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# A STUDY ON COMPARATIVE EFFICACY OF GUDUCHYADI BASTI AND GHANVATI IN OBESITY

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#### **ABSTRACT**

Today most of the non-communicable diseases have higher prevalence. Obesity is one of them. There is no satisfactory treatment available in conventional system. Thus, the global population is enthusiastically looking towards effective natural remedies. *Acharya* Charaka emphasized on the use of *Ruksha*, *Ushna & Tikhsna Basti* and the use of drugs like *Guduchi*, *Bhadramusta*, *Triphala*, etc. as treatment of Obesity. **Aim and Objectives:** To evaluate and compare the efficacy of *Guduchyadi Yoga* administered by orally as well as in the form of *Basti* in the management of *Sthaulya* (Obesity). **Method:** Out of 21

patients, total 20 patients i.e. 10 in each group were randomly divided in two groups and completed the course of therapy. In which group A, *Guduchyadi Basti*; and group B in which given *Guduchyadi Ghanavati*. **Result:** In this study we have found that *Guduchyadi Basti* has proven better than *Guduchyadi Ghanavati* in reducing weight & BMI; and also found more effective in almost all other subjective & objective parameters. **Statistical Analysis:** Wilcoxon's Signed-Rank Test for subjective parameters, Students paired 't' test for objective parameters were conducted in this study.

KEYWORDS: Sthaulya, Obesity, Guduchyadi yoga, Basti.

# **INTRODUCTION**

Sthaulya (Obesity) is a blessing of the Modern age of machines and materialism. Obese is a person with a body mass index (BMI) over  $30\text{kg/m}^2$ .<sup>[1]</sup> In India, more than 3% of Indian population is obese.<sup>[2]</sup> It is the one of the primary cause of non-communicable diseases (NCDs).<sup>[3]</sup> Lack of physical activity with increased intake of food, industrialization, stress and dietary habits etc. are the cause of obesity.<sup>[4]</sup> Dietary control, behavioural modification, drug therapy and surgical were the modes in which it is managed in conventional system.<sup>[5]</sup> In

spite of its treatment, the success of treatment is mysterious.<sup>[6]</sup> Hence *Acharya* Charaka has featured this condition under *Nindita Purusha* (undesirable constitution).<sup>[7]</sup> He also emphasized on the use of *Ruksha*, *Ushna & Tiksna Basti* and the use of the drugs like *Guduchi*, *Bhadramusta*, *Triphala* etc.in the management of *Sthaulya* (Obesity).<sup>[8]</sup>

### AIM AND OBJECTIVES

To evaluate and compare the efficacy of *Guduchyadi Yoga* administered by orally as well as in the form of *Basti* in the management of *Sthaulya* (Obesity).

#### **Selection of Patients**

Patients fulfilling the criteria of *Sthaulya* (Obesity) from OPD & IPD of Panchakarma Dept. & cases referred by other departments of IPGT & RA hospital, G.A.U., Jamnagar were selected randomly with coin toss method irrespective of race, cast, sex, religion etc.

#### **Inclusion Criteria**

- 1. Patient having classical sign and symptoms of *Sthaulya* and Obesity.
- 2. Age-18-60 years
- 3. B.M.I->25 & <40
- 4. B.M.I. Prime->1.00

# **Exclusion Criteria**

- 1. Patients having age less than 18 years & above 60 years.
- 2. Patients having serious cardiac, renal and hepatic diseases etc.
- 3. Patients having major illness like Diabetes Mellitus which is poorly controlled.
- 4. Patients having history of untreated thyroid disorders and uncontrolled Hypertension and other endocrine diseases.
- 5. Obesity due to drugs e.g. Anticonvulsant, antipsychotics, Beta-blockers, Corticosteroid.
- 6. Pregnant females & lactating women.
- 7. Patients having BMI>40 were excluded.

# **Investigations**

Routine haematological, biochemical and lipid profile before and after treatment were carried out.

# **Groups of Patients**

Out of 21 patients, total 20 patients i.e. 10 patients in each group were randomly divided in two groups. 1 patient in Group B dropped out of the study without any specific reasons.

**Group A:** *Guduchyadi Basti* for 16 days. A new schedule of 16 days is adopted as per shown in **(Table-1).** 

Niruha Basti: Makshika- (120gm), Saindhava- (6gm), Guduchyadi oil – (80ml), Putiyavani kalka- (40gm) and Guduchyadi kwatha- (240ml)

Anuvasana Basti: Guduchyadi oil – 80 ml

**Group B:** *Guduchyadi Ghanavati* (7g/day) was administered before meal in three divided doses with warm water for 30 days and follow up with 15 days.

Pathya-Apathya (Do's and Don'ts): According to Ayurveda classics.

#### **Assessment Criteria**

Total Assessment was done on the basis of relief in the signs and symptoms as well as objective criteria weight, BMI, BMI Prime. The efficacy of the therapy was assessed before and after treatment on the basis of subjective as well as objective criteria.

## **RESULT**

Guduchyadi Basti has shown 11.76% decrease in the visible movement in hip-abdomen-breast, 77.78% in dyspnoea on exertion, 65% in excess thirst, 50% in the excess hunger, 77.78% in the heaviness in body and 27.27% in the loss of libido.(Table-2) On statistical analysis highly significant & significant results were obtained in case of almost all the parameters. On comparing with Guduchyadi Ghanvati no significant difference was reported statistically (Table-3). Both the groups showed highly significant (p<0.001) results on BMI, BMI prime and Body weight in obesity patients (Table-4). Overall effect of therapy in Group A showed improvement in 70% and moderately improvement in 20% of the patients. Group B showed mildly improvement in 70% and improvement in 30% of the patients (Fig.1).

Table-1: Guduchi-Bhadramustadi Basti Schedule

Sr.No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Basti-Type	AN	NI	NI	NI	AN	NI	AN	NI	AN	NI	NI	NI	AN	NI	NI	AN

AN-Anuvasana basti, NI- Niruha basti.

Table-2: Effects on Sign and Symptoms of 10 patients of Group A

Symptoms	Mean	Score	Mean	%	"W"	"N"	"P"	
	B.T.	A.T.	Dif.	Change	VV	17		
Angachalatva	1.89	1.67	0.22	11.76↓	3	2	>0.05	
Atikshudha	3.56	1.78	1.78	50↓	45	9	< 0.01	
Atipipasa	2.5	0.875	1.625	65↓	21	6	>0.05	
Alpavyavaya	2.2	1.6	0.6	27.27↓	6	3	>0.05	
Kshudrasvasa	1.5	0.33	1.17	77.78↓	21	6	>0.05	
Angagaurava	2.25	0.5	1.75	77.78↓	36	8	< 0.01	

<sup>↓-</sup>Reduced, BT- Before treatment, AT- After treatment.

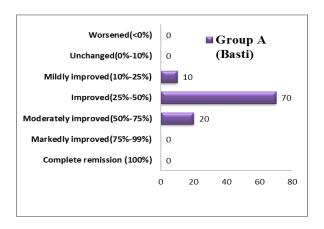
Table-3: Effects on Sign and Symptoms of 10 patients of Group B

Symptoms	Mean	Score	Mean %		"W"	"N"	<b>"р</b> "	
	B.T.	A.T.	Dif.	Change	VV	11	1	
Angachalatva	1.67	1.56	0.11	6.67↓	1	1	>0.05	
Atikshudha	3.2	1.7	1.5	46.87↓	55	10	< 0.01	
Atipipasa	1.71	1	0.71	41↓	6	3	>0.05	
Alpavyavaya	1.66	1.33	0.33	20↓	1	1	>0.05	
Kshudrasvasa	1.2	0.4	0.8	66.67↓	6	3	>0.05	
Angagaurava	2	1.33	0.67	33.33↓	3	2	>0.05	

<sup>↓-</sup>Reduced.

Table-4: Comparative effects of therapies on Weight, BMI, BMI Prime of patients of Obesity in Group A & Group B

Parameters	Mean Diff. Group A	Mean Diff. Group B	S.D.±	S.E. ±	"t"	p
Weight (kg)	2.77	0.8	0.92	0.41	4.81	< 0.001
BMI (kg/m2)	1.108	0.317	0.37	0.17	4.76	< 0.001
BMI Prime	0.044	0.01	0.014	0.006	5.35	< 0.001



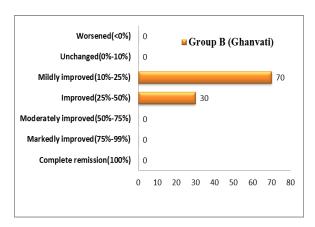


Fig.1: Overall effect of therapy of Both Groups A and B

#### **DISCUSSION**

Sthaulya is a Shleshma Nanatmaja Vyadhi. [9] Kapha Dosha is associated mainly due to its Ashrayashrayi Sambandha (substance-subordinate relation) to Meda. [10] Guduchyadi Basti is basically Shodhana (bio-purification) type of Basti, especially due to its schedule. In Bahudosha Avastha which includes Sthaulya, [11] Shodhana from both root of administration is indicated. That increases Agni at all level & disease may cured. [12] It removes vitiated Doshas from whole body, thus causes [13] Srotoshodhana. [14] It makes the further removal of the Doshas from the body possible by its own. Hence breaks the Samprapti (pathogenesis) of Obesity. In Guduchyadi Ghanvati, contents i.e. Guduchi, Musta, Triphala etc. are having Lekhaniya & Kapha medohara properties. Guduchi, Haritaki, Vidanga, Sunthi & Yavakshara are having Deepan Pachana & Anulomana Properties which increases Agni thus it increase the Dhatvagni, digests the Ama in Srotasa. Predominant Guna, Laghu Ruksha, help to reduce Kapha & Meda. Vipaka of Ghanavati is Madhura, which reduces vitiated Vata & Pitta in Kostha.

#### **CONCLUSION**

Sthaulya (Obesity) is a Dushya Dominant Vyadhi. There is an involvement of all the three Dosha in Sthaulya but the vitiation of Kapha and Meda of prime importance. Line of treatment should be Kapha-Vata-Meda Hara & Apatarpanakara. Guduchyadi Basti offered better result overall in Comparison to Guduchyadi Ghanavati. Ghanavati has also showed good effect on Sthaulya but Shodhana Chikitsa is proved better statistically & symptomatologically Guduchyadi Basti was found to have significant effects in reducing the symptoms of Sthaulya(Obesity) and also in reduction of objective parameters like weight, BMI, BMI Prime etc.

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