

International Research Journal of Ayurveda & Yoga

An International Peer Reviewed Journal for Ayurveda & Yoga



Role of *Khadira Asana Sara Bhavita Triphala Churna* in *Atisthaulya*

Aswathy. P¹, Pawan Kumar Godatwar², Aravind S³

VOLUME 4 ISSUE 8

- 1- PG Scholar, Department of Roga Evam Vikriti Vigyan, National Institute of Ayurveda, Jaipur, Rajasthan
- 2- Professor and Head, Department of Roga Evam Vikriti Vigyan, National Institute of Ayurveda, Jaipur, Rajasthan,
- 3- Medical Officer, Indian Systems of Medicine, Kerala

Corresponding Author :- Aswathy P, PG Scholar, Department of Roga Evam Vikriti Vigyan, National Institute of Ayurveda, Jaipur, Rajasthan, Email, Id- draswathy1990@gmail.com

Article received on 11th July 2021

Article Accepted 23rd August 2021

Article published 31st August 2021

ABSTRACT: -

Objective: *Athisthaulya* (Obesity) has been mentioned among *Ashtaninditha Purusha*, one among the most hatred persons in the world. An obese man is feeling ashamed of his body size in the public, and thus Obesity turns to be a serious health concern. In the present-day life style, due to the advanced technology and busy work schedule, life has become more sedentary and variety of junk foods are ingested resulting in *Atisthaulya*. The potential of Ayurveda in tackling non-communicable diseases such as obesity wants to be explored as it contains an array of formulations. This article is an attempt to explore the causative factors, pathogenesis, symptomatology, and treatment modalities of *Atisthaulya* and to explain the role of *Khadira Asana Sara Bhavitha Triphala Churna* (*Triphala Churna* prepared by triturated with *Kwatha* of *Khadira* and *Asana*) in the management of *Athisthaulya*.

Data source and Review methods: Data was collected through literature review of Classical Ayurvedic Literatures such as Charaka Samhita, Susruta Samhita, Astanga Hridaya and journal articles related to the subject,

Conclusion: *Atisthaulya* is a disease in which mainly *Kapha Dosha* and *Medas Dushya* are involved which causes *Medo-dhatvagnimandya* (decreased fat digestion) and *Srotas* obstruction, ultimately causing abnormal *Medo Dhatu Upacaya* and then *Staulya*. In *Khadira Asana Sara Bhavitha Triphala Churna* and *Medhoharaguggulu*, most of the ingredients have *Katu* and *Tikta Rasa*, *Ruksha*, *Laghu* and *Tikshna guna*, *Ushna Virya* and *Katu Vipaka*, and *Vata-Kaphasamaka* property which may be effective to control *Atisthaulya*.

Keywords: *Atisthaulya*, Obesity, *Staulya*, *Triphala Churna*



This work is licensed under a creative attribution -Non-commercial-No derivatives 4.0 International License commons

How to cite this article: P Aswathy, Godatwar PK, Aravind S, Role of *Khadira Asana Sara Bhavita Triphala Churna* in *Athisthaulya*, IRJAY. [Online] 2021;4(8): 183-192. Available from:

<http://irjay.com>;

DOI: <https://doi.org/10.47223/IRJAY.2021.4825>

INTRODUCTION

Athisthaulya is defined as a disease condition in which there is increased deposition of adipose tissue (*Medo Dhatu*) in the body especially in the regions of buttocks, abdomen and chest with tiredness and fatigue ^[1].

The human life is rapidly changing in terms of food, standard of living, environment, profession, fashion etc. In the present-day life style, due to the advanced technology and busy work schedule, life has become more sedentary and variety of junk foods are ingested resulting in the accumulation of extra calories. Changing life style of an individual by neglecting the suitability of *Ahara*, *Vihara* and *Vichara* according to ones *Prakriti* may lead to *Medodushi* and gives rise to *Santarpanotha Vikara* like *Sthaulya*, *Prameha*, *Srotosamlepa* and *Dhamnirprathichaya* as explained in *Kaphaja Nanatmaja Vikara* ^[2]

Although being a serious health issue, the modern medical management currently available is not effective in the management of obesity and the possible ray of hope is only surgical intervention. The potential of Ayurveda – the traditional Indian health system in tackling non-communicable diseases such as obesity wants to be explored as it contains an array of formulations and medicaments addressing multi-dimensional systematic disease approach. This article is an attempt to explain the role of *Khadira Asana Sara bhavitha Triphala Churna* (*Triphala Churna* prepared by triturated with *Kwatha* of *Khadira*

and *Asana*) and in the management of *Athisthaulya*.

Concept Of *Medodhatu*

The human body is made up of seven body elements called *Dhatu* (tissues) and out of these, *Medodhatu* (Fatty tissue) is the fourth in the sequence. It is called *Medas* because it gives smoothness to the body. It is also *Snigdha* ^[3](unctuous) and *Mrudu* (soft) in nature. The symptomatology of increased *medodhatu* (lipid tissue) includes disease affecting neck region like *Galaganda* - goitre, *Gandamala* - cervical lymphadenitis, *Arbudha* (large tumors, including malignant ones), *Granti* (benign lumps), increased fat deposits upon cheeks, thighs, abdomen and *Adhimamsa* (extra muscular bulk) at and around the neck. ^[4]

Medodhatu is of two types. *Poshaka Medodhatu/Abaddha* (Mobile) *Medas* and *Poshya Medodhatu/Baddha* (Immobile) *Medas*. *Poshaka Medodhatu/Abaddha* (Movable) *Medas* ^[5] is the type of *Medo Dhatu* which is *Gatiyukta* (mobile) and is circulated in the *Medovaha Srotas*. This is also called as *Poshaka MedoDhatu* because it circulates with the *Rasa-Rakta Dhatu* to give nutrition to *Poshya Medo Dhatu*. *Poshya Medo Dhatu/Baddha* (Immobile) *Medas* is the type of *Medo Dhatu* which is *Gativivarjita* (immobile) and is stored at various sites of the body. This is also called as *Poshya Medo Dhatu/ Sthayi, Medodhatu*

Pramana of *Medodhatu*: ^[6]

The total quantity of *Medodhatu* is 2 *Anjali*.

Pancabhautika composition: [7]

The *Panchabhautika* composition of *Medodhatu* has the dominance of *Pruthvi* (earth) and *Jala* (water). The presence of *Jala* (water) reveals the nourishing nature of fatty tissue and the presence of *Pruthvi* (earth) reveals its role in stabilizing the functions of the body and mind.

Karma of Medodhatu:

Snigdha and *Guru Guna* are predominant in *Medodhatu*. It is responsible for *Bala* and causes *Brimhanatva* (nourishment) and *Sthulata* (bulky appearance) of the body. It produces *Sneha* and *Snigdha* which helps in producing *Dridhata* (strength) of the *Shareera*. This *Medadhatu* nourishes *Asthi dhatu*. *Snigdhatu* of body is attained due to presence of *Medodhatu*.

Medodhatu Vridhi Lakshana:

Medodhatu vridhi (increase) causes *Snigdhatu* (unctuousness) of *Shareera* (body) and *Udara* (abdomen). *Parshvavridhi* (bulky appearance of the flanks), *Kasa* (Cough), *Shwasa* (Breathlessness), *Hikka* (Hiccup), *Daurgandhata* (foul smell) of *Shareera* (body) are caused due to the increased *Medodhatu*.

Medovaha Srotas

Medovaha Srotas is the channel which carry nutritive material to the site of *Medodhatu* and provide nutrition to *Medodhatu*. The *Medovaha Srota Mula* described by various *Acharyas*

1. According to Charaka [8] – *Vrikka* and *Vapavahana*
2. According to Sushruta [9] – *Vrikka* and *Kati*
3. According to Vagbhata [10] – *Vrikka* and *Mamsa*

Injury to this *Srotas* results in *Viddha lakshana* and they include *Atisweda* (excessive sweating), *Snigdhagata* (unctuousness of the body), *Talushosha* (dryness of throat), *Sthula* (obesity), *Sopha* (swelling) and *Pipasa* (thirst).

Description Of Sthaulya

According to *Acarya Caraka* [11], a person having pendulous movement of buttocks, abdomen and breasts due to the excess deposition of fatty tissue and muscular tissue and having unequal and abnormal distribution of fat with reduced vital capacity is known as *Atisthula purusha*. *Atisthaulya* is also mentioned as the *Nanatmaja Vikara* of *Kapha* in *Caraka samhitha Sutrasthana*. *Sthaulya* has been renamed by *Madhavakara* as *Medoroga*. He has used *Medasvina*, *Sthula* and *Atisthula* as the synonyms of *Medoroga*.

Sthaulya is a disease in which *Kapha Dosha* and *Meda Dushya* are mainly involved in the etiopathogenesis of the disease. Vitiated *Kapha* causes *Medo-dhatvagnimandya* (decreased digestive fire which severely affects fat digestion) and obstruction to *Srotas*, ultimately causing abnormal *Meda Dhatu Upacaya* and *Medoroga* finally resulting in *Sthaulya*.

Nidāna (Etiological factors)

According to *Madhavanidāna*, [12] the etiological factors of *Sthaulya* include *Avyayama* (Lack of exercise), *Divasvapna* (Day time sleep), *Slesma Ahara Sevana* (Food items which causes increase of *Kapha doṣa*), *Madhura Annarasa* (Sweet foods) and *Sneha* (unctuous substances).

According to *Caraka*, [13] the etiological factors include *Atigurvadi Sevana* (Excess intake of heavy food), *Atimadhuradi Sevana* (Excess intake of sweet food), *Atisita Ahara Sevana* (Excess intake of cold food), *Atisnigdhadhi Sevana* (Excess intake of fatty diet), *Avyayama* (lack of physical exercise), *Avyavaya* (abstinence from sexual intercourse), *Divā Svapnam* (sleeping during the day), *Acinta* (Lack of mental stress), *Harṣa* (Always cheerfulness) and *Bijasvabhavadoṣa* (Genetic factors). *Susruta* [20] has added *Adhyasanasila* (intake of food before digestion of previous meal) as a causative factor for *Sthaulya*.

The *Nidana* of *Sthaulya* can be understood in two ways as *Bahya karanas* (*Medas* potentiating diet) and *Abhyantara karanas* (*Dosha, Dhatu, Mala, Srotas* etc.). Only Charaka has defined *Beejadoshā* as one of the *nidana* besides other causes.

All the *Nidanas* described by various *Acharyas* for *Sthaulya* can be classified into

1. *Ahara* *Nidana*
2. *Vihara* *Nidana*
3. *Manasika* *Nidana*
4. *Anyā* *Nidana*

These *Ahara Dravya*, have properties like *Madhura Rasa, Snigdha, Guru, Slakshana* and *Tamoguna, Madhura Vipaka, Sheeta Virya, Brihmana* and *Santarpana Karma* and predominance of *Pruthvi & Jala Mahabhuta*, which are similar to qualities of *Kapha* and *Meda*.

Manasika nidanas cause aggregation of *Kapha* and *Tamoguna* and in turn influence indirectly by the association with *Shariraka Dosha's* in the materialization of the disease *Sthaulya*. *Beejadoshā* is considered has the *Utpadaka Hetu* in the manifestation of *Medoroga*. Hence individual who is having *Beejadushti* and indulge in *Ahara* which increase the *Kapha* and *Meda*, may predispose *Sthaulya*

Purvarupa (Prodromal Symptoms):

There is no direct description of *Purvarupa* of *Sthaulya* in classical texts. *Acharya Caraka* has mentioned *Prameha purvaroopā* can be considered as *Purvarupa* of *Sthaulya* ^[14]. *Bahudrava slesma & Abaddha Medus* are the two main components in *samprapti ghataka* of *Prameha* and *Medoroga* ^[15]. So, symptoms of *sleshma samcaya* and *Medodusti* related *Purvarupa* of *Prameha* and symptoms of *Medovaha Srotodushti* can be considered as *Purvarupa* of *Sthaulya*.

Symptoms

The symptoms of *Sthaulya* include *Atinidra* (Excessive sleep), *Tandra* (Incomplete sleep),

Alasya (Laziness), *Visra Sarira gandha* (Bad bodyodor), *Amgagaurava* (Heaviness) and *saithilya* (Flabbiness). According to *Madhavakara* ^[16] *Kshudrasvasa* (Dyspnoea), *Triishnā* (Thirst), *Moha* (Drowsiness), *Svapna* (Sleepiness), *Krathana* (Sudden obstructive respiration) Flabbiness of body parts, *Kshuth* (Voracious appetite), *Sveda* (Excessive sweating), *Daurgandhya* (Bad odor from body), *Alpa prāna* (Decreased vital capacity), *Alpamaithūna* (Decreased sexual potency), Accumulation of fat in abdomen and small bones and *Udare Vruddhi* (Abdominal expansion) are seen as the symptoms of *Sthaulya*.

Ashtadosha of Atisthaulya (Eight Peculiar features of Obesity) ^[17]

The peculiar features of *Sthaulya* mentioned by *Charaka* are *Ayuṣohrāsa* (Deficient in Longevity), *Javoparodha* (Slow in movement), *Kricchravyavayata* (Difficulty to indulge in sexual intercourse), *Daurbalya* (Weakness), *Daurgandhya* (Foul smell), *Sveda abādha* (Excessive Sweating), *Atikshut* (Voracious Appetite) and *Pipasa* (Increased Thirst)

Samprapti (Pathogenesis)

Acarya Caraka and *Acarya Susruta* have different opinion about the *Samprapti* of *Sthaulya*. *Acarya Caraka* has considered *Ahara* as most common *Samprapti ghataka* whereas *Acarya Suruta* has accepted *Ama* is the main factor.

According to *Caraka* ^{[18],[19]}, the obstruction of body channels by fatty tissue causes the *avarana* of *Vata Dosha* that results in its aggravation. The aggravated *Vata* moves mainly into stomach, and increases the *Jatharagni*. The increased digestive fire results in increased appetite, quicker digestion and absorption of the food. The next hunger reflex occurs quickly and person craves for more food. This excessive eating produces more

production of *Ahara Rasa* which causes over growth of fatty tissue leading to *Sthaulya*.

According to *Susruta* [20], the etiological factors like *Kapha Dosha* aggravating food items, excessive eating, lack of exercise and day sleep causes the improper digestion of food and results in the production of *Ama Rasa*. The sweet part of *Ama Rasa* moves with in the body and *Snigdhamasa* (unctuous part) of the *Anna Rasa* causes *Medoroga* which produces *Atisthaulya*.

Upadrava [21]

The *Upadrava* (complications) of *Sthaulya* includes *Pramehapidika* (Diabetic carbuncle), *Jvara* (Fever), *Bhagandara* (Fistula-in-ano), *Vidradhi* (Abscess), *Swasa* (Dyspnoea), *Udara roga* (Ascites) and *Urusthamba* (Stiffness of thigh). *Kushta*, *Visarpa*, *Kamala*, *Jvara*, *Atisara*, *Prameha*, *Arsa*, *Apachi* and *Slipada* may develop in *Sthaulya* person. Due to bad smell of sweat minute worms may develop in the skin (B.P.M.39/9-10)

Sādhyā- Asādhyatā (Prognosis)-

Sthaulya (Obesity) is *Kricchrasādhyā* (difficult to treat) and *Sahaja Sthaulya* (Hereditary obesity) is *Asādhyā* (incurable). According to *Acārya Caraka*, *Sthaulya* if not duly managed, a *Sthula* person is prone to death due to complications as a result of excessive hunger and thirst. Diseases of *Medas* like *Sthaulya* (Obesity) and *Prameha* (Diabetes) are curable in patients having good strength and only if onset of the disease is recent.

Cikitsa (Treatment) [22],[23],[24]

The main aim of *Sthaulya Cikitsa* is to restore the *Medodhatvagni* to its normal state and the correction of unbalanced *Doṣa*, vitiated *Srotas*, *Dhatu* and *Mala* which are the main factors involved in the *Samprapti* of *Sthaulya*.

The equilibrium of *Vata Dosa*, *Kapha Doṣa*, *Meda dhatu* and restoration of *Jatharagni* and *Medodhatvagni* is essential. In this regard *Vata*, *Kapha* and *Medohara* drugs are indicated for the treatment of *Sthaulya*. The *Dravya* which

possess *Katu*, *Tikta*, *Kashaya Rasa*, *Tikshna*, *Ushna Guna*, *Dipana*, *Pacana*, *Lekhana*, and *Chedana* properties which reduce *Kapha*, *Meda*, *Ama* and increases power of *Agni* are choice of drugs for treatment of *Sthaulya*. (Table no I)

Emaciation is better than obesity, since the later is difficult to cure. Neither *Brimhana* (nutritive therapy) nor *Langhana* (attenuation therapy) is capable of pacifying the increased *Medas* (adiposity), *Agni* (digestion) and *Vata in Sthaulya*.

Obesity – Modern Review

Unwanted weight gain leading to overweight & obesity has become a main concern for the global rise in the incidence of non-communicable diseases. Because of the psychological and social stigmata that accompany being overweight & obese, those affected by these conditions are also vulnerable to discrimination in their personal and work lives, low self-esteem, and depression. These medical and psychological sequel of obesity contribute to a major share of current health-care expenditures and generate additional economic costs through loss of worker productivity, increased disability, and premature loss of life. [25]

Obesity is generally caused by eating excess & Lack of physical activity [26]. If a person consumes high amounts of energy, particularly fat & sugars, but do not burn off the energy through exercise & physical activity, much of the surplus energy will be stored in the body as fat and leads to obesity. (Table no. II)

Role Of Khadira Asana Sara Triphala Churna In Sthaulya

Sthaulya is a disease in which *Kapha Dosha* and *Meda Dushya* are mainly involved in the etiopathogenesis of the disease. Vitiated *Kapha* causes *Medo-dhatvagnimandya* (decreased digestive fire which severely affects fat digestion) and obstruction to *Srotas*, ultimately causing abnormal *Meda Dhatu*

Upacaya and *Medoroga* finally resulting in *Sthaulya*. In *Khadira Asana Sara Bhavitha Triphala Churna* most of the ingredients have *katu-thikta rasa*, *ruksha*, *laghu guna* and *teekshṇa guna*, *usha virya*, *katu* and *madhura vipaka* and *vata-kapha samaka* property which is effective in controlling *Sthaulya*.

Ingredients of *Khadira Asana Sara Bhavitha Triphala Churna* [27][28]

(Drug Latin name Part used Quantity)

Pathya - Terminalia chebula Retz. Fruit 1 part

Vibhitaki - Terminalia bellerica (gaertn) Roxb
Fruit 1 part

dhatri - Emblica officinalis Gaertn. Fruit 1 part

Khadira -Acacia catechu (Linn.f.)Willd.
Heart wood 1.5 part

Asana -Pterocarpus marsupium Roxb
Heart wood 1.5 part

Preparation of *Khadira Asana Sara Bhavitha Triphala Churna*

Triphala Churna was prepared by mixing equal quantity of *Harithaki*, *Vibhitaki* and *Amalaki*. *Khadira-Asana Kwatha* was prepared by boiling one part of *Asana* and *Khadira* in eight times of water and reduced to one by eight part [29]

Triphala [30]

In *Ashtanga Hridaya Sutrasthana*, the explanation of “*Triphala*” comes under *Aushada varga* in *Annasvarupavijnaniya* chapter. These three fruits constitute the best-known rejuvenative drugs and hence the name “*Triphala*”. *Triphala* was used in the management of eye diseases, promote wound healing, skin diseases, *Kleda* (discharges/exudates), *Medas* (adiposity), *Prameha* (diabetes), *Kaphaja* and *Raktaja vikaras* (diseases predominant of *Kapha* and *Rakta*)(Table No.III.)

Most of the drugs in both *Khadira asana sara bhavitha Triphala churna* have following properties.

✚ **Rasa:** *Katu, Kashaya*

✚ **Guṇa:** *Ruksha, Laghu*

✚ **Virya:** *Ushna*

✚ **Vipaka:** *Katu*

✚ **Doshakarma:** *Kaphavatasamaka*

Katu Rasa has the action of, *Meda soshana*, *Kleda soshana*, *Sneha soshana*, *Srotovivarana*, *Dipana Pacana Ruksha Guna* has the action of *soshanaLanghana (Apatarpaṇa)* action is achieved by virtue of *LaghuGuna*. *Usha Virya* is *Kaphavata samaaka* and helps in *Pāka* (metabolism). *Katu Vipaka* has action similar to *katurasa*. In case of *Sthaulya*, treatment (*Samprapti Vighatana*) is aimed at the following levels and it is attained in the sequence explained below.

1. *Ama Pacana- Katu Rasa, Ushna Virya* and *KatuVipaka*
2. *Agni Dipana (Dhatvagni)- Katu Rasa, Usha Virya*
3. *Medahara- Katu -Tikta Rasa, Ruksha - Laghu Guna, UshnaVirya*
4. *Srotosodhana(Srotovivaraṇa)- Katu Rasa, TikshaGuna*
5. *Vata samana (Specially Samsna Vata)- UṣnaVirya*
6. *Kapha Hara- Katu -Tikta Rasa, Laghu- Ruksha Guna And Ushna Virya*

CONCLUSION

Sthaulya is a disease in which mainly *Kapha Doṣa* and *Medas Dushya* are involved. Vitiated *Kapha* causes *Medo-dhatvagnimandya* (decreased fat digestion) and *Srotas* obstruction, ultimately causing abnormal *Medo Dhatu Upacaya* and then *Medoroga*. In *Khadira Asana Sara Bhavitha Triphala Churna* and *Medhoharaguggulu*”, maximum ingredient

havekatu rasa and tikta rasa,ruksha guna ,laghu guna and tikshna guna, Virya is Ushna, katu Vipakaand madhura Vipaka,and Vata-Kaphasamaka property which may be effective to control *Sthaulya*.

Acknowledgment: Nil.

Financial Support: Nil.

Conflict of Interest: Nil

REFERENCES

1. Charaka Samhita, Sutra Sthana, Ashtanindiitiya Adhyaya, 21/2. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
2. Charaka Samhita, Sutra Sthana, Maharoga Adhyaya, 20/17. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
3. Charaka Samhita, Chikitsa Sthana, Grahani Chikitsa, 15/16. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
4. Sushruta samhita, Sutra Sthana, ,24/9. Available from: [Http://Niimh.Nic.In/Ebooks/Esushruta/? Mod=Adhi](http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi). [Last Accessed On 2021 May 28].
5. Charaka Samhita, Nidana Sthana, Prameha Nidana Adhyaya, 4/7. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
6. Charaka Samhita, Sareera Sthana, Sareera Sangya sareera Adhyaya, 7/15. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
7. Charaka Samhita, Sareera Sthana, Sareer asangyasareera Adhyaya, 7/15. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
8. Charaka Samhita, Vimana Sthana, Srotovimana Adhyaya, 5/8. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
9. Sushruta samhita, Sareera sthana, Dhamani Vyakarana Adhyaya, 24/9. Available from: [Http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi](http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi). [Last Accessed On 2021 May 28].
10. Sastri HS, Acharya B, Editors. Ashtanga Hridaya Of Vagbhata With The Sarvangasundara Commentary Of Arunadatta. Sareeraasthana, Raktapitta Chikitsa Adhyaya, 2/6. Varanasi: Chaukhamba Surbharati Prakashan; 2017.
11. Charaka Samhita, Sutra Sthana, Ashtanindiitiya Adhyaya, 21/9. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
12. Madhava Nidana, Medoroga Nidana Adhyaya, 34/1. Available from: [Https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read](https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read) [Last Accessed On 2021 May 28].
13. Charaka Samhita, Sutra Sthana, Ashtanindiitiya Adhyaya, 21/4. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
14. Charaka Samhita, Sutra Sthana, Vividh asithapeetheeya Adhyaya, 28/15. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
15. Charaka Samhita, Nidana Sthana, Prameha Nidana Adhyaya, 4/8. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
16. Madhava Nidana, Medoroga Nidana Adhyaya, 34/1. Available from: [Https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read](https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read) [Last Accessed On 2021 May 28].
17. Charaka Samhita, Sutra Sthana, Ashtanindiitiya Adhyaya, 21/5-7. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021 May 28].
18. Madhava Nidana, Medoroga Nidana Adhyaya, 34/5-7. Available from: [Https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read](https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read) [Last Accessed On 2021 May 28]

19. Charaka Samhita, Sutra Sthana, Ashtan indiitiya Adhyaya, 21/5-7. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021May 28].
20. Sushruta samhita, Sutra Sthana, Dosha dhatumala Kshaya Vrudhi Vinjaneeyam, 15/32. Available from: [Http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi](http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi). [Last Accessed On 2021May 28].
21. Madhava Nidana, Medoroga Nidana Adhyaya, 34/7-9. Available from: [Https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read](https://Niimh.Nic.In/Ebooks/Madhavanidana/?Mod=Read) [Last Accessed On 2021May 28]
22. Charaka Samhita, Sutra Sthana, Ashtan indiitiya Adhyaya, 21/21-28. Available From: [Http://Niimh.Nic.In/Ebooks/Ecaraka](http://Niimh.Nic.In/Ebooks/Ecaraka). [Last accessed On 2021May 28].
23. Sushruta samhita, Sutra Sthana, Dosha dhatumala Kshaya Vrudhi Vinjaneeyam, 15/32. Available from: [Http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi](http://Niimh.Nic.In/Ebooks/Esushruta/?Mod=Adhi). [Last Accessed On 2021May 28].
24. Ashtanga Hrudaya, Sutrasthana, Dwivido pakramaneeya Adhyaya, 14/21-24 , Available From; E-Vagbhata - Institute Of Ayurveda And Integrative ... - Ayurvedya. [Http://Ayurvedya.Net](http://Ayurvedya.Net) › Shastra › Sangraha. [Last Accessed On 2021May 28].
25. [Https://Www.Ncbi.Nlm.Nih.Gov/Books/NBK279167](https://www.ncbi.nlm.nih.gov/books/NBK279167) [Last Accessed On 2021May 28].
26. Ramdas N, Exam Preparatory Manual For Undergraduates Pathology, Second Edition Jaypee Brothers Medical Publishers; 2017. pp.243
27. Ansari M M, Khan A, Zargar R K. Body Mass Index An Important Anthropometric Parameter To Predict Health-Risk In Adult Population Of Bastar Region Of Chhattisgarh: A Cross Sectional Study At GMC Jagdalpur. DOI:10.5958/2394-2126.2016.00018.9
28. D. Sreeman Namboothiri, Yogamrutha, Commentary: (11th ed.) Alapuzha: Vidhy arambham Publishers; 2014. P-309.
29. Sharma S Rasa tharangini. (1st ed.) Delhi: Mothilal banarsi das; 2014. pp-22
30. Ashtanga Hrudaya, Sutrasthana, Anna swaroopa Vinjaniya Adhyaya, 6/153-159 , Available From; E-Vagbhata - Institute Of Ayurveda And Integrative ... - Ayurvedya. [Http://Ayurvedya.Net](http://Ayurvedya.Net) › Shastra › Sangraha. [Last Accessed On 2021May 28].

Table no I.Principle of treatment of *sthaulya* in Classical texts

Name of <i>Samhita</i>	Treatment principle adopted for <i>Staulya</i>
Caraka Samhita ^[22]	<i>Guru Aptarpana</i> , [Food substances ,which are <i>Guru</i> (heavy) and <i>Atarpana</i> (emaciating)] <i>Stihula Karshana, Vata, sleshmahara and Medohara Aushadha,</i> <i>Ruksha ushna Basti</i> <i>Tikshna, Ruksha Udvartana</i>
Susruta Samhita ^[23]	<i>Nidana Parivarjana</i> <i>Virukshana</i> <i>Chedana and Lekhana Basti</i>
Ashtanga Hrdaya ^[24]	<i>Meda Anila and slesmahara Ausadha</i> <i>sodhana</i>

Table no. II. BMI values and its interpretation according to ICMR Hyderabad, AIIMS Delhi, Diabetic Foundation of India and NIN ²⁷

Sl.no.	BMI Value	Interpretation
1	< 18.5 kg/m ²	Underweight
2	18.5-22.9kg/m ²	Normal
3	> 23kg/m ²	Overweight
4	> 25kg/m ²	Obese I
5	> 30kg/m ²	Obese II
6	> 35kg/m ²	Obese III

Table No.III. Approximate *Rasa Pañcaka* of *Khadira Asana Sara Bhavitha Triphala Churna*

Rasa	<i>Madhura</i>	2	13.3%
	<i>Amla</i>	2	13.3%
	<i>Lavana</i>	0	0
	<i>Katu</i>	2	13.3%
	<i>Tikta</i>	4	26.6%
	<i>Kashaya</i>	5	33.33%
Guna	<i>Guru</i>	1	9%
	<i>Snigdha</i>	0	0
	<i>Ruksha</i>	5	45%
	<i>Laghu</i>	4	36.3%
	<i>sita</i>	1	9%
Virya	<i>Ushna</i>	2	40%
	<i>sitha</i>	3	60%
	<i>Anushna sita</i>	0	0
Vipaka	<i>Madhura</i>	2	30%
	<i>Katu</i>	3	60%
	<i>Amla</i>	0	0
Doshakarma	<i>Kapha Pitta Śāmaka</i>	2	30%
	<i>Tridosha samaka</i>	3	60%