

## A Clinical Study to Evaluate the Efficacy of *Guduchyadi Yogin* The Management of *Sthoulya* W.S.R.T. Obesity- A Case Study

**1. Dr Umesh Kale,**

Assistant Professor( Rasashastra), ARAC, Manchi Hill

[vdumeshkale@gmail.com](mailto:vdumeshkale@gmail.com)

**2. Dr Avinash Jadhav**

Assistant Professor (KAYachikitsa), ARAC, Manchi Hill

[avish1091@gmail.com](mailto:avish1091@gmail.com)

**3. Dr Deepa Bhanage,**

Professor (Swasthavritta), ARAC Manchi Hill

[khairnarpriyanka1989@gmail.com](mailto:khairnarpriyanka1989@gmail.com)

### Abstract:

*Ayurveda is a science for both healthy as well as diseased person and it deals with prevention as well as cure of diseases. In ayurveda Sthoulya<sup>[1][2]</sup> has been describes since very early days in various Samhita, Sangraha Granth, Nighantu etc. in pathogenesis of Sthoulya Kapha Vata and Meda Dhatu are main responsible factors. There is vitiation of MedaDhatvagniPoshakanshadue to which MedaDhatavagniunable to function properly. KaphaVruddhikaraAhar, Adhyashan, Avyayam , Diwaswapetc are the causative factors. According to modern science obesity<sup>[3]</sup> characterized by enlargement of fat cells in its size or an increase in number or both leads to abnormal growth of Adipose Tissue. Fat is extensively accumulated under the skin and around certain organs such as belly, buttocks, breasts, thighs etc.*

*In present study, a patient was diagnosed with Sthoulya but without any complications and given GuduchyadiYog containing Dravyas like Guduchi<sup>[4]</sup>, Musta<sup>[5]</sup>, Vidang<sup>[6]</sup>, Haridra<sup>[7]</sup>, Triphala<sup>[8][9][10]</sup> and Madhu<sup>[11]</sup> as Anupanain the form of choornaas internally and Udvartana<sup>[12]</sup> therapy externally for next 3 months, results were very remarkable subjectively as well as objectively.*

*Key words - Obesity, Sthoulya, GuduchyadiYog, Udvartana*

### Introduction:

**O**besity is one of the major lifestyle disorders. It is a state of excess Adipose Tissue Mass, often viewed as increased body weight. The most widely used method to measure obesity is Body Mass Index (BMI), which is equal to weight / height<sup>2</sup> (in kg/m<sup>2</sup>). Studies suggest that all metabolic, cancer and cardiovascular morbidity begins to rise when BMI is  $\geq 25$  kg/m<sup>2</sup>. A BMI between 25 to 30 should be viewed as medically significant and worthy of therapeutic intervention, especially in presence of risk factors such as hypertension and glucose intolerance. The prevalence of obesity in India varies due to age, gender, geographical environment, socio economic status etc. According to ICMR-INDIAB study 2015, prevalence rate<sup>[13]</sup> of obesity and central obesity varies from 11.8% to 31.3% respectively. The increasing prevalence of medically significant obesity raises great concern. Various studies shows that

prevalence of obesity is higher in women than men. Also, prevalence is increasing in children at worrisome rate.

In Ayurveda, obesity can be correlated with *SthoulyaVyadhi* defined by Charak. He explained *Sthoulya* under *AshotoninditiyaVyadhies*. *Sthoulya* is referred in various ayurvedic Samhita like Charak, Sushruta, Vagbhata and Bhavprakash. In ayurveda *Sthoulya* is defined as a condition in which *DushtaMeda* and *Mamsa Dhatu* increases than their normal *Pramana* causing increased abdomen, chest and buttocksgirth i.e., *Chalafikudarstana* with lethargy i.e., *Nirutstah*. *Sthoulya* in Ayurveda is characterised by *Daurbalya*, *Atisweda*, *Daurgandha*, *Atitrushna* and *Atikshudha*. In this case patient was treated with *GuduchyadiYog* which contains *Guduchi*, *Musta*, *Vidang*, *Haridra*, *Triphala* and *Madhu* as *anupanain* the form of *choornaas* internally and *Udvartan* therapy. *Udvaratanais* a procedure where powdered medications are rubbed over the body in a

direction opposite to hair growth. This procedure is *KaphaMedahar*, so works significantly in *Sthoulya*.

**Material:**

A 35yrs old female patient came to OPD with complaints of –

1. *BhaarVruddhi*(Weight gain)
2. *Atikshudha*(Excessive hunger)
3. *Atisweda*(Excessive perspiration)
4. *Alasya*(Lethargy)
5. *Atinidra*(Excessive sleep)

Patient was complaining all above symptoms from 1 year.

**Past History:**

Patient did not have any history of Hypertension / Diabetes Mellitus / Hypothyroidism / PCOD / Asthma / Epilepsy/ Ischemic heart disease / Tuberculosis

- No history of any major surgical illness.
- No history of any addiction like alcohol / smoking / tobacco
- N/H/O – Typhoid / Chickenguniya / Dengue / Jaundice

**General Examination:**

The general condition of patient was fair and afebrile.

Pulse - 72/min

Blood pressure - 120/70 mm of hg

Respiratory rate – 20/min

Weight – 76 kg

Height – 1.58 m

BMI – 30.4 kg/m<sup>2</sup>

Waist Hip Ratio – 0.89

*Jivha – Sama*

*Prakruti–Kaphapredominant*

**Systemic Examination:**

In the systemic examination, findings of respiratory and cardiovascular system within normal limits. Abdomen was mildly distended; non tender and bowel sounds were present. Patient was conscious and well oriented and pupillary reaction to light was normal.

**Management:** Patient was treated with *GuduchyadiYogin* the form of *choornaas* internally and *Udvarthanatherapy* for 3 months.

Drug of Study: *GuduchyadiYog*

Ingredient of *GuduchyadiYog*: *Guduchi, Musta, Vidang, Haridra, Triphala*

| Sr no | Drug                   | Quantity |
|-------|------------------------|----------|
| 1     | <i>Guduchichoorna</i>  | 3GM      |
| 2     | <i>Triphalachoorna</i> | 3GM      |
| 3     | <i>Mustachoorna</i>    | 2GM      |
| 4     | <i>Vidangchoorna</i>   | 1GM      |
| 5     | <i>Haridrachoorna</i>  | 1GM      |

**For Internal Administration:**

*Anupana :Madhu*

*Aushadhi Sewan Kaal:Abhakta* (i.e., on empty stomach in morning) and *PragbhaktaKala* at evening.

**Dose:** 10 gm in divided dosage i.e. (5gm each)

**For External Administration:**

*Udvaratanatherapy*:i.e.,*Guduchyadi Yog* rubbed over the body in a direction opposite to hair growth once in a day in the morning for 20 mins.

*PathyaApathya*: Patient was advised brisk walking daily. And also advised to avoid junk, sweet food and stress.

**Duration** - Two months for *Choornasevanand Udvarтана*

**Follow up** - Clinically patient was screened before and follow up after every 1 month for three months.

**Criteria of Assessment:**

**A) Subjective criteria –**

**1) Atikshudha**

Grade 0 – Hunger after 6 hours

Grade 1 – After 5-6 hours

Grade 2 – After 4 hours

Grade 3 – Irritable desire within 3 hours

**2) Atisweda**

Grade 0 – Swearing after heavy work and fast movement in hot season

Grade 1 – Profuse sweating in moderate work

Grade 2 – Profuse sweating with little work and movement

Grade 3 –Sweating at rest or in cold season

**3) Alasya-**

Grade 0 - No *Alasya*(doing work satisfactorily with proper vigour in time)

Grade 1 - Doing work with satisfactorily with late initiation

Grade 2 - Doing work with unsatisfactorily under mental pressure and takes time

Grade 3 - Does not take any initiation and not want to work even after pressure

**4) Atinidra**

Grade 0 – Normal sleep upto 6-7 hrs per day

Grade 1 – More than 8 hrs

Grade 2 – More than 8 hrs with *Angagaguravand Jrumbha* after sleep

Grade 3 – More than 10 hrs with *Tandra* and *Klama*

**B) Objective Criteria**

**1) BMI (kg/m<sup>2</sup>)**

Grade 0 – 18.5 – 24.9

Grade 1 – 25 – 29.9

Grade 2 – 30 – 34.9

Grade 3 – 35 – 39.9

**2) Waist Hip Ratio (in female)**

Grade 0 – < 0.85

Grade 1 – 0.85 – 0. 87

Grade 2 – 0.88 – 0.90

Grade 3 - > 0.90

**Observation & Results –**

**Case Report –**

**A) Subjective Criteria –**

**B)**

| Sr No | Lakshana   | Before treatment | After 1 month | After 2 months | After 3 months |
|-------|------------|------------------|---------------|----------------|----------------|
| 1     | Atikshudha | ++               | ++            | ++             | +              |
| 2     | Atisweda   | ++               | ++            | +              | +              |
| 3     | Alasya     | ++               | ++            | +              | 0              |
| 4     | Atinidra   | ++               | ++            | +              | 0              |

**C) Objective Criteria –**

| Sr No | Parameter       | Before treatment | After 1 month | After 2 months | After 3 months |
|-------|-----------------|------------------|---------------|----------------|----------------|
| 1     | BMI             | ++               | ++            | +              | +              |
| 2     | Waist Hip Ratio | ++               | ++            | ++             | +              |

| Sr No | Parameter   | Before treatment | After 1 month | After 2 months | After 3 months |
|-------|-------------|------------------|---------------|----------------|----------------|
| 1     | Weight (Kg) | 76               | 73            | 71             | 69             |

**Discussion:**

According to Ayurveda *Sthoulyais* one of the diseases of vitiated *Kapha dosha* and *Dushta Meda Dhatu* which is characterised by *Daurbalya*, *Atisweda*, *Daurgandha*, *Atitrushna* and *Atikshudha*.. In *Sharangdhar Samhita*, several drugs have been mentioned for treatment of *Shoulyain* the form of *Sevana* and *Udvardana*. Most of the contents of *Guduchyadyog* having *Katu*, *Tiktarasa*, *Ushna Veerya*, *Laghu Ruksha Tikshna Guna* and *Kaphashamaka* properties. All these properties are effective against the vitiated *Kapha Dosha* and *Med Dhatu*. The *Ruksha* and *Laghu Guna* has the *Shoshana* and *Langhana* effect, which causes absorption and metabolization of *Dushta Meda Dhatu* accumulated in the body causing weight loss. The *Udvardana* therapy is effective for dissolution of dense fat at the abdomen, waist, hip and buttocks region causing toning of body and leanness.

| Ingre dient s     | Latin Name           | Rasa                            | Vip aka         | Ve ery a      | Guna                          | Doshagh nata                   |
|-------------------|----------------------|---------------------------------|-----------------|---------------|-------------------------------|--------------------------------|
| <i>Gudu chi</i>   | Tinospora cordifolia | <i>Katu Tikta</i>               | <i>Ma dhura</i> | <i>Us hna</i> | <i>Guru Snigdha</i>           | <i>Tridosha ghna</i>           |
| <i>Amal aki</i>   | Emblic officinalis   | <i>Lava nara hit Panc haras</i> | <i>Ma dhur</i>  | <i>She et</i> | <i>Laghu Ruksha</i>           | <i>Tridosha ghna</i>           |
| <i>Harit aki</i>  | Terminalia chebulala | <i>Lava nara hit Panc haras</i> | <i>Ma dhur</i>  | <i>Us hna</i> | <i>Laghu Ruksha</i>           | <i>Tridosha ghna</i>           |
| <i>Bibhi taki</i> | Terminalia bellerica | <i>Kash ay</i>                  | <i>Ma dhur</i>  | <i>Us hna</i> | <i>Laghu, Ruksha</i>          | <i>Tridosha ar (Kaphah ar)</i> |
| <i>Must a</i>     | Cyperus rotundus     | <i>Tikta Katu Kash ay</i>       | <i>Kat u</i>    | <i>She et</i> | <i>Laghu, Ruksha</i>          | <i>Pittakap hashamaka</i>      |
| <i>Vida ng</i>    | Embelliaribes        | <i>Katu</i>                     | <i>Kat u</i>    | <i>Us hna</i> | <i>Laghu, Ruksha Tiksh na</i> | <i>Kaphava tashamaka</i>       |

|                      |                      |                                    |                         |                        |                              |                                   |
|----------------------|----------------------|------------------------------------|-------------------------|------------------------|------------------------------|-----------------------------------|
| <i>Hari<br/>dra,</i> | Curcu<br>ma<br>longa | <i>Katu<br/>Tikta</i>              | <i>Kat<br/>u</i>        | <i>Us<br/>hn<br/>a</i> | <i>Laghu<br/>Ruksh<br/>a</i> | <i>Kaphapit<br/>tashama<br/>k</i> |
| <i>Mad<br/>hu</i>    | Hone<br>y            | <i>Madh<br/>ur<br/>Kash<br/>ay</i> | <i>Ma<br/>dhu<br/>r</i> | <i>She<br/>et</i>      | <i>Laghu<br/>Ruksh<br/>a</i> | <i>Kaphaha<br/>r</i>              |

**Conclusion:**

It has been concluded that *GuduchyadiYog* is very effective in *Shoulyawhen* ingested internally along with *Madhu* and *Udavartan* therapy externally. Patient improved Symptomatically.

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