

Yogic Management of *Sthaulya* (Obesity): A Case Report

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Abstract- An excessive deposition of body fat leads to an obesity. In ayurveda the obesity is defined as the excessive deposition of fat at the breast, belly, or abdomen and at the buttocks. It considered as a lifestyle disorder in India. In India, it's the second big health problem after diabetes mellitus. In every age, obesity having its own role. Obesity can be in heredity it may produce due to many other reasons. But here in this study we include the participant / patient who is obese due to lack of exercise and sedentary lifestyle. This present case study is of a 35-year-old female patient who presented with complaints of Weight gain , breathlessness, restlessness, Extreme fatigue, Extreme lethargy, Lack of concentration and memory & Excessive Sweating which were progressively increasing and disturbing her daily routine activities. She was advised to follow the *yogasana* module for about 8 weeks regularly with follow-up after completing the 8 weeks. After the treatment , the patient reported significant relief in her symptoms and after two months, she was able to perform his routine activities without any disturbance. The *yogasana* module is effective in the management of obesity if one follows it sincerely and regularly. . Therefore, this study is to observe the effects of *yogasana* module in the management of obesity.

Keywords: Lifestyle disorder, Obesity, *Sthaulya*, *Yogasana* module

INTRODUCTION

Obesity may be defined as an abnormal growth of the adipose tissue due to an enlargement of fat cell size or an increase in fat cell number or a combination of both.^{[1][2]}

In Ayurveda, a person having heaviness and bulkiness of the body due to extensive growth especially in *Udaradi* region is termed as "*Sthoola*" and this Bhava (state) of *Sthoolata* is called as *Sthoulya*.^{[2][3]}

Atishoola has been defined as a person who on account of the inordinate increase of fat and flesh is distinguished with pendulous buttocks, belly and breasts and whose increased bulk is not matched by a corresponding increase in energy.^{[2][4]} *Sthoulya* is the disease of *MedodhatvagniVikriti*. The good and potent *Dhatvagni* is responsible for the maintenance of healthy Dhatus through proper metabolism at Dhatu level. Due to specific *DhatvagniVikruti* (*Mandya*) there will be improper formation and accumulation of respective *Dhatus*. *Medovridhi* manifesting as *Sthoulya* is one such disorder.^{[2][5]}

Prevalence of obesity in India has increased threefold within the last 20 years. Obesity is a growing disease in developed and developing countries. Prevalence is drastically hike in past few years. In 21st century, with morbid obesity affecting 5% of nation's population^[6]. Lifestyle disorders are one of the biggest threats for the population living unhealthy lifestyle. *Sthoulya* (Obesity) is one such disorder which creates lot of physical as well as mental disorder to the sufferer. Due to changing lifestyle, comforts, and dietary habit lots of individuals changed their life totally. Ayurveda, the science of life with which we can manage and control lots of lifestyle disorders. The *yogasana* module was followed within the treatment duration and effect of treatment was assessed before and after treatment. The treatment adopted is effective in the management of *Sthoulya* and to improve the quality of life.

Obesity (*sthaulya*), in general, is a significant health problem and is associated with several comorbidities and various discomforts that can cause negative impact on physical, mental, and social well-being of a person. In this case study, an obese patient was suffering from shortness of breath (*shwaas*) was unable to climb stairs and had extreme difficulty in walking. The patient also suffered from stress-related

complaints, such as sleep disturbances (*anidra*) and poor digestion. The treatment was aimed at restoring psycho-physiological and physical health of the patient. The integrative therapy of *Ayurvedayoga* showed significant improvement in functional capacity, quality of life, and musculoskeletal pain.

Patient Information

An Indian, non-addicted female, having the age 35 years visited for the treatment at the Havya ayurveda clinic, Pune. The patient had complaints of

- Weight gain from past one year
- Difficulty in breathing while climbing the stairs
- Extreme fatigue
- Extreme lethargy
- Lack of concentration and memory
- Excessive Sweating

The female patient works a demanding private job from home from 10 am to 7 pm every day. She had irregular food habits and timings & also had a poor appetite due to reduced digestive fire. The patient was consulted well and asked to follow the *Yogasana* module in the daily routine for about 8 weeks sincerely.

O/E

Table No. 1 – Physical examination of the patient

Weight	92 kg
Height	5 ft 8 inch
BP	130/90 mmHg
Pulse rate	74/min
BMI	30.8
Chest Circumference	170cm
Abdomen Circumference	194 cm
Mid Arm Circumference	71 cm
Mid-Thigh Circumference	99 cm
Waist Circumference	174 cm
Hip Circumference	180 cm
Abdominal Examination	Normal
Vitals Examination	Normal

Table No. 2 – Routine of the patient

Diet	Non vegetarian (frequent)
Daily routine	Sitting work for about 12-14 hrs. daily
Habits	Eating in every 2-3 hrs., Water intake more and before meal, Lack of exercise
Defaecation	Normal
Micturition	Normal
Sleep	Frequent disturbed

Diagnostic Assessment

The assessment was done by comparing changes in before - after readings of CBC Count and lipid profile.

The Therapeutic Intervention

The *yogasana* module was started on March 01, 2023, for a period of 8 weeks. Every day in the morning from 7 am to 8 am, Yoga was taught. The *surya namaskara* followed by the main set of *yogasana* was taught for the patient. Each *Asana* was done for three counts with maintaining normal breathing for 10 s. After 8 weeks, CBC & Lipid profile was evaluated. [Table 3, Table 4].

FOLLOW-UP AND OUTCOME

There were effective changes occurred in the readings of Sr. total cholesterol, Sr.triglycerides, Sr.HDL & Sr. LDL. Symptomatic improvement in the subjective parameters like extreme fatigue, Extreme lethargy, Weight gain, Breathlessness, Restlessness after the administration of *Yogasana* module for a period of 8 weeks. The patient reported a better feeling physically and psychologically at the end of the month.

DISCUSSION

Obesity is a disease of all age group within the people of high socioeconomic status, specifically in of Urban Communities. WHO declared obesity as global epidemic giving rise to new term — Globesity”. In 2016, WHO global estimated as about 13% of the world’s adult populations (650 million adults & 41 million children) were obese. Obesity is a complex, multi factorial disease which invites several pathological complications like Hypertension, Type 2 Diabetes mellitus, atherosclerosis, infertility, hepatic steatosis/ fatty liver, endocrine abnormalities, obstetric complications, osteoarthritis of weight bearing joints, certain types of Cancers, and possibly immunological impairment as well as it hampers the cosmetic value of the affected person. It has deleterious effects both on body and mind. Obesity i.e., *Sthaulya Roga* of Ayurveda comes under the heading of *Medoroga* which results due to dysfunction of *Medadhatvagni* (factor responsible for nourishment/ metabolism of *Medadhatu*) and is considered as metabolic disorder. Entire world is expecting a fruitful management protocol and prevention of obesity through Ayurveda and *Yoga*. Keeping this fact in view, this paper is an effort to understand etiology, pathogenesis, and treatment.

Table 3: Timeline

Date	Clinical event & intervention
March 2022	Patient was suffering from obesity
March 2023	Patient was diagnosed by obesity
March 2023	Biochemical parameters were assessed before treatment
March 2023 – May 2023	Patient was on <i>yogasana</i> module
May 2023	Biochemical parameters were assessed after treatment

Table 4: Yogasana module

Yogasana	Counts	Duration
<i>Surya Namaskar</i>	12 rounds	20 min
<i>Trikonasan</i> (Triangle pose)	3	5 min
<i>Tadasana</i> (palm-tree pose)	3	5 min
<i>Ushtrasan</i> (Camel pose)	3	5 min
<i>Paschimottanasan</i> (Forward bend pose)	3	5 min
<i>Halasan</i> (Plough posture)	3	5 min
<i>Dhanurasan</i> (Bow pose)	3	5 min
<i>Bhujangasana</i> (cobra pose)	3	5 min
<i>Naukasana</i> (Boat Pose)	3	5 min
<i>Matsyasana</i> (Fish Pose)	3	5 min
<i>Shavasana</i> (Corpse Pose)	1	5 min

Table 5: Outcome after the administration of *Yogasana* module

Weight	78 kg
Height	5 ft 8 inch
BP	120/80 mmHg
Pulse rate	82/min
BMI	26.4
Chest Circumference	150 cm
Abdomen Circumference	172 cm
Mid Arm Circumference	60 cm
Mid-Thigh Circumference	80 cm
Waist Circumference	152 cm
Hip Circumference	169 cm
Abdominal Examination	Soft & Non tender Normal
Vital Examination	Normal

Table 6: Clinical findings

Test Name	Normal Range	Before Treatment	After Treatment
CBC/Hematology			
WBC Count	4,000-10,000	5,630/mm ³	6,820/mm ³
RBC Count	4.5 - 6.0	5.57 mil/mm ³	6.7 mil/mm ³
Hemoglobin	14 - 18 g/dl	15.8 g/dl	16.6 g/dl
Hematocrit	40 - 50	47%	47%
MCV	82 - 98	85 Fl	85 Fl
MCH	27 - 31	30 pg.	31 pg.

MCHC	32 - 36	34 g/dl	35 g/dl
RDW-CV	11 - 16	12%	14%
Platelets	140,000 - 450,000	254,000 / mm ³	370,000 / mm ³
Differential Count			
Neutrophils	40 - 75	50 %	62 %
Lymphocytes	15 - 45	32 %	39 %
Monocytes	2 - 12	17 %	14 %
Eosinophils	2 - 6	2 %	1 %
Basophils	0 - 1	0 %	0 %
Bands	0 - 3	0 %	0 %
Lipid Profile	<200 mg/dl	250 mg/dl	191 mg / dl
Sr. Total Cholesterol			
Sr. Triglycerides	< 150 mg/dl	222 mg/dl	165 mg / dl
Sr. HDL Cholesterol	60 mg / dl	40 mg / dl	30 mg / dl
Sr. LDL Cholesterol	60 - 130 mg / dl	170 mg / dl	128 mg / dl

CONCLUSION

It is observed that the given Ayurveda module when the patient started to follow, she had observed the changes occurred in his body and mind too. She got the feelings of freshness, alertness and healthiness while habituated to the given module. The given Ayurveda module not only gives cure from obesity but also gives preventive tools to the body and mind for obesity. The yoga schedule gave her the complete mind body nutrition which leads to lowers the unorganized unwanted tissue deposition tendency of the body. Hence the regular practice of the given *yogasana* module resulted into the cure of obesity.

From the above all observations, its concluded that the given *yogasana* module helps to cure the obesity. The given yoga practice makes body and mind strength full and energetic. It gives proper nourishment to the body and mind at a very cellular level. It purifies the *naadis* in the body as they clear the channels of the body to remove toxin from the bodily level. Hence it prevents any unwanted and harmful activities that happen to the body.

Declaration of patient consent

Authors certify that they have obtained patient consent form, where the patient has given her consent for reporting the case along with the images and other clinical information in the journal. The patient understands that her name and initials will not be published, and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed.

Conflicts of interest

There are no conflicts of interest.

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