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Integrated Yoga and Naturopathy Management (IYNM) of Obesity: A Case Report

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ABSTRACT

A 45-year-old male patient with the nature of sedentary lifestyle, diagnosed with obesity (BMI- 33.2 kg/m²) since 2013, was visited for Integrated Yoga and Naturopathy Management (IYNM) for the weight reduction in our hospital on November 2019. He had mild pain over the both knees with sleeping disturbances. We advised him a tailor made individualized protocol for the weight management for the period of 6 months. The results showed reduction in weight (107.9kg to 90.6kg), Body Mass Index (BMI) (33.2kg/m² to 29.32kg/m²), total cholesterol (209mg% to 185mg%), triglycerides (172mg% to 113mg%), Low Density Lipoprotein (LDL) (102mg% to 94mg%), and High Density Lipoprotein (HDL) (44mg% to 48mg%). His knee pain minimized on discharge as observed on a Visual Analog Scale (7 to 3 points). He had an improved feeling of wellness and overall functional health. This case report suggests that lifestyle change in the form of IYNM is useful in the management of Obesity.

INTRODUCTION

Obesity is a growing public health concern in modern societies. Physical inactivity and unhealthy diet have been identified as major risk factors for obesity [1]. Ample research has highlighted the role of obesity as a risk factor for a large number of chronic health complications, such as cardiovascular disease, hypertension, type 2 diabetes, stroke, sleep apnea and certain types of cancer, as well as in mood change and depression in obese individual. Yoga and naturopathy interventions have emerged as one of the evidence-based practices widely used across the globe. Previous findings on 72 obese adult males resulted in improvement in BMI, hip circumference, waist circumference, and skin-fold thickness following a 14 weeks of integrated yoga-based lifestyle change. It included yogic diet, asana, pranayama, relaxation techniques, meditation, and yogic counseling [2]. Yoga/meditation users with normal BMI appeared to be more satisfied with their body weight and shape than non-yoga/meditation users [3]. Non-pharmacological lifestyle interventions are recommended for management of various metabolic disorders like obesity. There are published reports of the significant effect of individual components of naturopathy like calorie limitation and therapeutic fasting on the weight management for obesity [4]. We report this case as a safe and effective possibility of Integrated Yoga and Naturopathy Management (IYNM) in the management of weight reduction for patients with obesity.

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CASE DESCRIPTIONS

A 45-year-old male patient with the nature of sedentary lifestyle, diagnosed with obesity (BMI-33.2kg/m²) since 2013, was visited for Integrated Yoga and Naturopathy Management (IYNM) for the weight reduction in our hospital on November 2019. He had generalized weakness, fatigability, increased body weight, bilateral knee pain since 5 years. His body weight was found to be 103kg, height 176cms with a BMI of 33.2kg/m². His pulse rate was 79 beats/minute and blood pressure 142/86mmHg. He was not having any metabolic disease history (diabetes/Hypertension/Thyroid dysfunction). Following a detailed case history, initial counseling and obtaining signed informed consent, the IYNM intervention was planned by expert yoga and naturopathy physician for the weight reduction. Considering the importance of yoga and naturopathy, an integrated program was designed including **asanas** (Surya Namaskar minimum of 10 rounds), pranayama (Kapalbhati, bhastrika and nadisudhi pranayama), relaxation techniques (Yoga nidra), **kriyas** (vamana kriya), combination of hydrotherapy (Steam bath), mud therapy (mudpack to abdomen), manipulative therapies (partial massage to abdomen), with calorie restricted diet. The therapies administered were modified based on the patient's response assessed in the daily visit of the physician. Height was recorded on a stadiometer. Weight was recorded every week using an electronic research grade weighing scale. The lipid profile was checked at baseline and post-intervention in the same laboratory after 6 months of follow up.

RESULTS AND DISCUSSION

The results showed reduction in weight (107.9kg to 90.6kg), Body Mass Index (BMI) (33.2kg/m² to 29.32kg/m²), total cholesterol (209mg% to 185mg%), triglycerides (172mg% to 113mg%), Low Density Lipoprotein (LDL) (102mg% to 94mg%), and High Density Lipoprotein (HDL) (44 mg% to 48mg%). His knee pain minimized on discharge as observed on a Visual Analog Scale (7 to 3 points). He had an improved feeling of wellness and overall functional health. There was a significant improvement in all variables studied in the patient with obesity using IYNM. Previous studies found that Naturopathy and yoga-based intervention promises better reduction of risk for cardiovascular diseases among the patients with metabolic disorders [5-8]. We also found that IYNM protocol was easy to adhere and the results might be sustainable if he continued the practice daily. We plan to follow-up the patient further to understand the long-term benefits of IYNM based lifestyle interventions in obesity. This case also adds to growing clinical evidence of the use of Yoga and Naturopathy therapies in chronic non-communicable metabolic disorders. Overall, the IYNM

intervention shows promising effects in bringing weight reduction along with lipid profile in patient with obesity. The short-term effects of these interventions are profound and last for a longer time. However, the effects wane with time, more randomized controlled studies with active control arm are needed to validate the effects of IYNM in these populations.

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