

Investigating the prevalence of nutritional abnormalities in patients pre and post bariatric surgery – an Australian experience.

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Background:

Bariatric surgery remains an effective treatment for the condition of obesity, however it predisposes patients to nutritional deficiencies and related complications. Aims: Objectives: The aim of this study was to identify nutritional abnormalities, weight loss, adherence to supplements, and presence of gastrointestinal symptoms in a cohort of bariatric surgical patients.

Methods:

An analysis of the electronic medical records of patients attending a multidisciplinary private clinic in Sydney, Australia from August 2020 to August 2021 was conducted. Data on anthropometric measures, nutritional indices, adherence to supplements and gastrointestinal symptoms preoperatively and then at ≤ 6 months, 1 and 2 years or more postoperatively were collected.

Results:

A total of 231 patients were included in the study. The majority of patients were female (76.2%), with a sleeve gastrectomy (78.8%). Average preoperative BMI was 43.4 ± 7.1

kg/m². Weight loss ≥ 2 years post-surgery was 33.5 ± 12.4 kg. The most common nutritional abnormalities pre-operatively were: C-reactive protein (47.7%), vitamin D (39%), B₁₂ (31%), parathyroid hormone (27.6%), and ferritin (12.7%). Vitamin B₁₂ (23.2%), parathyroid hormone (23%), vitamin D (17.7%) and ferritin (15.9%) remained common abnormalities postoperatively.

Adherence to multivitamins was 90% in the first year following surgery, declining to 77% at ≥ 2 years. Gastrointestinal symptoms were predominantly present in the initial stages following surgery, manifesting thiamine deficiency in 6.5% of patients.

Conclusion:

Despite achieving durable weight loss, nutritional abnormalities remain an ongoing challenge for bariatric surgery. Adherence to nutrient supplements, gastrointestinal symptoms and related complications are important considerations in addressing the problem.

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