

Nutritional Status of Morbidly Obese Patients Prior to Bariatric Surgery

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Abstract : Background: Bariatric surgery is widely proposed as the most effective approach to mitigate the growing pace of morbid obesity. As bariatric surgery candidates suffer from pre-existing nutritional deficiencies, it is of great importance to assess nutritional status of candidates before surgery in order to establish appropriate nutritional interventions. Objectives: The present study assessed and represented baseline data according to the nutritional status among candidates for bariatric surgery. Methods: A cross-sectional analysis of pre-surgery data was collected on 170 morbidly obese patients undergoing bariatric surgery between October 2017 and February 2018. Dietary intake data (evaluated through 147-item food frequency questionnaire), anthropometric measures and biochemical parameters were assessed. Results: Participants included 145 females (25 males) with average age of 37.3 ± 10.2 years, BMI of 45.7 ± 6.4 kg/m² and reported to have a total of 72.3 ± 22.2 kg excess body weight. The most common nutritional deficiencies referred to iron, ferritin, transferrin, albumin, vitamin B12, and vitamin D, the prevalence of which in the study population were as followed; 6.5, 6.5, 3, 2, 17.6 and 66%, respectively. Mean energy, protein, fat, and carbohydrate intake were 3887.3 ± 1748.32 kcal/day, 121.6 ± 57.1 , 144.1 ± 83.05 , and 552.4 ± 240.5 gr/day, respectively. The study population consumed lower levels of iron, calcium, folic acid, and vitamin B12 compared to the Dietary Reference Intake (DRI) recommendations (2, 26, 2.5, and 13%, respectively). Conclusion: According to the poor dietary quality of bariatric surgery candidates, leading to nutritional deficiencies pre-operatively, close monitoring and tailored supplementation pre- and post-bariatric surgery are required.

Keywords : bariatric surgery, food frequency questionnaire, obesity, nutritional status

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