

68693 SECONDARY HYPERPARATHYROIDISM AND HYPOVITAMINOSIS D ONE YEAR AFTER POST-BARIATRIC SURGERY

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Introduction: Patients with obesity submitted to bariatric procedures have a high risk of secondary hyperparathyroidism (SHPT) (up to 53%) and hypovitaminosis D (33% to 96.7%). These morbidities could imply in future adverse bone conditions. The aim of this study was to evaluate vitamin D deficiency and SHPT in South Brazilian patients after one year of bariatric surgery (Y-en-Roux bypass procedure). **Methods:** In this retrospective cohort study (March 2016 to September 2017) vitamin D deficiency was defined as serum 25(OH) vitamin D < 20 ng/ml and SHPT as PTH > 68 pg/ml post-surgery, in patients with normal serum creatinine and calcium. Bone mineral density (BMD) was estimated by DXA – Lunar (g/cm²). **Results:** From 151 patients who underwent bypass surgery, 83 were included (49.7 ± 10.6 years, 12% non-white ethnicity, 95.2% female, 51.6 ± 17 months of follow-up). Pre-surgery and current BMI were 49 ± 7.4 and 32.8 ± 4.9 kg/m², respectively, with 68 ± 16.6% excess body weight lost. Multivitamin supplementation was used in 86.7% and calcium tablets in 53%; 85.5% consumed dairy products. In the last medical visit, 71% of patients were taking vitamin D [23,000 IU weekly (P25-75 16,000-28,000)] and of them. Mean 25(OH)D was 20.6 ± 7.9 ng/ml at first and 25.6 ± 7.9 ng/ml in the last evaluation (P < 0.01). SHPT was identified in 43.4% [PTH = 76.2 pg/dl (P25-75 55.1-93)]. An inverse correlation (P < 0.05) was observed between BMD and PTH in lumbar spine (r = -0,375) and total hip (r = -0.243), but not with vitamin D. **Conclusion:** Vitamin D deficiency and SHPT were frequent after bariatric surgery, and BMD was inversely correlated to PTH.