

Prevalence of iron deficiency anemia and its effect on diet therapy in overweight and obese women

Cigdem Bozkir

Namık Kemal University, Turkey

Statement of the Problem: Anemia and obesity are defined as a public health problem by World Health Organization (WHO). It is reported that obesity and iron deficiency are related to each other. A multifactorial etiology has been reported, including decreased bioavailability of iron, its association with body weight and reduced iron absorption due to excessive adipose tissue. It has been reported that increased adipose tissue causes iron deficiency by decreasing iron absorption in women and children. The aims of this research are: detecting to prevalence of iron deficiency anemia (IDA) on overweight and obese women and on the effect of IDA on dietary treatment.

Methodology: The research group consisted of overweight (Body Mass Index (BMI)=25-29.9 kg/m²) and obese women (BMI >30 kg/m²) who applied to Malatya Public Health Directorate Wellness Center. Overweight and obese women who accept to participate in the study were given medical nutrition (diet) treatment. The study group was followed up for 3 months within the scope of diet therapy program.

Findings: The prevalence of IDA was 61.7% in obese women and 38.3% in overweight women. It was observed that the frequency of IDA increased as the BMI level increased but the difference was not statistically significant. The total weight loss of women was examined as percentage, it was determined that those without anemia lost 13.68% of their body weight and 11.96% of those with anemia (p<0.05).

Conclusion & Significance: IDA was determined in 29.2% of women. At the end of 3 months, it was observed that the weight percentages of those without anemia were higher. IDA is thought to slow down the weight loss process due to its possible effects on metabolism. Therefore, the treatment of obesity and the lack of micronutrients such as anemia require a holistic approach.

Diabetes mellitus (DM) is a chronic metabolic disease characterized by hyperglycemia, requiring continuous medical care, resulting from insulin deficiency or insulin defect. Genetic, environmental and lifestyle changes occur mainly due to multifactorial reasons [9]. Type 2 diabetes mellitus (T2D) is the most common type of diabetes, the prevalence of which is increasing faster than expected and affects millions of people worldwide [10]. Since the early stages of the disease are usually asymptomatic, it leads to late diagnosis. In this asymptomatic process, major cardiovascular complications can occur and affect the quality of life and life expectancy of patients. The

risk of these complications increases significantly in people with a late diagnosis of T2DM