

Outcome of a holistic Yoga therapy and Naturopathy treatment for obesity: a case study

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Abstract - A 53-year-old female patient who came to Naturopathy and Yoga OPD was diagnosed a case of obesity associated with hypertension, joint pains and hypothyroidism since 4 years. She was administered Yoga and Naturopathy treatment 5 days a week for 45 days, she was advised a tailored diet regiment to be followed. Height, weight, waist circumference, blood pressure and BMI were recorded before and after the interventions. There was reduction in BMI, blood pressure and joint pain. These changes were persistent while follow up for next 90 days. This case study is an attempt to elicit the impact of one and half month of integrated naturopathy and yoga treatment protocol to reduce BMI, weight, abdominal obesity and joint pain. Further studies with larger sample size are indicated to establish mechanism of action and impact of yoga, diet & naturopathic treatments for managing abdominal obesity.

Index Terms - Obesity, Yoga Therapy, Diet, Naturopathy, Integrated treatment protocol.

INTRODUCTION

Overweight and obesity are defined as abnormal or excessive fat accumulation that may impair health. "WHO Global Strategy on Diet, Physical Activity and Health" describes the actions needed to support healthy diets and regular physical activity. (*Obesity and Overweight*, n.d.). The activation of the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system have been utilized as objective measurements of stress reactions. (*Do Stress Reactions Cause Abdominal Obesity and Comorbidities?* - Björntorp - 2001 - *Obesity Reviews* - Wiley Online Library, n.d.). Stress disturbs the homeostasis or allostasis. Abdominal obesity is a major risk factor for major diseases and thus a cause of stress. Low level of physical activity, altered eating patterns, wrong lifestyle may contribute to obesity. Yoga is one of the effective ways to reduce stress

which is one of the causes of obesity. (Rathi et al., 2018) In this study we aim to investigate effect of lifestyle modifications, Yogabhyasa and ahaara on waist circumference, BMI, raised blood pressure and depression -anxiety- stress score, and other self-reported variables. Prevalence of metabolic syndrome and abdominal obesity is escalating in south Asian countries. They have an increased risk of metabolic syndrome due to variety of factors including unhealthy lifestyle and their unique body composition. (*Abdominal Obesity and Metabolic Syndrome in South Asians: Prevention and Management: Expert Review of Endocrinology & Metabolism: Vol 0, No Ja*, n.d.). Yoga is supposed to play a vital role in promotion of physical and mental health and treating many other disorders. Regular practice of yoga 30 to 60 minutes daily is useful for health and altering obesity. (Rani, S. (2017). *Obesity and Its Control through Yogic Practices. Int. J. Phys. Edn. SH, 4(1), 82-84.* - Google Search, n.d.) Yoga can be recommended as a technique for combating abdominal obesity in women. (Cramer, Thoms, et al., 2016)

METHODOLOGY

A 53 years old female house maker, registered at OPD with the following complaints such as breathlessness, snoring, low confidence, joint pain, lethargy, inability to cope with changes in sudden mental and physical activity associated with hypothyroidism since 4years. All the symptoms were noted down on first day, her vitals were measured. She was put on a structured Yoga therapy session 1 hour for 5 days a week for 45 days. She was advised short intermittent fasting, sun bath (20 min), full body (reverse) massage, steam bath (10 min). (5 days a week)

The baseline data was measured and then after 45 days of the intervention.

Intervention:

YOGA THERAPY SESSION (1 HOUR 5 DAYS /WEEK FOR 6 WEEKS)		NATUROPATHY Treatments (5 days a week for 6 weeks)
Loosening exercise, asana, pranayama, meditation, kriya	Total= 60 Min	1. Short Intermittent fasting 2. Sunbath (Daily 10 min) 3. Full body (reverse) massage (45 min/ day) 4. Steam bath (10 min).
SukshamaVyayama(Loosening exercises): 1. Head and neck movt. 2. Shoulder movement 3. Stretching arms and rotating fist 4. Spine movement 5. Leg stretch and feet rotation 6. Abdominal breathing in hip hinge position	10 Min	
Sthula Vyayama (Locomotive exercises): 1. Engine daud 2. Sarvang pushti kriya	03 Min	
Surya namaskara- 3 rounds	05 Min	
Asana: 1. Tadasana - 2Round 2. Virabhadrasana - 2Round 3. Trikonasana - 1Round 4. Uttan Padasana- 2Round 5. Pawan-Muktasana – 3Round 6. Setu Bandhasana - 2Round 7. Sarvangasana - 3Round 8. Bhujangasana -2Round 9. Shalbhasana - 2Round 10. Dhanurasana - 2Round 11. Shashankasana – 1Round 12. Ardhmatsyendrasana - 1Round 13. Yoga mudra- 1Round 14. Shavasana- 1Round	20 Min	
Pranayama: (each 3 minutes) 1. Anulom-vilom Pranayama 2. Suryabhedhi Pranayama 3. Bhastrika Pranayama 4. Bhramari Pranayama	12 Min	
Meditation: Omkara chanting or guided meditation.	05 Min	
Relaxation: Deep relaxation technique	05 Min	
Bandha: Uddiyana Bandha Kriyas: Kunjal weekly once		

DISCUSSION

The data suggest that a 45 days of holistic treatment of Naturopathy, Intermittent fasting, Yoga therapy is helpful to reduce the abdominal obesity, BMI, reduce the joint pain, Improved quality of life was reported, stress-anxiety –depression reduction was reported. There was considerable decrease in systolic and diastolic blood pressure. There was a significant decrease in BMI, both systolic and diastolic blood pressure’s in subjects who were practicing yoga for a period of 3 months (Gadham et al., 2015). lifestyle

change by integration of specific non-drug Yoga and Naturopathic intervention is useful in the management of MetS. (Gowda et al., 2017). Obese adults with yoga experience appear to have better quality of life in specific aspects, compared to yoga naïve persons with a comparable degree of obesity.(Telles et al., 2019) Incorporating yogic asana in the treatment protocol of patients suffering from anxiety and depression may prove beneficial in the long run.(Dhananjai et al., 2013)

Further large scale studies with large group to be done to prove the efficacy of holistic therapies. There is a

need to provide recognition for the holistic therapies as a system of treatment.

CONCLUSION

Regular yogic practices with proper medical counseling and guidance helped patient regain mental and physical quality of life and self esteem. In this case patient experienced the satisfaction within one and half month of regular practice & her investigation reports supported the result. Yoga and dietary intervention reduced waist circumference, body weight, BMI, and percentage of body fat and increased body strength, reduction in blood pressure. In this case study we noted that the regular practice of yoga along with proper diet and naturopathy treatment can be useful to reduce fat in various parts of our body. This will help reduce weight and maintain the body in proper health in the long run.

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TABLES AND FIGURE:

	DAY 1	DAY 45
B.P	130/90 mmhg	122/78 mmhg
Weight	81 kg	76.2 kg
Height	64 inches	64
Waist Circumference	38- inches	35 -inches
BMI	30.65 kg/m ²	28.83 kg/m ²
VAS for joint pain	08	04
QOL-BREF	Very poor quality of life	Neither poor nor good quality of life.(very often has negative thoughts)
DASS	Depression:06(Mild level) Anxiety:09 (severe level) Stress: 08 (Mild level)	Depression:2 (normal) Anxiety:1 (normal) Stress:4 (normal)

