

Abstract

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Nutrient deficiencies secondary to bariatric surgery.

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PURPOSE OF REVIEW: The number of adolescent and adult patients submitting to bariatric surgery is increasing rapidly around the world. This review describes the literature published in the last few years concerning nutritional deficiencies after bariatric surgery as well as their etiology, incidence, treatment and prevention.

RECENT FINDINGS: Although bariatric surgery was first introduced in the 1950s, safe and successful surgical management has progressed over the last two decades and longer post-surgical follow-up data are now available. Most of the patients undergoing malabsorptive procedures will develop some nutritional deficiency, justifying mineral and multivitamin supplementation to all postoperatively. Nutrient deficiency is proportional to the length of absorptive area and to the percentage of weight loss. Low levels of iron, vitamin B12, vitamin D and calcium are predominant after Roux-en-Y gastric bypass. Protein and fat-soluble vitamin deficiencies are mainly detected after biliopancreatic diversion. Thiamine deficiency is common in patients with frequent vomiting. As the incidence of these deficiencies progresses with time, the patients should be monitored frequently and regularly to prevent malnutrition.

SUMMARY: Nutritional deficiencies can be prevented if a multidisciplinary team regularly assists the patient. Malnutrition is generally reverted with nutrient supplementation, once it is promptly diagnosed. Especial attention should be given to adolescents, mainly girls at reproductive age who have a substantial risk of developing iron deficiency. Future studies are necessary to detect nutrient abnormalities after new procedures and to evaluate the safety of bariatric surgery in younger obese patients.

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