for obese
-----------------------	----------------------------

AHARA VARGA	РАТНҮА	APATHYA
Shuka Dhanya	Yava, Venuyava, kodrava, nivar, Jurna	Godhuma, Navanna, Shali
Shami Dhanya	Mudga, Rajmasha, kulattha, Chanak, masur, Masha, Tila	
	Adhaki	
Shaka Varga	Vruntak, Patrashaka, Patola	Madhurshaka, Kanda
Phala	Kapitha, Jamun, Amalak	Madhurphala
Dravya	Takra, Madhu, Ushnodaka, Til tail, Sarshap	Dugdha, Ikshu Navnit,
	tail, Arishtha	Ghrita Dadhi
	Asava, Jirnamadya	
Mamsa	Rohitmatsya	Anupa, Audaka Gramya

Table 3: Pathya – Apathya Vihara (Physical Regimen)

Pathya	Apathya	
Shrama (Labour)	Sheetala Jala Snana (Cold bath)	
Chintana (Worry)	Swapna Prasanga (Excessive sleep)	
Jagarana (Night awakening)	Divaswapa (Day sleep)	
Vyavaya (Intercourse)	Avyayama (Not exercising)	
Nitya Bhramana (Regular walking)	Avyavaya (Avoiding sex)	
Shoka (Grief)	Sukha Shaiya (Comfortable bed)	
Harshakshaya	Achintana (No worries)	
Krodha (Anger)	Nityaharsha (Always happy)	

- Use of *Madhu* (honey), Spices-Fenugreek, turmeric, cumin, mustard, asafoetida, curry leaves, ginger, black pepper, clove, cinnamon is advised.
- Avoid sweet, sour, salty and oily food as it aggravates *Kaphaand Meda* (Sweet foods means not only sugar containing items but also rice, wheat, pasta, breads, and sweet milk products), Cakes,

cookies, Pastries, Chocolates and other bakery products.

AND

SWASTHAVRITTA

STHAULYA

Swasthavritta has a great strength in prevent- ing Obesity by intervention in its cycle of pathogenesis as early as possible beginning from the avoidance of risk factors of the dis- ease. Measures for prevention of Sthaulya (obesity) can be classified as: It include properly observing Dinacharya and Ritucharya sadavritta, self control and knowledge of various factors affecting health, good habits, avoiding food in excess quantity (Atyashana), apathya aacha- rana, virudhashana, avoiding Diva Swapna (Sleeping in day time), doing regular exercise and many others.

2. Extraordinary measures:

This includes Pramitashana (adequate quan- tity of food), Langhan (fasting), cise. Heavy exer-Ruksa udavartan.(application of dry powder to body), Ratri jagarana (late night work), Atimaithun (excess sexual activity), Adhik Adhayana (excess study), Chinta (wor- ries).Use of certain medicines such Triphala,(Haritaki-Terminalia as chebula, Bibhi- taki-Terminalia belerica, Amalaki-Embelicaofficanalis). Takrarishta, Madhu (Honey), Shunthi, Kshar. Lohabhasma, Nagarmotha rotundus), Shilajit (mineral (cyperus pitch).

The role of Swasthavritta in obesity can be studied at various prevention levels26 i.e. at primordial, primary, secondary and tertiary prevention.

Primordial prevention of Sthaulya (obesity) through Swasthavritta

Primordial prevention is the prevention of oc- currence of risk factors in population groups in which they have not yet appeared. This can be the perfect type of prevention in diseases like Sthaulya and it is achieved through individual and mass education of regular exercise (Vyayam) till the appearance of features of ArdhashaktiVyayam (exercise till increased rate of respiration, perspiration,

feel of fresh- ness) as a part of Dincharya (daily regime). This can be done as cultural practice. Empha- sis has been given in Swasthavritta to Sad- vrutta which includes adaptations of good habits for lifetime to bring lifestyle changes in- cluding diet, exercise and weight reduction. Use of proper dietary habits as per Ashtavidha ahar vidhivisheshayatana²⁷ and Dwadash AshanPravichar²⁸ (eight and twelve dietary rules) from childhood only can be a strong step in preventing obesity at primordial level. Primary prevention of Sthaulya (obesity) through Swasthavritta It is action taken prior to the onset of disease which removes possibility that a disease will ever occur in future life. This group is advised to make certain changes in socio-economic, behavioural, food patterns, habits, sleep cycle and lifestyle. This includes modification in lifestyle as per guidelines of Ayurvedic classi- cal texts such as Sadvritta (good lifestyle practices), non suppression of natural urges, NidanaParivarjana (avoiding causative factors) and so on after recognizing Purvaroopa (early signs) of Sthaulya.

Secondary prevention of Sthaulya (obesity) through Swasthavritta

Secondary prevention involves measures which are taken to stop the progress of a dis- ease at its incipient stage and prevent compli- cation. Such measures which reduce meda and kapha, for example heavy exercise, ruksa udavartana, ratri jagarana, Pramitashana (ade- quate quantity of food), Langhan (fasting), Atimaithun (excess sexual activity)etc. are useful for patients of Sthaulya. Use of certain medicines such as Triphala, Amalki Takrar- ishta, Madhu (Honey), Shunthi, Kshar, Lohabhasma, mustha, Shilajatu. Tertiary prevention of Sthaulya (obesity) through Swasthavritta

It includes all measures that reduce disorders and minimize suffering of the patient due to disease. Ayurveda has restricted role at this level.

Shodhan Chikitsa (Body purificatory meth- ods):

One can use Shodhan upakramas as men-Ayurveda tioned by classics for prevention of sthaulya as a part of swasthavritta. For exam- ple elimination of Kapha dosha in its prakopa kaal (Vitiating time) in Vasant ritu(Spring season). Being a syndromic condition doshasya (Bahu-Lakshana) samshodhana therapy is highly recommended for Sthaulya patients possessing stamina and strength. Ruksa, Usna and Tiksna Basti are also suggested by Charaka. Ruksa Udvartan is the bahya Shodhan (External purificatory Method) indicated for the management of sthaulya.

SHAMANA CHIKITSA:

Rukshana and Langhan can be given for sha- man purpose having Ruksa Guna dominance in them. Alleviation of Vata, Pitta and Kapha especially Saman Vayu, Pachaka pitta and Kledaka kapha along with depletion of me- dodhatu by increasing medodhatvagni is main goal of treatment in Sthaulya. Administration of guru and apatarpana articles which possess additional vata shleshma and medo nashaka properties is considered as an ideal for san- shamana therapy. Pragbhakta i.e intake of medicine before meal is insisted for krushi-karana purpose. It has been further explained by Sharangdhara and advised to take Lekhana drug on empty stomach in early morning and before meal. Acharya Charaka has mentioned Lekhaniya

dashemani29dravyas(a group of 10 drugs), these drugs mainly perform the Lek- hana Karma(scrapping) of excess and abnor- mal Meda, causing weight reduction as well as relief in other signs and symptoms. Rasanjana is mentioned as the best for the treatment of Sthaulya, while Guggulu is mentioned as the best for the disorder of Vata and Medodhatu

Miscellaneous Ayurvedic Drug formula- tions:

In Ashtanga Hridaya Gomutra Haritaki, Rodhrasava, Navaka guggulu, Vardhamana Amruta guggulu. Bhallataka Rasayanaetc. are the compounds mentioned in the management of Sthaulya. Bhava Prakasha has men- tioned the remedies for Medohara purpose, Chavyadi Saktu, Triphaladya Mulak churna, Erandapatra churna. Badaripatra Peya, Dashanga Kshara, guggul, Tryushanadi guggul, Loha Rasayanan, Lauharishta etc.

Prevention of Sthaulya through Yogic Shuddhi kriyas:

"Kunjal kriya" 30 is first mentioned in Hatha Yoga as a type of Antardhauti, which is also known as "Gajakarani" in Hatha Yoga Pradipika. The process Kunjal mainly acts on Amashaya (prime seat of Kapha) and Annavaha Srotas. It rectifies Jatharagni and Dhatugata Ama gets expelled resulting in halting of of Sthaulya. pathogenesis Among ShatkarmaKunjal Kriya is included in Dhau- tikarma. Kunjal Kriya is not a mere stomach cleansing procedure, apart from that, it also has systemic effects. Kunjal Karma has been considered as one of the best treatments for the Kaphaja disorders like Sthaulya.

1. Yoga Asana

Some yogasanas which are found to be pre- ventive in sthaulya are Suryanamaskar (Sun Salutations), Pawan muktasana (Wind Liber- ating Pose), Utthanpadasana (Raised Leg Pose)

Dvichakrikasan (Bicycling), Padvruttasan (Leg rotation), Naukasana (Boat Pose)and Pranayama (breathing exercises).

2. **Shauch** (External hygiene) and Santosh (satisfaction): which are the sub types of Niyam of Ashtang yoga should be taken as guideline in prevention of obesity. Symptoms like Sweda- badha (Excessive sweating), Sweda daurgandhya (Foul smell) can be avoided by shauch (snana). Another thing which is to be kept in mind is that Santosh i.e. one should be happy or satisfied with limited food.

- 3. Dietary rules:
- The dietary rules should be followed strictly like "aharmatra agnibalapekshini" as said by acharya charaka i.e. one should consume food in correspondence with his agni(digestive fire) only.
- Faulty dietary habits like adhyashana, vishamashan and samashan should be avoided.
- Drink enough water before meals only and less water after meals.

CONCLUSION:

Manasika factors along with genetic predispo- sition plays a vital part in occurrence of Sthau- lya. There is no specific treatment for obesity, Yoga therapy, vyayam and proper dietary guidance can play crucial role in prevention of obesity. Obesity occurs more in female than male. Life style modifications as per given in classical texts i.e following dinacharya, ruk- sha udavrtana in context with sthaulya can be

useful in avoiding sthaulya. Rutunusar Shod- hana procedures like vamana in vasanta rutu according to classical methods will definitely help in preventing obesity. Further one can use these preventive guidelines along with some medicinal formulation to combat with obesity.

REFERENCES:

- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Ashtauninditiya Adhyaya, 21/3, edited by Tripathi Brah- manand. Varanasi: Chaukhambha Surbharati Prakashan; 2016, p. 398.
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Maharoga Adhyaya, 20/17, edited by Tripathi Brahmanand. Va- ranasi: Chaukhambha Surbharati Prakashan; 2016; p. 395.
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Santarpaniyam Adhyaya; 23/6, edited by Tripathi Brah- manand. Varanasi: Chaukhambha Surbharati Prakashan; 2016; p. 422.
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Ashtauninditiya Adhyaya; 21/3, edited by Tripathi Brah- manand. Varanasi: Chaukhambha Surbharati Prakashan; 2016;p. 398.
- 5. Agnivesha, Charaka, Dridhabala, Charaka Samhita. Sutrasthana, Langhana Brumhniya Adhyaya; 22/38. edited by Tripathi Brahmanand. Varanasi: Chauk-Surbharati hambha Prakashan: 2016;p. 419.
- 6. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana Chikitsaprabhrutiya Adhyaya; 16/13-

16, edited by Tripathi Brahmanand. Varanasi: Chaukhambha Surbharati Prakashan; 2016; p. 323.

- 7. Sushruta. Sushruta Samhita. Sutrasthana. Dosha Dhatu Mala Kshaya Vriddhi Vijnaniyam Adhyaya 15/32, edited by Vaidya Yadavji Trikamji Acharaya and Narayan Ram Acharaya. Varanasi: Chaukhambha Orientalia; 2007, p.73.
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Ashtauninditiya Adhyaya; 21/5-6, edited by Tripathi Brahmanand. Varanasi: Chaukhambha Surbharati Prakashan; 2016; p. 400.
- Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Ashtauninditiya Adhyaya; 21/4, edited by Tripathi Brah- manand. Varanasi: Chaukhambha Surbharati

Prakashan; 2016; p. 399.

- 10. Shri Taranath Tarak Vaschaspati Bhatta- charya, Vachaspatyam 6/5358, Chauk- hambha Ayurved Pratishthan; Reprint; 2006.
- 11. Amarasimha With Commentary of Bhanuji Diksita, Amarkosha Nanartha Varga-204 Edited With Notes By MM Pandit Shivadatta Dadhimtha.
- 12. Mishra Bramhashankar.
 Bhavaprakasha Vidyotini Tika, Madhya Khanda 39, 11 edition, Varanasi, Chaukhambha Sanskrit Sansthana; 2004.
- 13. Agnivesha, Charaka, Dridhabala, Charaka Samhita, Sutrasthana, Ashtauninditiya Adhyaya, 21/8-9, edited by Tripathi Brahmanand. Varanasi: Chaukhambha Surbharati Prakashan; 2016. p. 401.

Conflict of Interest: Non

Source of funding: Nil

Cite this article:

Ayurveda and Sthaulya (obesity): A review Vinod S.Koravi, M. M. Godbole

Ayurline: International Journal of Research In Indian Medicine 2020;4(3): 01 - 11

E- ISSN: 2456-4435 pg. 11