



ISSN : 2350-0743

www.ijramr.com



International Journal of Recent Advances in Multidisciplinary Research

Vol. 07, Issue 09, pp. 6295-6298, September, 2020

RESEARCH ARTICLE

THERAPEUTIC REVIEW OF *BILVADI PANCHAMULA (BRUHAT PANCHAMULA)* IN THE MANAGEMENT OF *STHAULYA*

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ARTICLE INFO

Article History:

Received 20th June, 2020

Received in revised form

16th July, 2020

Accepted 04th August, 2020

Published online 30th September, 2020

Keywords :

Bilvadi

Panchamula, Sthaulya,

ABSTRACT

Acharya Sushruta has mentioned the main constituent of pathogenesis of *Shaulya* (Obesity) is *Dhatvagni Mandya* (decrease in the functional efficacy of *Dhatvagni*). *Acharya Charaka* described *Atisthoola* is a person having pendulous appearance of *Sphika*, *Udara* and *Stana* due to excess deposition of *Meda* (Fatty tissue) along with *Mamsa Dhatu* (*Muscle tissue*) and having inadequate abnormal distribution of *Meda* with reduced zeal towards life. The disease *Sthaulya* originates due to consumption of *Kapha Vriddhikara Ahara* (*Kapha Dosha* Vitiating diet), *Vihara* (exercise) and *Manasa Nidana* (Psychological Causes). *Bilvadi Panchamula* (*Bruhat Panchamoola*) contains *Bilva*, *Agnimantha*, *Shyonak*, *Kashmari* and *Patala* which encounters *Vata* and *Kapha Dosha* by virtue of its *Tikta*, *Kashay-Rasa* dominance and *Ushna-Virya*. *Tikta-Rasa* performs *Medo-Kledopa-Shoshana* action. *Sthairy Guna* of *Madhura Rasa* combats *Sharira Shaithilya*. *Ushna-Virya* also helps in *Kleda* and *Meda Vilayana* action. *Tikta-Rasa*, *Ushna-Virya*, *Laghu Guna* encounters *Dhatvagnimandya* and potentiates the weakened *Dhatvagni* and help in *Amapachana*, thereby alleviates *Aparipakwa* and *Ama Dhatu*. Ultimately act as *Medohar* and breaks the *Samprapti* of *Sthaulya*.

INTRODUCTION

Sthaulya (obesity) is now a day became a global health problem caused due to sedentary life styles and changing environment, accompanied with faulty irregular dietary habits which lead to many diseases. The industrialization, stress during the work, lack of exercise and various varieties of the daily diet e.g. fast food, freeze fruits, increased amount of soft drinks and beverages, canned foods result into the clinical entity called as *Sthaulya*. Many institutions and Medical schools are making efforts to find a perfect remedy for this burning problem. *Sthaulya* leads to various complications. The long term dangers of *Sthaulya* are like a sword hanging over one's head tied in a weak thread which can strike at any time and create numerous difficulties and boundless miseries. *Acharya Charaka* has classified *Sthaulya* under "*Ashta Nindit Purusha*" (eight despicable personalities)¹.

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Atisthauya is also mentioned as *Sanatarpan Janya vyadhi* (disease due to overeating)². *Sushruta* has Mentioned it as *Medadoshaja Roga* and *Dhatvagni Mandya* as the main cause of the etiopathogenesis of *Sthaulya Roga*². Further elaboration of line of treatment has been described by *Acharya Sushruta* with many remedies described for the management of *Sthaulya* at different places which indicates railing condition of the disease in that time of society.³ Types of *Sthaulya* and their management have been first time mentioned by *Vridhdha Vagbhata* in *Ashtanga Sangraha Sutrasthana*. *Vridhdha Vagbhata* and *Vagbhata* have elaborated etiopathogenesis of *Sthaulya* on the basis of formation of *Ama* and disturbance of the process of *Dhatu Parinamana* (Process of *Dhatu* formation).⁴

Nirukti of Sthaulya: The person who has heaviness and bulkiness of the body due to extensive growth of *Meda* (fat) in *Udaradi* (abdominal) region is called as "*Sthula*" and the state of *Sthula* is called "*Sthaulya*".⁵

Paribhasha of Sthaulya: *Acharya Charaka* has defined *Atisthula* is person having inordinate increase of fat and flesh,

which disfigured his appearance and has pendulous, buttocks, belly and breasts with increasing bulk not matching by a corresponding increase in energy".⁶ *Nidana* (Causative Factors) of *Sthaulya*

Several etiological factors of *Sthaulya* related to different aspects of life that affect the body from outside and inside are described in *Samhitas*. The hereditary (*Bija Dosh*), dietetic, regimen and psychological factors cause *Sthaulya* as per *Charaka Samhita*.⁷ These are mostly of exogenous type and vitiate *Vata*, *Meda* and *Shleshma* resulting is *Sthaulya*. *Dhatwagni-Mandya* (decrease in the functional efficacy of *Dhatwagni*) is the main cause besides other components in etio-pathology of *Sthaulya* according to Vagbhata.⁸ All the causative factors described in *Ayurved* classics can be classified into four groups described in table no 1.

According to different *Acharyas*, *Rupas* of *Sthaulya* are, *Kshudra Shwasa* (Dyspnoea), *Nidradhikya* (Excessive sleep), *Gatrasada* (Numbness of limbs), *Gadgadadhvani* (Slurred speech), *Krathana* (Sudden catch of breath), *Alpaprana* (Less energy), *Sarvakriyasu Asamarthata* (Incapable of doing any work), *Alpavyavaya* (Lack of sexual urge), *Kasa* (Cough), *Shvasa* (Asthma), *Snigdhangata* (Unctousness in body), *Udaraparshva vridhhi* (Excess accumulation on abdomen and chest), *Alasya* (Laziness), *Ama*, *Moha* (Delusion), *Saukumarata* (Cannot sustain difficulty), *Anga Shaithilya* (Looseness in parts) and *Alpabala* (Lack of power).¹¹

Samprapti of Sthaulya

The whole process of the manifestation of disease can be explained based on different *Hetu sewan* (causative factors) in the diagram¹³

Classification of Sthaulya

In *Ayurveda* text there is no clear classification of *Sthaulya* available. Only *Astanga Hridaya* and *Astanga Sangraha* has described three types of *Sthaulya* i.e. *Adhika*, *Madhya* and *Hina* while describing the indications of *Langhana upakrama*¹⁴. *Acharya Charaka* has mentioned *Sthoola* and *Atisthoola*¹⁵. *Acharya Sushruta* has mentioned *Sthaulya* and *Medoroga*¹⁶. Classification of *Sthaulya* can be done in following table No.4 A number of herbs and herbominerals has been described in the ancient *Ayurveda* text for the treatment of *Sthaulya*. *Acharya Charaka* has mentioned brief treatment of *Astisthauya* and use of *Bilvadi Panchamula churna*¹⁷ with *Madhu* (honey) is one of the treatment *Yoga* (remedy) which can be very effective in the treatment of *Sthaulya*.

Objectives

- To review literature of *Sthaulya*.
- To review literature of *Bilvadi Panchamula*
- To Study the therapeutic effect of *Bilvadi Panchamula* in the management of *Sthaulya*.

METHODOLOGY

A systemic Review was done from various ancient *Samhita* and text book for *Sthaulya*, *Dravya Guna Vidhnyanam*,

Ayurved Pharmacopeia of India, and contents of *Bilvadi Panchamula*.

Bilvadi Panchamula: Actions which bring the equilibrium of *Dhatu*, constitute the treatment of diseases. According to *Acharya Charaka*, "*Chikitsa*" aims not only at the radical removal of the causative factors of the disease, but also at the restoration of the *Doshik* equilibrium".¹⁸ According to *Acharya Charaka* treatment of *Sthaulya* includes *Vataghna-Kapha-Medaghna Ahara* (diet which controls *Vata*, and *Kapha* And *Meda Dhatu*.), *Basti* (Medicated enema) treatment with of drugs having *Ruksha –Ushna* properties along with the many formulations and *Bilvadi Panchamoola* with *Madhu* is one of them.¹⁹ *Madhu* has *Kapha-Medoghna* property by his *Chedan-Ruksha Guna*, *Madhur-Kashaya Rasa*.²⁰ Properties of *Bilvadi Panchamoola* has been described by various ancient text in table no 5 it is as follows

Mode of action

The mode of action of *Bilvadi Panchamula* on *Sthaulya* can be explained as follows:

The disease *Sthaulya* originates due to consumption of *Kapha Vriddhikara Ahara*, *Vihara Avyayam*, *Manasa Nidana*. These factors derange *Jatharagni* causing *Ama Annarasa*, which results in *Medodhatvagni-mandya*. This condition leads to the excessive growth and accumulation of *Mansa-Medodhatu*, causing the manifestation of disease *Sthaulya*. *Bilvadi Panchamoola* contains *Bilva*, *Agnimantha*, *Shyonak*, *Patala*, *Gambhari*. All these drugs encounters *Kapha Dosh Meda dhatu* by virtue of its *Katu*, *Kashay-Rasa* dominance and *Ushna-Virya* when used along with *Madhu* which has *Kapha-Medoghna* property. *Meda* and *Kleda* are the chief culprits in *Sthaulya*. *Katu-Rasa* performs *Medo-Kledopa-Shoshana* action. *Shairya Guna* of *Madhura Rasa* combats *Sharira Shaithilya*. *Ushna-Virya* also helps in *Kleda* and *Meda Vilayana* action. *Katu-Rasa*, *Ushna-Virya* encounters *Dhatwagnimandya* and potentiates the weakened *Dhatwagni* and help in *Amapachana* thereby alleviates *Aparipakwa* and *Ama Dhatu*. Ultimately act as *Medohar* and breaks the *Samprapti* of *Sthaulya*.

DISCUSSION

***Sthaulya* (obesity) is a non-communicable disease, which provides the platform for so many**

Threats like Hypertension, Cardiovascular disease, diabetes and Osteoarthritis, infertility, impotency as well as psychological disorders like stress, anxiety, depression, etc. Thus, the mortality and morbidity are more in obese person compared to others. In condition of *Sthaulya*, *Jatharagni* is found in excessive condition whereas *Medodhatvagni* is found in *Manda* condition. It is due to *Avarana* of *Vayu* in *Kostha*. So, the person indulges more food, which produce excessive *Meda* and vitiated *Vayu*, this cycle go on. This cycle can be broken (*Samprapti Vighatana*) by *Katu-Rasa* and *Ushna-Virya Pradhana* Drugs which are included in *Bilvadi Panchamoola* which decreases *Meda* by its *Lekhana*, *Shoshana* and *Kaphanashaka* properties when taken with *Madhu*. *Bilvadi Panchamoola* has *Pachan* property which prevents *Amarasa* formation caused due to excessive intake of *Madhur Ahara* (*Atisampuran*).

Table no 1. *Nidana Of Sthaulya*

Sr. No	Types of <i>Nidana</i>	<i>Nidana</i>
1.	<i>Aharatmaka Nidana</i>	<i>Atibhojana</i> (Excessive eating), <i>Guru Aharasevana</i> (Consumption of food which heavy to digest), <i>Madhura Aharasevana</i> (Sweet food), <i>Sheeta Aharasevana</i> (Consumption of cold diet), <i>Snigdha Aharasevana</i> (Consumption of unctuous food), <i>Navanna Sevana</i> (Usage of fresh grains, Cearls), <i>Nava Madhyasevana</i> (Usage of fresh alcoholic preparation), <i>Gramya Rasa sevana</i> (Usage of domestic animal's meat and soups), <i>Paya Vikara Sevana</i> (Usage of milk and its preparations), <i>Dadhi Sevana</i> (Use of curd), <i>Sarpi Sevana</i> (Use of ghee), <i>Sleshmala Aharasevana</i> (Kapha increasing food), <i>Ikshu Sevana</i> (Usage of sugarcane), <i>Guda Vikara Sevana</i> (Usage of Jaggery preparations), <i>Mamsa Sevana</i> (Use of meat), <i>Shali sevana</i> (Use of rice), <i>Masha Sevana</i> (Use of black gram), <i>Godhuma Sevana</i> (Use of wheat), <i>Audak Rasa Sevana</i> (Usages of aquatic animal's meat and soups)
2.	<i>Viharatmaka Nidana</i>	<i>Avyayama</i> (Not exercising), <i>Avyavaya</i> (Avoiding sex), <i>Divaswapa</i> (Day sleep), <i>Sukha Shaiya</i> (Comfortable bed), <i>Snana Sevana</i> (Bathing), <i>Gandhamalyanu Sevana</i> (Anointment with fragrant unctious and wearing of garlands), <i>Swapna Prasangat</i> (Excessive sleep)
3.	<i>Manas Nidana</i>	<i>Harshaniyatav</i> (Always in the state of happiness), <i>Achintan</i> (Devoid of worries), <i>Manasonivritti</i> (Relaxed state of mind), <i>Priyadarshana</i> (Meeting with loved ones), <i>Saukhyena</i> (Good health)
4.	<i>Anya Nidana</i>	<i>Amarasa</i> (improperly digested Rasa), <i>Snigdha-Madhura Basti</i> (Sweet unctuous enema), <i>Tail Abhyanga</i> (Oil Massage), <i>Snigdha Udvartana</i> (Unctuous Udvartana), <i>Bijadoshasvabhavat</i> (Hereditary)

Table 2. *Rupa of Sthaulya*

Sr. No	<i>Rupa</i>
1	<i>Aayushrhasa</i> (Decrease life span)
2	<i>Javoparodha</i> (Slow movement)
3	<i>Krucchavyavayata</i> (Difficulty in Sex)
4	<i>Daurbalya</i> (Weakness)
5	<i>Daugandhyam</i> (Foul Smell)
6	<i>Svedabadha</i> (Excessive amount of sweat)
7	<i>KshuKshudhanam Atimatram</i> (Excessive amount of Hunger)
8	<i>Atipipasa</i> (Excessive amount of thirst)
9	<i>Chala Sphika</i> (Excess fat on buttocks)
10	<i>Chala Udara</i> (Excess fat on abdomen),
11	<i>Chala Stana</i> (Excess fat on chest)
12	<i>Ayatha Upachaya</i> (Disproportionate body)
13	<i>Anutsaha</i> (Lack of enthusiasm)

Table no 3. *Samprapti Ghatok of Sthaulya*

<i>Dosha</i>	<i>Kapha-Kedaka, Pitta-Pachaka Vata-Sanana, Vyana</i>
<i>Dushya</i>	<i>Rasa, Meda, Mansa Dhatu</i>
<i>Agni</i>	<i>Jatharagni Trirata, Parthiva, Apya Bhutagni, Rasa & Meda Dhavagni</i>
<i>Ama</i>	<i>Dhavagnimandyajanita Ama</i>
<i>Strotas</i>	<i>Medovaha Strotas</i>
<i>Strotodushti</i>	<i>Sanga, Margavarodha, Ama Amarasa-Atipravrutti</i>
<i>Adhithana</i>	Whole body particularly <i>Vapahana</i> and <i>Medo Dharan Kati</i>
<i>Udbhavasthara</i>	<i>Amashaya</i>
<i>Prasara</i>	<i>Rasayani</i>
<i>Rogamarga</i>	<i>Balya</i>
<i>Vyaktisthana</i>	<i>Sarvanga</i> specifically <i>Sphik, Udara, Stana</i> and <i>Gala</i>

Table no 4. *Classification of Sthaulya*

Sr. No	<i>Acharya Name</i>	<i>Classification</i>
1	<i>Vagbhata</i>	<i>Hina Sthaulya</i> <i>Madhyam Sthaulya</i> <i>Ati Sthaulya</i>
2	<i>Charak</i>	<i>Sthoola</i> <i>AtiSthoola</i>
3	<i>Sushrut</i>	<i>Sthaulya</i> <i>Medoroga</i>

Table no 5. *Properties of Bilvadi Panchamula*

Sr. No	<i>Dravya</i>	<i>Rasa</i>	<i>Virya</i>	<i>Vipaka</i>	<i>Guna</i>	<i>Karmikaiva</i>
1.	<i>Bilva</i> ¹ (Aegle Marmelos)	<i>Kashay</i> <i>Tikta</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> , <i>Ruksha</i>	<i>Pachak, Grahi, Ruksha, Agni-</i> <i>PittaKrut, Vata-Shleshmahara</i>
2	<i>Agnimantha</i> ² (Premna mucronata)	<i>Tikta, Katu, Kashay</i> , <i>Madhur</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> , <i>Ruksha</i>	<i>Pachan, Agnimandya</i> , <i>Nashanam, Dipanam</i> , <i>Kapha-Vataghna</i>
3	<i>Shyonak</i> ² (Oroxylum indicum)	<i>Madhur-</i> <i>Tikta-Kashay</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> , <i>Ruksha</i>	<i>Dipangrahi, Vata-Kapha</i> <i>Doshaghna, Amanashana</i>
4.	<i>Patala</i> ² (Sterospermum sauevolens)	<i>Tikta-Kashay</i>	<i>Ushna</i>	<i>Katu</i>	<i>Laghu</i> , <i>Ruksha</i>	<i>Tridoshaghna, Pachak</i> , <i>Amlapittaghna</i>
5.	<i>Gambhari</i> ² (Gmelina arborea)	<i>Tikta, Kashay, Madhur</i>	<i>Ushna</i>	<i>Katu</i>	<i>Guru</i>	<i>Tridoshaghna</i> , <i>Dipana</i> , <i>Pachan, Amashoolaghna, Rasayana</i>
6	<i>Bruhatpanchamula</i> ⁰	<i>Tikta-Kashay-Madhur</i>	<i>Ushna</i>	<i>Katu</i>	<i>laghu</i>	<i>Agnidipanam, Kapha-Vataghna</i> ,

it also has *Vatghna* property due to its *Ushna Virya* which leads to keep *Vata Dosha* in its *Stahana Awastha* and prevent it from getting circulated in *Kostha* and does breaks the *Samprapti* of *Sthaulya*. Also *Bilvadi Panchmoola* and *Madhu* can remove *Medovaha Strotas Khavaigunya* by *Tikta-Kashay-Madhur Rasa*, *Ushna –Virya,Katu-Vipaka properties*.

Conclusion

Sthaulya has devastating effect on human body. It affects overall physical status along with social status. *Atusampuran*, Excessive intake of *Madhur Ahara*, *Ayayam*, and *Medovaha strotas dusthi* are the main causative agent for manifestation of *Sthaulya*. Excessive formation of *Mansa-Medadhātu*, Vitiation of *Kapha Dosha*, *Vimargamanam* of *Vatadosha* and excessive increase in *Agni* are the main factors which are actually involved in the pathogenesis of *Sthaulya*. *Bilvadi Panchamoola* has *Kashay-Madhur Rasa*, *Ushna - Virya*, *Katu-Vipaka* properties while *Madhu* has *Kapha-Medoghna*, *Lekhan* Property which can lead to *Mansa – Medoekhan*. *Bilvadi Panchamoola* does *Ama-Annarasa P achana* by its *Kashaya Tikta-Rasa*, it also controls vitiated *Vata Dosha* by its *Ushna Guna* and prevents *Vata Dosha* from getting moved into *Kostha*. *Bilvadi Panchamoola* when used with *Madhu* can break *Samprapti* of *Sthaulya* by controlling all responsible factors . So, from current study it can be concluded that use of *Bilvadi Panchmoola* with *Madhu* will be effective in treatment of *Sthaulya*.

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