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A Comparative Clinical Study on *Trushanadi Guggulu* & *Amrutadya Guggulu* in the Management of *Sthoulya* with reference to Obesity

Mane Akash Pawan¹ 

1.PG Scholar, Dept of Kayachikitsa, Dhanwantari Ayurveda College and Hospital, Karnataka.

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Corresponding author-

Mane Akash Pawan, PG Scholar,
Dept of Kayachikitsa, Dhanwantari
Ayurveda College and Hospital,
Karnataka.

Email: akashmane9393@gmail.com

ABSTRACT:

Introduction The disease *Sthoulya* is known to Indian Physicians since very olden time. All the Ayurvedic classics described the disease *Sthoulya* in detail. This disease has been listed under the eight most discarded personalities. The two terminologies have been widely used by Ayurvedic texts in reference to Obesity. i.e. *Sthoulya* and *Medoroga*.

Materials and methods 40 patients irrespective of sex, socio-economic status, place, suffering from *Sthoulya* were selected for the study. Selected patients were randomly placed under two groups A and B with 20 patients in each group. Group 'A': Patients under this group were treated by *Trushanadi guggulu vati* 500 mg 2 TID [General dose of *Guggulu* is 1-3 *Maasha* 14=1-3gm] with *sukhoshna jal anupana* for 30 days. Group 'B': Patients under this group were treated by *Amrutadya Guggulu vati* 500 mg 2 TID [General dose of *Guggulu* is 1-3 *Maasha* 14 = 1-3gm] with *sukhoshna jal anupana* for 30 days.

Result and Discussion-Both the treatment modalities have shown good result in the management of the disease *Sthoulya*. On Comparison between the Group-A (*Trushanadi Guggulu*) showed better results than Group B (*Amrutadya Guggulu*) in all the classical symptoms as well as on objective parameters.

Keywords: *Sthoulya*, *Medoroga*, *Trushanadi Guggulu*

INTRODUCTION

Sthoulya attracts many illnesses like *Hridroga*, *Vaataroga*, *Prameha* etc. in the form of *Upadravas*, if not managed in the earlier stage. The prevalence of *Sthoulya* vis-à-vis obesity is rising to high level at an alarming rate in both developed and developing countries. The prevalence of obesity has increased by about 10-50% in the majority of European countries in the last 10 years and currently effects 77% of people living in urban areas of Western pacific. *Sthoulya* is a predominant metabolic disorder. It is described by *Acharya Charaka* in *Ashtaunindita Purusha*.

Sthoulya is one among the major diseases that falls under the category of *santarpanotha vyadhies*.¹ According to it eight kinds of persons are despicable such as over-tall, over-short, over hairy, over-hairless, over-black, over-fair, overweight and over-lean. *Sthoulya*² (over-weight) is caused by over-saturation intake of heavy, sweet, cold and fatty diet, indulgence in day sleep and exhilaration, lack of mental work and genetic defect. Obese person is said to suffer from the following eight defects; *Ayurhasa*, *Javoparodha*, *Alpa-vyavayita*, *Daurbalya*, *Daurgandhya*, *Swedabadha*, *Atitrisha*, *Ati-kshudha*. According to



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Charaka Samhita, the *dhatu* (body tissues) get disequilibrium due to several complications. Therefore, Ayurveda has a principle that the weak *Agni* (the metabolic agent) plays a major role as a cause of many diseases. The *sthoulya* is one of them, which leads to the *srotoavarodha* (blocking in to micro channels of the body) that causes different complications and may shorten the life span. *Bhaishajya Ratnavali* emphasized the uses of the *Amrutadya Guggulu*³ which is claimed effective for the *sthoulya*. *Trushanadi Guggulu*⁴ explained as *ati sthoulya nashaka* by Bharat bhaishajya ratnakar. In the present Study *Trushanadi Guggulu* and *Amrutadya Guggulu* are taken for clinical trial which contains drugs like *Sunthi*, *Marich*, *Pippali*, *Chitraka*, *Haritaki*, *Bibhitaki*, *Amalaki*, *Musta*, *Vidanga*, *Amritha*, *Ela*, *Vatsaka*, *Kalinga* and *Shuddha Guggulu*. Almost all the drugs are having *Katu rasa*, *Laghu Ruksha guna*, *Ushna virya*, *Katu vipaka* and *Kapha Vata Shamaka* properties which may be helpful in disintegrating the *Samprapati* of *Sthoulya*. These have scope for encouraging results in reduction of weight, skin fold thickness, body circumference and associated signs and symptoms. Hence present study was undertaken to compare effect of *Trushanadi Guggulu* and *Amrutadya Guggulu* in *Sthoulya*.

MATERIALS AND METHODS

Source Of Data:

Literary Source:

All the Ayurvedic, Modern literature, Journals, websites about the disease & the Medicine was reviewed & documented for the planned study

Sample source:

The patients were selected from OPD and IPD of Dhanvantari Ayurveda College, Hospital & PG Research centre, Siddapur

Drug source:

Raw drugs required were collected from the GMP approved pharmacy *Trushanadi Guggulu* and *Amrutadya Guggulu* were prepared at Dhanvantari Ayurveda College, Hospital & PG Research centre, Siddapur in the dept. of *Rasashastra* and *Bhaishajyakalpna* in according to classical reference.

Methods of collection of data:

Evaluation of the patient was done after detailed examination and the Data was recorded in a specially prepared proforma.

Inclusion criteria

1. Patient presenting classical symptoms of *sthoulya*.
2. Age group–18 to 50 years.
3. BMI more than 25 and less than 40
4. Patients were selected irrespective of gender, occupation and socioeconomic status.

Exclusion criteria:

1. BMI more than 40.
2. Pregnant women.
3. Patients suffering from life threatening disease like (cancer, HIV/AIDS, Diabetes, coronary heart Disease, Neurological Condition, Hypothyroidism, Tuberculosis)
2. Patient who daily go aerobics.

Withdrawal criteria: Patients with improper follow up and showing any adverse effect were withdrawn from study.

Diagnostic criteria: Diagnosis would be done on the bases of signs & symptoms of *sthoulya* as explained in the classical text. (Diagnosis was also done according to subjective & objective parameters)

Ethical Clearance number:-

IEC/DACH/DATE:29/04/2022

Study design: A randomized comparative Clinical study.

40 patients irrespective of gender, socio-economic status, place, suffering from *Sthoulya* were selected for the study. Selected patients were randomly placed under 2 groups A and B with minimum 20 patients in each group. A separate case sheet was prepared with a complete history, physical signs & symptoms, necessary lab investigations. The parameters of signs & symptoms were scored on basis of standard methods & was analyzed statistically

Duration of Treatment- *Shamanoushadha* was given for 30 days in both groups

Group A

Trushanadi Guggulu – 30 days.

Follow up - 15th and 30th day

Group B

Amrutadya Guggulu – 30 days.

Followup-15th and 30th day

Assessment criteria:

These criteria to be followed before, during & after the treatment.

Subjective parameters:

1. *Ati-kshudha*
2. *Ati-pipasa*
3. *Ati-nidra*
4. *Ati-sweda*
5. *Ayatopachautsaha*

Objective parameters:

1. Body weight
2. BMI
3. Chest circumference
4. Waist circumference
5. Mid arm circumference
6. Mid-thigh circumference

Interventions

Group 'A': Patients under this group were treated by *Trushanadi guggulu-vati* 500 mg 2 TID [General dose of Guggulu is 1-3 *Maasha* 14=1-3gm] with *sukhoshna jal anupan* 30 days.

Group 'B': Patients under this group were treated by *Amrutadya Guggulu vati* 500 mg 2 TID [General dose of Guggul is 1-3 *Maasha* 14 = 1-3gm] with *sukhoshna jal anupan* 30 day.

Statistical Test: Wilcoxon test & Mann Whitney test was used to analyses the results of Subjective parameters and paired 't' test was used to analyse the result of objective parameters.

RESULTS

Age: 35% patients belonged to 41-50 years age group followed by 32% of each are in the age group 31-40 years age group & 21-30 years age group The Incidence is higher number of patients in the age group of 41-50. In this clinical study young and middle-aged population is more. Consumption of rich food, lack of exercise and mental stability coming after settlement in middle age may be the reason behind this.

Gender: Maximum 29(72.5%) patients were female, and 11(27.5%) patients were male.

Marital Status: Maximum 27(67.5%) patients were married, and 13(32.5%) patients were unmarried.

Occupation: Maximum 15(37.5%) patients were doing service, 11(27.5%) patients were doing housewives, 7(17.5%) patients were students and 6(15%) patients were labours.

Religion: Amongst the patients registered for the study, 30(75%) were Hindu, 9(22.5%) were Muslims and 1(2.5%) belongs to other religion. **Socio- economic Status:** 34(85%) of the patients belonged to the middle class, 5(12.5%) of the patients belonged to the poor class and 1(2.5%) belonged to rich class.

Ahara Sevana Prakara: In this series 29(72.5%) patients were taking the mixed type of food and 11(27.5%) patients were taking vegetarian type of food. **Prakruti:** In this series

14(35%) patients had *kapha-vata prakruti*, 13(32.5%) patients were had *kapha-pitta prakruti*, and 6(22.5%) patients had *vata-pitta prakruti*.

Observation shows that more percentage of the patients was of *Kaphapittaja* and *Kaphavataja prakruti* in the patients. This clearly indicates the major role of *Kaphapradhan Prakruti* as causative factor in *Sthoulya*.

Mala Pravrutti: In this series 26(65%) patients were having *vibandha mala pravrutti* and 14(35%) patients were having *samyak mala pravrutti*. **Koshta:** The data shows that 22(55%) patients were having *madhyam Koshta*, 9(22.5%) each patients were having *mridu koshta* & *krura koshta*. **Agni:** The data shows that 12(30) patients were having *manda agni*, 11(27.5%). patients were having *visham agni*, 9(22.5%) *tikshna agni* and 8(20%) patients were having *samagni*.

Sleep: 22(55%) of the patients complained of sleep disturbances while 18(45%) had no such complaints.

Symptoms: The symptom *Ati-Kshudha*, *Ati-Pipasa*, *Ati-Nidra*, *Ati-Sweda*, *Ayatopachautsaha*, and *Anga Gaurav*, was observed in all 40 patients. The symptom *Ati-Kshudha* was reduced by 74% and 71%, *Ati-Pipasa* was reduced by 70% and 65%, *Ati-Nidra* was reduced by 70% and 67%, *Ati Sweda*: was reduced by 69% and 65%, *Ayatopachautsaha* was reduced by 64% and 60%, and *Anga Gaurav* was reduced by 70% and 65% in group-A and group-B respectively.

Body weight was reduced by 9% and 5% in Group-A and Group-B respectively. The initial mean score of body weight was 78.27 and it was reduced to 71.14 after the treatment in Group-A. The initial mean score of body weight was 83.33 and it was reduced to 79.37 after the treatment in Group-B.

BMI was reduced by 9% and 5% in Group-A and Group-B respectively. The initial mean score of BMI was 29.52 and it was reduced to 26.85 after the treatment in Group-A. The initial mean score of BMI was 30.71 and it was reduced to 29.26 after the treatment in Group-B.

Chest Circumference: was reduced by 1.5% and 1.4%, **Waist circumference:** was reduced by 1.7% and 1.5%, **Mid arm circumference:** was reduced by 2.7% and 2.5% and **Mid-thigh circumference:** was reduced by 1.5% and 1.4% in group-A and group-B respectively. Table No. 01: Overall Effect after treatment on Subjective parameters. Table No. 02: Overall Effect after treatment on Objective parameters

Overall effect of the therapies on Subjective parameters

-The overall effect of each therapy was assessed at the end of completion of treatment. **Cured:** 1(5%) patient in each group was cured. **Complete remission:** 7(35%) patients in group-A and 6(30%) patients in group-B were gained complete remission. **Marked Improvement:** 7(35%) patients in group-A and 8(40%) patients in group-B were showed marked improvement **Improvement:** 5(25%) patients in each group were showed just improvement

Unchanged: No patients had shown the unchanged result at the end of the treatment. Thus, both the Medicine proved to be effective in combating the disease *Sthoulya*. But after Comparison the results between the group-A & Group-B, Group-A (*Trushanadi Guggulu*) shown better results than Group B (*Amrutadya Guggulu*) in all the classical symptoms as well as on objective parameters. All the results are statistically significant at $P < 0.001$. Comparison between the Group-A and Group-B, revealed that Group-A (*Trushanadi Guggulu*) shown better results than Group B (*Amrutadya Guggulu*) in all the classical symptoms as well as on objective parameters.

DISCUSSION

*Trushanadi Guggulu*⁵ contains *Pippali* (*Piper longum*), *Maricha* (*Piper nigrum*), *Shunti* (*Zingiber officinale*), *Chitraka* (*Plumbago zeylenica*), *Musta* (*Cyperus rotundus*), *Vidanga* (*Embelia ribes*), *Vaca* (*Acorus calamus*), *Shudha Guggulu* (*Commiphora mukul*) and *Ghrta* (*ghee*). *Vata* and *Kapha* are involved in the pathology of this disease. So, a combination of *Snehana* and *Rukshana* is needed to break the pathology. In the combination of *Trushanadhi guggulu*, the concentration of *Guggulu* is found to be more, which has the *Prabhava* (special effect) of *Medo-Vatahara* and *Lekhana* (scraping) In this formulation, eight drugs, have dominant *Katu Rasa* (pungent taste) three *Dravyas* are having *Kashaya* (astringent) & *Tikta Rasa* (bitter) dominancy. *Katu, Tikta* & *Kashaya Rasa* have potential to pacify the *Kapha Dosh*. Among these three, *Katu rasa* has the potential of stimulating the digestive fire & scraping action, which helps to normalize the *Jataragni* to form nutritional *Anna Rasa* as a substrate which further gives qualitative nutrition to the next *Dhatu*s & help in modification or normalization of *Dhatwagni*. It also helps to scrape out the *Abaddha Mamsa-Medo Dhatu*s from the body.

Tikta rasa has properties of digestive, carminative, *Kleda-Meda Shoshaka*, *Srotovishodhaka* & potent in *Lekhana*

property, thus helping to break the pathogenesis of *Medoroga*. *Kashaya Rasa* also has the property of *Sharira Kleda Shoshana*. All these dominant *Rasa* in this formulation thus helps in the breakage of the pathogenesis of the disease. Besides this, there is dominancy of *Laghu* (lightness), *Ruksha* (non-unctuousness) & *Tikshna Gunas* (sharpness) in the *Trushnadi Guggulu* which also helps in *Kapha-meda shamana* property & *Kleda-medashoshana* four *Dravyas* out of eight in the formulation possesses *Tikshna* & *Ruksha Guna* and all eight *Dravyas* possesses *Laghu Guna*. The formulation of *Trushanadhi guggulu* has six *Dravyas* with dominant *Ushna virya* (hot potency) which also helps to pacify the *Vata -Kapha dosha*. With all these properties, *Sukshma* property of *Guggulu* helps in *Bhedana* of *Avarana* of *Samana Vayu*. *Vatanulomana-Vataharanam* properties of some *Dravyas* help to normalize the *Apana vayu*. Thus, by controlling the *Apanavata*, other types of *Vata* can also be normalized in their functions by virtue of all the properties of various *Dravyas* present in the formulation.

Mode of action of *Amrutadya Guggulu*

Katu, Tikta and *Kashaya Rasa* are present in maximum drugs. *Katu Rasa* has *Deepana*; *Sneha-Kleda- Sweda-Abhishyandinashaka*; *Kapha Shamaka* and *Srotoshodaka* properties. *Katu Rasa* is formed by *Vayu* and *Agni Mahabhuta*⁶ having qualities opposite to *Kapha* (*Prithvi* and *Jala*), thus helps in reducing excessive *Meda* deposition. *Tikta rasa* has also got *Deepana*, *Lekhana*, *Kleda Meda-Vasa-Sweada Shoshana* and *Pachana* properties. *Tikta Rasa* is a combination of *Vayu* and *Akasha Mahabhuta*. Substances that are made up of *Vayu Mahabhuta* cause *Rukshata* and *Laghuta* in the body whereas *Akasha Mahabhuta* causes *Laghuta* in the body thereby reducing excessive *Meda Dhatu*⁷. These two *Mahabhuta* have qualities opposite to *Kapha*. *Tikta Rasa* also shows *Chedana* and *Shodhana* properties. *Kashaya Rasa* is mainly formed by conjugation of *Vayu* and *Prithvi Mahabhuta*. *Vayu* is *Ruksha* in quality and dries up the excessive *Sneha* present in the body while *Prithvi* by virtue of *Kathina* and *Sthira Guna* which are opposite to *Drava* and *Sara Guna* reduces the *Shaithilta*. *Kashaya Rasa* has *Shoshana*, *Kledanashak* and *Sleshamaprashaman* properties. So, it clarifies the *Srotorodha* and scraps excess *Medodhatu* from body and dries up excessive *Vasa*. Contents of drug are mainly having *Ushna Virya* and rests are *Sheeta Virya*⁸, but most of *Sheeta Virya* drugs are *Mridu*. *Ushna Virya* suppresses the action of *Sheeta Virya* drugs and due to *Agni Mahabhuta Pradanta*, it possesses

Vata and *Kaphahara* property.

Drugs having *Katu Vipaka* acts by their *Kapha Shamaka* property while drugs with *Madhura Vipaka* acts as *Rasayana* e.g., *Guduchi*, *Amalaki*, *Haritaki* etc. Maximum contents possess *Laghu*, *Ruksha* properties. *Laghu Guna* increases the *Agni* and decreases *Kapha*. It produces *Laghuta* in the body. *Ruksha Guna* may pacify vitiated *Kapha* and *Kleda* due to its *Shoshana Karma*. *Laghu Guna* also pacifies the *Snigdha* and *Pichchila* properties of vitiated *Kapha* by the virtue of its *Langhana* and *Lekhana Karma*. To cure *Srotodushiti* caused by *Abhishyandi*, property of *Ama Shoshana Karma* is required. So, *Amrutadya Guggulu* is one of the ideal combinations for the management of *Sthoulya* mentioned in Ayurveda; having maximum ingredients possessing *Katu*, *Tikta* and *Kashaya Rasa*; *Laghu*, *Ruksha Guna*; *Ushna Virya*; *Katu-Vipaka*; *Vata Kaphashamaka*; *Lekhaniya Medohara*, *Ama Pachana*, *Dhatushoshana* property which normalize the state of *Agni* and *Srotas*. Thus regulated *Agni* checked the excessive growth and accumulation of *Medodhatu* and thereby causing *Lakshana Upshamna* of *Sthoulya*.

CONCLUSION

In the present study females were found to be more prone to obesity may due to feminine factor like menopause and aggravating factors like delivery. The Incidence is higher number of patients in the age group of 41-50. In this clinical study young and middle-aged population is more prone to obesity. Among 40 patients maximum 37.5% patients were doing sedentary type of job and 27.5% patients were doing housewives. Also, the patients have responded with improvement in their symptoms rather than objective features. Both the treatment modalities have shown good result in the management of the disease *Sthoulya*. In Group-A average of 7.13 kgs reduction was observed where as in Group B, average 3.95 kgs weigh loss was observed. On Comparison between the Group-A (*Trushanadi Guggulu*) showed better results than Group B (*Amrutadya Guggulu*) in all the classical symptoms as well as on objective parameters. It is further suggested that a Multidimensional study with large sample size with diet & exercise is needed, with the help of certain biochemical

analysis to understand the effect of the treatment. The study may also be carried out with *shodhana* therapy for better result.

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ORCID

Mane Akash Pawan , <https://orcid.org/0000-0002-7611-1343>

REFERENCES

1. Acharya YT, Ayurveda Deepika Commentary of Chakrapani, edited Sutra Sthana, 23rd Chapter, Verse-6, Choukambha Surabharati Prakashan, Varanasi, reprint-2011.pp.738
2. Shastri A.D, Bhaishajya ratnavali. 39th ch. Medoroga Chikitsa. Prakarna. Vidyotini Hindi commentary. Choukambha. Sanskrit Sansthan. Prakashan 13th edition 1997.pp.746.
3. Gupta A, Bharat Bhaishajya ratnakar, 2nd Part, medorogadhikar, unjha pharmacy limited, unjha,Uttar Gujarat prakashan, Shri Vaidya Gopinath Gupta bhishagranthenkrutaya, chapter no-37th, 2009.pp.372, ^h
4. Shastri K, Sharangadhara, Sharangadhara Samhita, Adhamalla Dipika & Kashiram Gudarpa Dipika, Choukamba Orientalia, Varanasi, 2000.pp.289
5. Acharya YT, Agnivesa, Charaka Samhita, Choukambha publication 2001 Varanasi. Pp 738,.
6. Acharya YT, Agnivesa, Charaka Samhita, , Choukambha publication Varanasi 2001.pp 731
7. Sharma PV, DravyagunaVijnana, vol-2, reprint, Varanasi, ChaukhambhaBharati academy; 1999; pp.441

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Table No. 01: Overall Effect after treatment on Subjective parameters

Effect after Treatment	Criteria	No. of Patients		% of Patients	
		Group A	Group B	% Group A	% Group B
Cured	100% relief	1	1	5	5
Complete remission	More than 75% relief	7	6	35	30
Marked Improvement	51 – 75% relief	7	8	35	40
Improvement	26 – 50% relief	5	5	25	25
Unchanged	Below 25% relief	0	0	0	0

Table No. 02: Overall Effect after treatment on Objective parameters

Effect after Treatment	Criteria	No. of Patients		% of Patients	
		Group A	Group B	% Group A	% Group B
Cured	100% relief	0	0	0	0
Complete remission	More than 75% relief	0	0	0	0
Marked Improvement	51 – 75% relief	0	0	0	0
Improvement	26 – 50% relief	0	0	0	0
Unchanged	Below 25% relief	20	20	100	100