

RESEARCH ARTICLE

CONCEPT OF STHOULYA IN AYURVEDA W.S.R TO MEDO DHATU

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Abstract

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*Key words:-*Sthoulya, Medo Dhatu, Ashtanindita, Overweight Ayurveda, the science of life explains all the concepts to obtain a healthy life. Ideal characteristics and desirable measurements of various parts of the body are mentioned thereby considering those people as prasastha purusha . Variations from these characteristics are not considered ideal and eight such features are explained as nindhya. Athisthoola is one among them which further cause multiple systemic disorders and finally aayu hrasa. Nowa days, sthoulya has become a very common life style disorder due to improper food habits, sedentary life style and change in sleep pattern. The role of medo dhatu in sthoulya is inevitable since the derangement in medo dhatwagni arrests the formation of further dhatus and may even harm the longevity of the individual. Hence proper purification therapy to correct the dhatus and healthy life style is very much essential in sthoulya.

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Introduction:-

Ideal characteristics of good health are as follows:

- 1. Sama mamsa pramana (proportionate musculature)
- 2. Samhanana (compactness)
- 3. Sama paktha (proper jataragni)
- 4. Sama jara (proper digestion)
- 5. Mamsa cayatwa (proper muscular formation)
- 6. Dridendriya (strong and healthy sensory faculties)
- 7. Vyadhi kshamatwam (immunity)

Apart from the above physical features, Charaka samhita also points few characters of good health as tolerance of hunger (kshuda), thirst (pipasa), sunlight (atapa), cold (saithya), and exercise (vyayama). According to Ayurveda it is a santarpana janya roga and it results due to derangement in metabolism thereby only medas sustains and restricts the formation of other dhatus. ⁽¹⁾ The disease progress is explained on the basis of avarana due to medas which affects vayu and agni in koshta. The severity of condition is explained with a simile that the progress is similar to spreading of wild fire and it has to be arrested by soon by means of treatment.

Aim:

- 1. To explicate the concept of sthoulya in Ayurveda
- 2. To illuminate the role of medo dhatu in sthoulya

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Materials and methods:-

Classical texts of Ayurveda are reviewed.

Review of literature

The concept of sthoulya could be seen in samhitas, commentaries and nighantus. Various references are as follows;

Charaka Samhita(2 BC):

The concept of sthoulya had been mentioned under kaphaja nanatmaja vikara⁽²⁾, santarpanotha vikara⁽³⁾, bahu dosha lakshana⁽⁴⁾, contra indication of sweda⁽⁵⁾ and under eight nindita purushas.

Susrutha Samhita (2 AD):

Sthoulya had been described as a consequence of rasa nimitha vikara, wherein he details the nidana, poorvaroopa, samprapti, roopa and treatment principle of sthoulya. $^{(6)}$

Ashtanga Sangraha (6 AD):

Sthoulya is a vikara of kapha dosha that undergoes dhoosya samoorchana with medas⁽⁷⁾. Here the samprapti, lakshana and treatment principle of sthoulya are being explained.

Ashtanga hridaya (6 AD):

Sthoulya is mentioned in sootra sthana wherein karshya is considered to be better than sthoulya because sthoulya is considered as krichra sadhya vyadhi and is difficult to cure ⁽⁸⁾. Sthavima is mentioned as a synonym to sthoulya in the same context. Medhaadhika purusha is mentioned one among the category of people who does not easily get intoxicated on the consumption of madya⁽⁹⁾. Sthoulya is mentioned under the contra indication of swedana⁽¹⁰⁾

Kashyapa samhita (6 AD):

Under the context of venesection, medovridhi⁽¹¹⁾ is indicated. Sthoulya had also been considered under eight nindita purusha. ⁽¹²⁾

Bhela samhita (7 AD):

Sthoula is mentioned under medo vikara.⁽¹³⁾

Madhava nidana (7 AD):

The samprapthi, lakshana of sthoulya is explained in detail. (14)

Sharangadhara samhita (13th century):

He had described medodosha as one in number under roga ganana adhyaya⁽¹⁵⁾. He also points out the role of vrikka in the nourishment of jatharastha medas. ⁽¹⁶⁾

Commentator Chakrapani (11th century):

Sthoulya is considered as incurable and if again a sthoola person is given nourishment it leads to atisthoola stage. ⁽¹⁷⁾ Also in the context of treatment of sthoulya, Acharya Chakrapani had commented that guru and apatarpana type of food when administered helps to alleviate vridha agni and reduces meda dosha respectively. ⁽¹⁸⁾

Commentator Dalhana (12th century):

Under the samprapthi of sthoulya; he gives an enumeration on how medo vardhana occurs and leads to the stage of atisthoola. ⁽¹⁹⁾ In the indications of navayasa choorna of prameha pidaka chikitsa; a word jatarya is mentioned by Acharya Susrutha, wherein the Commentator Dalhana clarifies it as a synonym of sthoulya. ⁽²⁰⁾

Commentator Arunadutta (13th century):

Sthavima is mentioned as a synonym to sthoulya. Also he gives the reason for the contra indication of swedana in sthoulya as vilayana roopa vridhi of medas may occur leading to shareera kshoba.⁽²¹⁾

Vangasena samhita (12th century):

In the context of medoroga adhikara, the nidana, poorvaroopa, roopa, samprapthi and chikitsa of sthoulya are explained. $^{(22)}$

Bhavaprakasha (16th century):

In the chapter of sthoulya; the nidana, poorvaroopa, roopa and upadrava of sthoulya arementioned.⁽²³⁾

Yogaratnakara (17th century):

In medo roga nidana chikitsa prakarana of uttharartha, various herbal and mineral preparations have been described under the treatment of sthoulya. $^{(24)}$

Defnition Of Sthoulya:

A person with bulkiness of body especially around the udara region is considered to be sthoola. Charaka samhita says; the abnormal increase of medas and mamsa resulting in bulkiness of specific parts like sphik (buttocks), udara (abdomen) and stana (breast). Such type of people comes under the category of atisthoola. ⁽²⁵⁾

Ayurvedic perspective of medas:

Medo dhatu plays a prominent role in the pathogenesis of sthoulya. Infact the excessive formation of medas occurs and further dhatus remain unformed due to the dhatwagni mandhya of medas thereby resulting into sthoulya. Henceforth concept of medas has to be understood in detail before moving to the treatment aspects. Medas is derived from mother i.e. matrija bhava.

Based on the concept of panchamahabhoota, the formation of medodhatu is explained in grahani chikitsa of charaka samhita. Rakta dhatu combines with teja and jala gets solidified by the action of agni there by production of mamsa dhatu occurs. The mamsawill be digested by its own dhatwagni and combines with quality of jala and sneha (unctuous substance) results in the formation of medo dhatu. ⁽²⁶⁾

Medodhara Kala⁽²⁷⁾:

Kala is a kleda bhava lying in between dhatu and ashaya covered with snayu, sleshma and jarayu. The third kala formed is medodhara kala; that is deposited in udara predominantly. In small asthi, it is mixed with rakta. In shiras it is termed as masthishkya and in sthoolasthi it is termed majja.

Organs developed from medas ⁽²⁸⁾:

The prasada bhaga of rakta and medas leads to the formation of vrikka. The prasada bhaga of mamsa, rakta, kapha and medas leads to the formation of vrishana.

Karma Of Medodhatu:

Important functions of medo dhatu are:

- 1. Snehana
- 2. Dridatva
- 3. Asthi pushti
- 4. Netra gatra snigdata

Medovaha srotas:

The channels that carry nourishment to the medodhatu are considered as medovaha srotas. There are three different opinions for the origin of medo vaha srotas as follows;

- 1. Charaka samhita vrikka and vapavahana⁽²⁹⁾
- 2. Susrutha samhita vrikka and kati⁽³⁰⁾
- 3. Ashtanga sangraha vrikka and mamsa ⁽³¹⁾

Pramana of medodhatu – 2 anjali ⁽³²⁾: Samprapti of sthoulya:

Charaka samhita ⁽³³⁾:

Due to the nidana sevana, the medo dhatu does avarana of koshta which hampers the normal gati (movement) of koshta vayu (samana). This vaigunya vayu moves inside koshta leading to the agni sandukshana and quick digestion of food thereby leading to excessive desire towards intake of food. Repeated consumption of food without burning the calories consumed might result in various vikaras. The similie explained to denote the potency of the disease is; in the event of excessive increase of medas, agni and vayu suddenly rises to severe disorders and destroy the life shortly like forest fire that spreads quickly and cause destruction.

Susrutha samhita ⁽³⁴⁾:

Due to nidana sevana, there will be formation of aama in koshta (mahasrotas). This aama thereby gets deposited in srotas leading to srotosanga; depriving the formation of other dhatus. Only medas gets produced in excess leading to sthoulya.

Bhavaprakasha⁽³⁵⁾:

Consequent to various causative factors, medas gets excessively deposited and obstructs the other dhatu vaha srotas creating obstacles to the nourishment of other dhatus. This makes the person unstable in all activities (asakta sarvakarmasu)

Samprapthi Ghataka:

The manifestation of roga occurs through the process of samprapthi. The components involved are dosha, dooshya, srotas, agni, dhatu, stroto dushti. Such factors are named as samprapthi ghataka. In sthoulya the samprapthi ghatakas involved are;

- 1. Dosha samana and vyana vayu, pachaka pitta and kledaka kapha
- 2. Dushya rasa, meda
- 3. Agni jataragni sandukshana by vata and medodhatu agni mandhya
- 4. Srotas rasavaha , medovaha srotas
- 5. Srotodushti sanga
- 6. Udhbava sthana aamashaya
- 7. Vyakta sthana specifically in sphik, udara and sthana
- 8. Roga marga bahya and abhyantara
- 9. Swabhava chirakaari

Role Of Shad Kriyakala In Sthoulya:

The six steps in development of roga is explained under the context vranaprashnam adhyaya of susrutha samhitha. These stages are explained in vrana; the same can be applicable to the samprapthi of other diseases also.

Sanchaya:

Due to the nidana sevana, the dosha gets commence to lodge in specific sthanas and give rise to specific symptoms. Here, in sthoulya due to nidanasevana, the alteration of following doshas takes place.

- 1. Vata samana , vyana
- 2. Pitta pachaka
- 3. Kapha kledaka

Symptoms are not clearly manifested as the progression had not taken place. Based on samanya vishesha sidhantha, we can understand that the involved dhatu will be medas. The sthana of medas is vrikka and vapavahana .Here, the samhati roopa vridhi would take place in these sites being the moola of medo vaha srotas. Kapha, meda vridhi occur due to aashraya aashrayi bhava of kapha dosha and medho dhatu.

Prakopa:

The second stage in the progression of roga is prakopa. The doshas apart had reached chaya avashtha, but not been intervened and further exposure to nidanas would give rise to vilayana roopi vridhi of the same that are explained under prakopa. Here, in sthoulya let us consider the prakopa of samana vayu in koshta since chaya of medas had already taken place in sanchaya stage and this leads to sroto sanga in mahasrotas, thereby normal anuloma of vayu doesnot occur. Since samana vayu stays near jataragni, this further kindles the agni. The formed annarasa does not undergo proper parinaama onto rasaadi dhatus since poshaka rasa is not the major part and aama rasa retains in koshta. Apart from jataragni mandhya, medodhatu agni also gets mandhya hence further parinaama gets hampered. Abnormal vridhi to kapha and medas occurs.

Prasara:

This is the stage where the lodged doshas are moved out of sanchitha sthana and deposited in various sites. The main role is played by vyana vayu which transports the aamaja annarasa, vridha kapha and medas to sarva shareera from maha srotas.

Sthana samsraya:

The Madura pradhana aama rasa combines with medo dhatu once it has been brought out of koshta by vyana vayu. This is the stage where dosha dooshyasamoorchana occurs. Apart from samana vayu, the circulating vyana vayu also gets obstructed in medo vaha srotas leading to kha vaigunya. This vyana again moves back to koshta. Samana vayu and vyana vayu combined in koshta further kindles the agni and speeds up the digestion. The person gets increased appetite and craves for more food. Here medo dhatu gets excessive poshaka bhaga, hence the medo dhatu agni cannot digest further there by apakwa meda formation takes place repeatedly. Even if the agni is teekshna, the person undergoes adhyashana (bhuktasya upari bhojana) and kaala vyateeta ahara repeatedly, chance of aama formation gets increased due to medo dhatwagni mandhya.

Vyaktha:

This is the stage where the clear cut symptoms of the roga manifest. Since utharothara dhatu formation had not occurred beyond medas, eight different lakshanas are manifested out. This includes aayusho hrasa, java uparodha, krichra vyavayata, dourbalya, dourgandhya, swedaabhaada, kshut atimaatra, pipaasa atiyoga.⁽⁴²⁾ The reasons explained for each symptoms are as follows;

- 1. Since only upachaya of medas occurs in excess not other dhatus aayuhrasa
- 2. Due to shaithilya, soukumarya, guru guna of meda java uparodha
- 3. Decreased shukra and aavarana of srotas by meda krichra vyavaya
- 4. Asamathwa of dhatus dourbalya
- 5. Medo dosha, medo swabhava and swedana dourgandhya
- 6. Samsarga of kapha and meda, vishyanda, guru guna, vyayama asahatwa swedaabhaadha
- 7. Due to teekshnagni increased kshut and pipaasa occurs.

Bheda:

Due to sroto rodha of various srotas, the nourishment of rest other dhatus are diminished. From the concept of aayu hrasa, we can understand that the person would obviously lack immunity, and since asthi, majja and sukra does not get poshaka amsha, diseases concerned to the same manifests as the complication of sthoulya roga.

Sadhya Asadhyata Of Sthoulya:

Susrutha samhita⁽³⁶⁾:

Acharya susrutha says sthoulya gets a stage of incurability when it is associated with prameha pidaka, jwara, bagandara, vidradi, vata vyadhi. This may even lead to death of the patient.

Charaka samhita⁽³⁷⁾:

These obese people are frequently prone for other diseases which indicate the incurability of sthoulya.

Vangasena samhita⁽³⁸⁾:

Sthoola person when develops kushta, visarpa, bagandara, jwara, atisara, prameha, arsha, sleepada, apachi and kamala, the disease becomes incurable. This may even lead to death. Also, if due to excess sweat and foul smell; there is a possibility to develop anu jantu (small germs). This stage is incurable.

Ashtanga hridayam⁽³⁹⁾:

In the context of sthoulya and karshya, he says karshya is considered better compared to sthoulya because there is no pin point treatment for obese people.

Sthoulya chikitsa:

Eventhough the disease is considered to be krichra sadhya, there are few treatment principles not only aim to subside the roopa of sthoulya, but it also helps in preventing the further vitiation of doshas in the body. The modalities of treatment can be;

- 1. Samshodana antar and bahir
- 2. Samshamana

Shamana Chikitsa:

The implementation of shamana treatment in sthoulya is mainly aimed in subsiding the vitiated kapha and medas, regulate the movement of samana vayu and brings back the agni to normal stage. The medo dhatu agni mandhya has to be checked off. Generally pachana and deepana foods are to be administered for depletion therapy in general.

Here it is specifically adviced to administer guru and apatarpana ahara. Commentator chakrapani explains the role of guru and apatarpana ahara as;

- 1. Guru vridham agnim yapayati
- 2. Apatarpana medo hanti

The example cited in this context is honey $^{(40)}$.

Susrutha samhita says to administer virookshana and chedaniya dravya in sthoulya like shilajatu, guggulu, gomootra, triphala, loha raja, rasanjana, honey, yava,mudga, koradoosha, shyamaka, uddhala, vidhivat vyayama (exercise according to the capacity). Commentator Dalhana justifies the administration of these foods as ⁽⁴¹⁾

- 1. Virookshana medogna
- 2. Chedana does sroto shodana

Bahirparimarjana Chikitsa:

In sthoulya, the external procedure advised is mainly rooksha udwarthana^{(42).} This procedure removes foetid odour, restricts the process of excess sweating and subsides the vitiated kapha and meda. It does twak prasadana, stireekarana of angas, gauravahara, dourbalyahara, tandra hara, kandu hara and mala hara. The procedure is patient friendly. By the tikshna guna of dravya and due to the friction created during the procedure by rubbing the herbal powder in a direction opposite to the hair follicles, virya of the drug enters the body.

Antarparimarjana chikitsa:

It is the other word given for shodana therapy. Sthoulya is said one among the lakshanas of bahudoshayukta by charaka samhita, wherein shodana is said to be the ultimate therapy for the same. The procedure by which the doshas in vitiated stage are eliminated through nearest route from the body is said to be shodana. This shodana therapy would be preceeded by the poorva karmas namely snehana and swedana.

Snehana:

The procedure of snehana is generally contra indicated for sthoola persons. Commentator Arunadutta in sarvanga sundara vyakhyana clarifies that, if a sthoola person is administered snehana, it would wind up in agni vridhi and medo vridhi.⁽⁴³⁾

Tila taila had been described to possess tikta, kashaya as anurasa by Susrutha samhita. It does lekhana, pachana and vata kapha hara in nature. Commentator Dalhana specifically says lekhana means medohara.^{(44).} The intension of administering snehana prior to shodana is to bring up the utklesha of doshas that remains in leena avastha over the srotas. Hence in sthoola rogi, taila can be administered for snehana after a proper rookshana.

Swedana:

Swedana is also contra indicated in sthoola rogi. But with an intension of succeeding shodana therapy, swedana can be done in the form of niragni sweda. In medakaphaavrita vata, niragni sweda is adviced.⁽⁴⁵⁾

Vamana:

Two different opinions regarding the administration of vamana in sthoulya can be seen in classics. In vimshati kaphaja nanatmaka vikaras, atisthoola had been mentioned and in the treatment principle vamana is pointed out as the pradhana upakrama among others.⁽⁴⁶⁾

On the contrary, in the contra indications of vamana in siddhi sthana atisthoulya is mentioned due to the inability of the patient to tolerate the oushada bala which may even lead to prana uparodha. ⁽⁴⁷⁾Susrutha samhita says persons with medo roga are generally indicated for vamana therapy. ⁽⁴⁸⁾

Virechana:

Generally virechana karma is contra indicated in sthoulya. But being the best upakrama of pitta dosha, it could be administered. This eliminates the vitiated pitta thereby the aamayukta anna rasa leading to removal of avarana and anulomana of vata dosha occurs.

Vasti:

In the treatment principle of sthoulya, charaka samhita emphasise the importance of administering rooksha, ushna vasti.⁽⁴⁹⁾Susrutha samhita specifically mentions lekhana vasti as a treatment of sthoulya.⁽⁵⁰⁾

Siro virechana:

Charaka samhita includes siro virechana as one among the treatment principle of 20 kaphaja nanatmaja vikaras eventhough it is not considered to be the pradhana treatment of sthoulya.⁽⁵¹⁾Under the context of avapeeda nasya, susrutha samhita mentions abhishyanna, which is justified as meda kapha abhivyaptha shiras by commentator Dalhana.⁽⁵²⁾

Discussion:-

Thus Ayurveda clearly explains the concept of medas, its formation, role in metabolism, pramana, its vridhi & kshaya lakshana. The role of medas in the pathogenesis of sthoulya is also elicited elaborately in the classics. Role of both bahirparimarjana chikitsa and antarparimarjana chikitsa, the aim behind the administration of each of these chikitsa are also mentioned. Hence agni and medas do posses a vibrant role in sthoulya pathogenesis and correction of these through proper shodhana followed by shamana oushada and modification of patient's life style helps to maintain a healthy life.

Conclusion:-

Prevention of sthoulya with healthy life style has to be focussed. In cases where sthoulya is due to beeja dushti, intervention also may not help much. Sodhana as per ritucharya, vyayamaadi kriyas adviced in dinacharya and proper sodhana before conception by the parents may to an extent give a healthy progeny.

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