

A case of scurvy following bariatric surgery

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Introduction: Vitamin C deficiency is commonly seen following malabsorptive bariatric surgery (i.e. gastric bypass or biliopancreatic diversion/duodenal switch), with rates as high as 35% being reported. Despite high rates of serological vitamin C deficiency in the post-operative period, the clinical presentation of vitamin C deficiency, scurvy, is rare.

Case presentation: We report a case of a 62-year-old female with new-onset spontaneous bruising and postmenopausal bleeding 15 months following biliopancreatic diversion with duodenal switch, complicated by prolonged diarrhea. Her hematological workup, including INR, aPTT, fibrinogen, platelet aggregometry studies, and testing for Von Willebrand Disease was normal. Vitamin C was found to be low at 7 µmol/L (normal reference range ≥ 25 µmol/L); other micronutrient levels including vitamin B12, vitamin D, zinc, and ferritin were within normal range. With vitamin C supplementation and elongation of the common channel, her symptoms of easy bruising and bleeding resolved completely.

Discussion: We present this case to help clinicians identify scurvy as an uncommon, but easily treatable condition post-bariatric surgery. A high index of suspicion for vitamin C deficiency in patients presenting with spontaneous bruising following bariatric surgery and normal coagulation studies is warranted. A review of the literature suggests that vitamin C deficiency is seen in 30% of bariatric surgery patients in the pre-operative period, likely driven by the effects of obesity on oxidative stress. Following malabsorptive bariatric surgery, vitamin C deficiency persists in 29% of patients at 1 year post-operatively due to a combination of reduced vitamin C intake, malabsorption, and non-compliance with supplementation.

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