

Understanding Sthoulya Through Nidan Panchak: An Analytical Ayurvedic Perspective

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ABSTRACT

The first aim of Ayurveda is prevention or maintenance of health for this purpose all acharyas explained multiple ways like dincharya, ritucharya, vyayam, yoga, Pathya pathya etc. Present Era is more challenged with various Lifestyle disorder. Sthoulya is one such Lifestyle disease. Many among the Indian people have started to rely upon the processed food, foods that contains a huge percent of transfer sugars and other unhealthy and artificial ingredients, and other habits like lack of exercise, computer works, no outdoor games etc which causes sthouyaya (obesity). Obesity is considered as the core of many diseases like Diabetes Mellitus, Hypertension etc.

In 2016 more than 1.9 billion adults aged 18 years and older were overweight. Of these 650 million adults were obese. The worldwide prevalence of obesity nearly tripled between 1975 and 2016.

India is currently most susceptible country to the sthoulya due to food habits and life style. Unfavourable modification of life style and food habits that are associated with urbanization are believed to be the most important factors for the development of sthoulya. The prevalence of sthoulya is approximately twice in urban areas than in rural population.

Keywords : Sthoulya, Obesity, Dincharya, Nidan

INTRODUCTION: Ayurveda the science of life, had given much importance to primary and secondary prevention of disease. Acharyas have explained at length the various procedures that are to be implemented under dincharya and ritucharya. These are advocated under a branch Swasthavritta which explain the prevention of disease at different levels.

In Ashta-Nindita Purusha Adhyaya Acharya Charaka comprises one of Eight varieties of Sthaulya. Acharya Charaka listed 8 defects underlying of Sthaulya Purusha, that is - Ayuharsa, Daurbalya, Daurgandhya, Javoparodha, Alpa-vyavayita, Swedabadha, Ati-trisha, Atikshudha.

According to Ayurveda causes of Sthaulya are over eating, Adhyashana, kaphavardhak Ahara- vihara, Avyayama, Divaswapna, Harsha (Achintan) etc. In present era, our life style is completely changing sporadically which results in several diseases. It is due to consumption of fast food, lack of exercise, day to day changeable life style, computer works, table works, watching T. V. and no outdoor gaming etc.

NIDANA OF STHAULYA

According to Acharya Charaka & Sushruta equilibrium of Dosha – Dhatu– Mala is considered as all important factors governing health. The unbalanced Dosha & Mala are termed as disease; whereas this balanced state is health. (Cha.Su.9/4, AH.Su.9/4, A.H.Su.1/20)

Charaka has classified the causative factors of disease into 3 categories:

1. Nija (Internal)

2. Agantuj (External)
3. Manasa (Psychological)

The disease due to external causes eventually leads to internal abnormalities. He also elaborates further that Agantuj (external causes) diseases, in course of time lead to de-arrangement of 3 Dosha thus finally changing the internal factors (on causing internal diseases). (Cha.Su.11/45, Cha.Su.19/7, Cha.Su.20/7)

Acharya Charaka has mentioned the Nidana of Sthaulya analytically in most of them is exogenous types of causes. Endogenous types of causes have been mentioned by Acharya Sushruta & Vagbhatta. Vagbhatta also mentioned Ama as causative factor. Only Charaka has defined Beejdosha as one of the cause of Sthaulya. In context with Sthaulya, exogenous causes are Meda stimulating diet & regimens where as Dosha, Dhatu, Mala & Srotas etc. come under endogenous causes. (Cha.Su.21) All the Nidana (causative factors) mentioned in Ayurvedic classics can be classified into 4 groups –

1. Aharatmaka Nidana
2. Viharatmaka Nidana
3. Manas Nidana

TABLE NO. 1 AHARATMAKA

No.	Aharatmaka Nidana	Cha.	Su.	A.S.	A.H.	M.N.	B.P.	Y.R.
1.	Anupa Rasa Sevan	+	-	-	-	-	-	-
2.	Adhyashana	-	+	-	-	-	-	-
3.	Atisampurana (over eating)	+	-	+	-	-	-	-
4.	Bhojanotara Jala Pana	+	-	+	-	-	+	+
5.	Dadhi Sevan (Excessive use of curd)	+	-	-	-	-	-	-
6.	Guru Ahara Sevan (excessive consumption of food)	+	-	+	-	-	-	-
7.	Guda Vikara Sevan (consumption of jaggery's preparation)	+	-	-	-	-	-	-
8.	Godhum Sevan (Excess use of wheat)	+	-	-	-	-	-	-
9.	Gramya Rasa Sevan	+	-	-	-	-	-	-
10.	Mamsa Sevan (Excessive use of meat)	+	-	+	-	-	-	-
11.	Masha Sevan (Excessive use of Phaseolus mungo)	+	-	-	-	-	-	-
12.	Navanna Sevan (fresh grain)	+	-	-	-	-	-	-
13.	Ikshu Vicar Sevan (sugarcane preparations)	+	-	-	+	-	-	-
14.	Madhura Ahara Sevan (Sweet food)	+	-	+	+	-	+	+
15.	Nava Madya Sevan (fresh alcohol)	+	-	-	-	-	-	-
16.	Shali Sevan (Excess of rice)	+	-	-	-	-	-	-
17.	Sarpi Sevan (Ghee)	+	-	-	+	-	-	-
18.	Payas Vikara Sevan (milk & its preparations)	+	-	+	+	-	-	-
19.	Rasayan sevan	+	-	-	-	-	-	-
20.	Santarpan	+	-	+	+	-	-	-
21.	Sanskrita mamsa	+	-	-	-	-	-	-
22.	Shita Ahara Sevan (excessive intake of cold diet)	+	-	-	-	-	-	-
23.	Vrishya Sevan	+	-	-	-	-	-	-
24.	Snigdha Ahara Sevan (excessive of unctuous food)	+	-	+	+	-	+	+
25.	Shleshmala Ahara Sevan (Kapha increasing food)	+	+	-	-	+	+	+

TABLE NO. 2 VIHARATMAKA NIDANA OF STHAULYA

No.	Viharatmaka Nidana	Cha.	Su.	A.S.	A.H.	M.N.	B.P.	Y.R.
1.	Alpavyavaya (Reduced sex life)	-	+	-	-	+	+	+
2.	Avyavaya (Lack of sex life)	+	+	+	-	+	+	+
3.	Asana Sukha	+	-	+	+	-	-	-
4.	Ayayama (Lack of physical exercise)	+	+	+	-	+	+	+
5.	Divaswapna (Day sleep)	+	+	+	-	+	+	-
6.	Sukha Shayya (Luxurious sitting)	+	-	+	+	-	-	-
7.	Bhojanottar Snana (Bathing after meals)	-	-	-	-	-	+	+
8.	Bhojanottar idra (sleep after meal)	-	-	-	-	-	+	+
9.	Gandhamalyanusevan (use of perfumes & garlands)	+	-	-	-	-	-	-
10.	Swapanaprasangata (excessive sleep)	+	-	+	+	-	-	-

TABLE NO. 3 MANSIKA NIDANA OF STHAULYA

No.	Mansika Nidana	Cha.	Su.	A.S.	A.H.	M.N.	B.P.	Y.R.
1.	Achintanata (lack of anxiety)	+	-	+	+	-	-	-
2.	Harshnityata Vata (uninterrupted cheerfulness)	+	-	+	+	-	-	-
3.	Mansonivriti (lack of tension)	+	-	+	+	-	-	-
4.	Priyadarshana (observation of beloved things)	+	-	-	-	-	-	-
5.	Saukhyena (happiness)	-	-	-	+	-	-	-

TABLE NO. 4 ANYA NIDANA OF STHAULYA

No.	Anya Nidana	Cha.	Su.	A.S.	A.H.	M.N.	B.P.	Y.R.
1.	Amarasa	-	+	+	+	-	+	+
2.	Bijadoshasambha Vata	+	-	-	-	-	-	-
3.	Snigdha Udvartana (Unctuous function)	+	-	-	-	-	-	-
4.	Snigdha Madura Basti Sevan (administration of unctuous & sweet enema)	+	-	+	+	-	-	-
5.	Tailabhyanga (oil massage)	+	-	-	-	-	-	-
6.	Shuklamavaso (wearing white clothes)	+	-	-	-	-	-	-

SAMPRAPTI

The samprapti of Sthaulya has been briefly dealt in all the three major classical text books of Ayurveda. Charaka Samhita has narrated the pathophysiology of Sthaulya by highlighting the process Medasavruta Vata. It states that the set of nidanas increase Medas alone at the cost of other dhatus in vulnerable people. Due to the avarana of vayu by Medas, Vata is specially confined to koshta, resulting in exaggerated speed of digestion. This causes the habit of over eating and repeated intake of food. The major portion of the food thus consumed is ultimately converted into Medas resulting in Sthaulya. The samprapti of all the eight major lakshanas of Sthaulya such as Ayushohrasa javaparodha, is also discussed in Charaka samhita 21chap. The version of Sushruta Samhita regarding the pathophysiology of Sthaulya differs slightly from that of Charaka Samhita. It states that, due to the indulgence of nidanas, there will be formation of annarasa (Amarasa), which is predominantly madhura in nature. The annarasa thus produced circulates all over the body in the state of amavastha itself. As a consequence of this there is an excess production of sneha and Medas. This in turn results in Sthaulya²². Nibandha sangraha vyakhya of Dalhana on Sushruta Samhita elaborates and throws some more light on this process of pathogenesis. The commentary tries to critically analyze how ama is produced in people who are predominant of Medas, though they have teekshnagni. The reasons attributed for amotpatti are Dhatvagnimandya and adhyashana. Even though Medasvi people have teekshnagni the dhatvagnimandya eventually leads to the production

of ama. The ama rasa which is produced due to rasadhatvagnimandya, remains in ama avastha itself in the dhatu poshana krama, still medodhatu upachaya takes place at the cost of rakta and mamsa. In Ashtanga sangraha, the samprapti of Sthaulya is explained as follows; Due to the intake of nidana such as guru ahara, the anna rasa produced is predominantly in amavastha, which mixes up with sleshma which will be adherent or concealed (samleena) in dhatus. The resultant material causes the shlatheekarana of dhatus. As an end result of this process Sthaulya takes place. Indu teeka on Astanga Sangraha adds that the increase of medo dhatu is correspondingly high when compared to other dhatus in dhatu pariposhana karma because of the specific reasons which are favourable for medo vriddhi. Madhava nidana tries to integrate the views of both Charaka Samhita and Sushruta samhitha in formulating the pathophysiology of Sthaulya. Intake of nidanas such as avyayama, divaswapna, sleshma ahara forms the anna rasa which has the predominance of madhura rasa as a result of which there is an increase of sneha guna and medo dhatu in the body. The medo dhatus thus excessively produced causes margavarodha. As a result of which other dhatus are depleted causing symptoms such as inability to perform all the activities, kshudra shwasa, trushna and moha. Madhukosha commentary on Madhava nidana emphasizes the role of untimely food as the cause of the formation of ama in people who are obese. In addition to this there is an upalepa of madhura rasa in annavaha srotas. As a result of that annavaha srotas predominantly contains madhura anna rasa irrespective of rasa consumed, initiating the Pathophysiology of medo vriddhi. The samprapti of Sthaulya explained in Yoga ratnakara, Bhavaprakasha, Sharangadhara, Vangasena, Basavarajeeyam and Gadanigraha, is same as that mentioned in Madhava nidana. For the manifestation of any disease, vitiation of few basic components of the body required are dosha, dushya, srotas, agni and ama.

Dosha:

1) Kapha: In the samprapti of Sthaulya all the 3 doshas are involved. Acharya Charaka has considered Atisthauya as one among the Kaphajananatmaja vyadhi which is clearly observed by the nidanas of Sthaulya like guru, snigdha, sheeta, madhura and diwaswapna etc. which are also considered as Kaphakara nidanas. Hence inspite of involvement of tridosha Kapha is the main dosha involved in pathogenesis of the Sthaulya.

2) Pitta: In obese persons, Pitta also remains in a higher sight because the symptoms of the Sthaulya like atikshudha, atipipasa, swedadhikyata, dourgandhya have also been mentioned in the Pittavrudhi. Mainly the pachaka Pitta is involved in the etiopathogenesis of the Sthaulya.

3) Vata: The process of circulation, digestion and proper distribution of dhatus including Medas is controlled by Samana and Vyana vayu. Involvement of samanavayu can be clearly postulated with the evidence of Agnisandhukshana. Improper distribution of fat in the body proves the involvement of vyanavayu. Vata has been mentioned in the state of Avruta in koshta, which makes the agnivaishmya, ultimately increases the the abhyavarana shakti or demand of food.

Dushya:

Acharya Sushruta has mentioned Sthaulya as a Dushya dominant disorder. Here, Rasa, Mamsa, Meda, majja and shukra Dhatus are taken as Dushyas, as Kapha is seated in all these Dhatus on the basis of Ashrayashrayeebhava. So, vitiation of Kapha also leads to vitiation of dhatus in which Kapha is seated.

Srotas:

Involvement of medovahasrotas is the main factor along with the involvement of other srotas in Sthaulya. Charaka specifies Avyayama, Diwaswapna, Madhuradravyas and varuni(madya) as nidanas of Sthaulya. It indicates clear involvement of rasavahasrotas. Atisweda and daurgandhya indicate the involvement of swedavahasrotas. Presence of Atipipasa indicates the involvement of udakavahasrotas. An increased fat deposit inside the muscle indicates the involvement of mamsavahasrotas. Harshanityata, Achinta, Soukhya indicate the involvement of manovahasrotas.

Agni & Ama:

According to Vagbhata, mandagni, jatharagni and dhatwagni level are considered root cause of all diseases “Rogo sarveapi mandagnou”. In Sthaulya, due to vitiation of Vata by obstruction of Medas, teekshnagni is a prominent feature. Here a question arises how ama formation can take place instead of teekshnagni. Commentators Chakrapani and Dalhana have tried to clarify this controversy by giving explanation, that in the state of teekshnagni, person go for adhyashana, kalavyateeta ahara sevana again and again, which leads to disturbance in agni which subsequently leads to the formation of ama. It has been further explained by Dalhana that in the Sthaulya, formation of ama is due to the decrease of medodhatwagni than jatharagni. Due to increased in sheeta, snigdha & madhura guna which is opposite to that of Pitta the jatharagni mandya take place leading to Jataragnijanitaama. This further accumulation of Ama in Medovaha srotas due to Medodhatwagni mandya the dhatwagni janita ama is resulted

SAMPRAPTI GHATAKA

Dosha : Kapha : Kledaka Pitta : Pachaka

Vata : Samana : Vyana

Dushya : Rasa, Mamsa & Meda dhatu

Agni : Jatharagni Rasa and Meda Dhatvagni

Srotas : Meda vaha Srotas, Rasa vaha Srotas, Sweda vaha Srotas, Udakavaha Srotas

Srota Dushti : Sanga, Margavoradha, Amatah

Adhisthan : Whole body (Particularly Vapavahana & Meda dhara kala.) Udbhava Sthala : Amashaya

Sanchara Sthana : Rasayani Roga marga : Bahya

Ama : Jatharagni Vikriti Janita. Dhatvagni Mandya Janita

Vyatktsthana : Sarvanga, Specifically Sphik, Udara, Stana & Gala.

POORVAROOPA

It refers to the features, which indicates the forth-coming disease. It usually happens during (this corresponds with) fourth kriya kala called “Sthana samsraya”. Clinically, this is important for early diagnosis, treatment and prognosis. Mild exhibition of actual features of disease itself can be considered as Poorvaroopa.

Poorvaroopa is of two types:

- 1) Samanya poorvaroopa
- 2) Vishesha poorvaroop

Samanya poorvaRoopa gives the knowledge about forthcoming disease, but not regarding the exact disease, where as Vishesha Poorvaroopa gives the knowledge regarding Dosha as well as the disease. In the context of present disease, none of the Acharayas have stressed upon the poorvaRoopa, but it doesn't mean that they are absent; Acharya Charaka mentioned similar pathogenesis of Prameha and Sthaulya. Kapha and Meda also get vitiated in Sthaulya. Therefore purvaRoopa of Prameha and Medovaha Srotodushti Lakshanas can be considered as purvaRoopa of Sthaulya. These are as follows:

- Atinidra
- Tandra
- Alasya
- Visra sharira gandha
- Anga gaurava
- Anga shaithilya etc.

ROOPA

When the Vyadhi kriya kala is in fifth stage (Vyakthavastha), the disease will produce the features called as “Roopa”. These Roopa will indicate the manifestation of disease. Roopa is having synonyms like Samsthana, Vyanjaka, Linga, Lakshana, Chinna, and Akruthi. Roopa includes both subjective symptoms as well as objective signs. This is the stage when Dosha -Dushya Sammurchana is completed. All the lakshanas can be broadly classified as:

- 1) Sthaulya Pratyatmaka Lakshana
- 2) Sthaulya Samanya Lakshana

1. Sthaulya Pratyatmaka Lakshana:

The following are the diagnostic features of Sthaulya:

- Medomamsa ativriddhi
- Chala sphik
- Chala udara
- Chala Stana
- Ayatha Upachaya
- Anutsaha

2. Sthaulya Samanya Lakshana:

Beside these Cardinal Symptoms, eight disabilities of Sthaulya are mentioned in which can be considered as Sthaulya samanya lakshana are as follows **Ayushohrasa** - Life expectancy is decreased because other Dhatus could not be nourished properly.

Javoparodha - Shaithilya, Saukumarya and Guru properties, causes Javoparodha **Kricchavyavaya** - Due to obstruction in genital passage by Medodhatu and less production of semen, the sex act becomes difficult

Daurbalya - This results because of the deranged metabolism owing to mlnourishment of the Dhatus

Daurgandhya - Bad smelling results due to excessive sweating, innate quality of Medodhatu and morbid nature of vitiated Meda

Swedabadha - It occurs due to sang in Swedavaha Srotas by ama **Kshudhatimatrata** and

Pipasatiyoga - Because of increased Agni in Koshtha and vitiation of Vata by obstruction of Meda it results in excessive appetite and thirst.

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

TABLE NO.05 SHOWING ROOPAS OF STHAULYA

S.No.	Roopa	Cha.	Su.	AS.	AH.	MN.	BP.
1	Chala Sphika	+	-	+	+	+	+
2	Chala Udara	+	-	+	+	+	+
3	Chala Stana	+	-	+	+	+	+
4	Ayatha Upachaya	+	-	+	-	+	+
5	Udara parshva Vridhi	-	+	-	+	+	+
6	Anutsaha	+	-	+	-	+	+
7	Alasya (Jadyam)	-	-	+	-	-	-
8	Moha	-	-	-	-	+	+
9	Javoparodha	-	-	+	-	-	-
10	Alpa Vega	-	-	+	-	-	-
11	Shrama	-	-	+	-	-	-
12	Sarvakriyasu Asamrthata	-	+	-	-	+	+

13	Alpa Bala	-	-	+	-	-	-
14	Daurbalya	+	-	+	-	-	-
15	Alpa Prana	-	+	+	-	+	+
16	Ayushohrras	+	-	+	-	-	+
17	Krichh Vyavaya	+	-	-	-	-	-
18	Alpa Vyavaya	-	+	-	-	+	+
19	Daurgandhya	+	+	+	-	+	+
20	Swedabadha	+	-	+	-	-	+
21	Kshudhatimatra	+	+	+	-	+	+
22	Pipasatiyoga	+	+	+	-	+	+
23	Nidradhikya	-	+	+	-	+	+
24	Kshudra Swasa	-	+	+	+	+	+
25	Krathana	-	+	-	-	+	+
26	Gadgadvani	-	+	+	-	-	-
27	Gatrasada	-	+	-	-	+	+
28	Saukumarata	+	+	-	-	-	-

UPADRAVA

The alimant, which is associated with a disease, and is manifested after the manifestation of the main disease, is called Upadrava. Describing the severity of Sthaulya, Charak has compared the aggravated Vata and Pitta with davanala, which destroys the whole forest. Though Charak has not mentioned any specific Upadrava of Sthaulya, he describes that as Medas blocks the Vayu in koshta it stimulates Agni which in turn digest the food quickly and wants more and more food if not given enough food it causes severe Upadravas and kill the person and also that Sthoola rogi always suffers from one or other disease. As Sthaulya is an Asadhya Vyadhi, it will always have the tendency to exhibit Upadrava. The concept of Sthaulya Ashta Maha Dosha can be considered as Upadrava itself. Here Agni and Vayu are important factors for Upadrava. Prakupita Vata due to its obstruction by Medas will make the Sandukshana of Agni. This Pradepta Agni digests the food as quick as fire burning the forest. Hence there will be Athikshudha in the Sthoola. If the proper quality and quantity of food is not supplied to this Teekshnagni, it will produce hazardous effect, which may cause even death. Bhavamishra and Yogaratnakara have used the word “Sudustara” in the place of Upadrava shabda.

TABLE NO.06. SHOWING UPDRAVA OF STHAULYA:

S.No	Upadrava	SU	AS	AHR	MN	BP	YR
1	Ama Roga	-	-	+	-	-	-
2	Apachi	-	-	+	-	+	+
3	Arsha	-	+	+	-	+	+
4	Atisara	-	-	-	-	+	+
5	Bhagandara	+	+	+	+	+	+
6	Jwara	+	+	+	+	+	+
7	Jantavaha	-	-	-	-	+	+
8	Kaamala	-	-	-	-	+	+
9	Kustha	-	-	+	-	+	-
10	Mutra Kriccra	-	-	+	-	-	-
11	Prameha	-	+	+	-	+	+
12	Pramehapidika	+	+	-	+	-	-
13	Shleepada	-	-	-	-	+	+
14	Sanyasa	-	-	+	-	-	-
15	Udararoga	-	+	+	-	-	-
16	Urusthambha	-	+	-	-	-	-
17	Vatavikara	+	-	-	+	-	-
18	Visarpa	-	-	-	-	+	+
19	Vruddhi	+	+	-	+	-	-
20	Kasa	-	-	+	-	-	-

SAADHYAASAADHYATA

As per the criteria about the knowledge of Saadhyaasaadhyata, Sthaulya is a Krucchasaadhyaya Vyadhi. Acharya Charaka has mentioned the bad prognosis of Sthaulya as follows: If an obese person is not duly managed, he is prone to death due to excessive hunger, thirst and complications. Again Charaka has mentioned in Chi.6/57, bad prognosis for Sahaja (hereditary) disease. Hence Sahaja Sthaulya can be considered as Asadhya. According to Vagbhata 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.

Table No.7 Showing Saadhyaasaadhyata of Sthaulya

S.No	Saadhyaasaadhyata	Ch.	A.H
1.	Saadhya (if An Upadrava, balavaan, alpakaala)	--	+
2.	Krucchasaadhyaya	+	--
3.	Asadhya (If Sahaja)	+	+

ARISHTA LAKSHANA

Sudden drastic weight reduction is considered as Arishta lakshana. Yogaratnakara has mentioned that sudden weight loss or gain could be fatal within six months

CONCLUSION

The disease Sthoulya effectively represents Obesity. Sthoulya is a metabolic disorder, described by Charaka in Astauninditiya Adhyaya. In spite of advanced technology and researches, the modern medicine is failing to give the best result for obesity, due to its multifactorial nature. Hence intervention at this level is need of the hour. So this article will help us to understand the concept of most burning issue Sthaulyata (obesity).

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