were inconclusive. These findings should trigger suspicion for functional parathyroid lesions. Cystic components should be evaluated for PTH levels and if significantly elevated should be treated as a parathyroid adenoma.

Bone and Mineral Metabolism
PARATHYROID AND RARE BONE DISORDERS

Risk of Chronic Kidney Disease in Adult Patients With Chronic Hypoparathyroidism Treated With rhPTH(1–84) Compared With a Historical Control Cohort

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Patients (pts) with chronic hypoparathyroidism are at increased risk of renal complications. This study evaluated chronic kidney disease (CKD) outcomes over a period of up to 5 years in adult pts with chronic hypoparathyroidism treated with recombinant human parathyroid hormone (1–84), rhPTH(1–84), compared with a historical control cohort of pts who did not receive rhPTH(1–84). The cohort of pts with chronic hypoparathyroidism treated with rhPTH(1–84) was derived from the NCT00732615 (REPLACE), NCT01268098 (RELAY), NCT01297309 (RACE) and NCT01199614 (HEXT) clinical trials. The control cohort of adult pts who did not receive rhPTH(1–84) or rhPTH(1–34) was selected from the US Explorys electronic medical record database (Jan 2007−Aug 2019), using criteria similar to the enrollment criteria used in the trials. Index date was the day after treatment initiation for the rhPTH(1–84) cohort, and the day after the first calcitriol prescription for the control cohort. Pts with CKD at baseline (defined as estimated glomerular filtration rate [eGFR] <60 mL/min/1.73 m^2 at the closest eGFR measurement before the index date) were excluded. All included pts had ≥1 eGFR measurement within 6 months before the index date and ≥2 eGFR measurements ≥3 months apart during the 5 years on or after the index date. The CKD outcome was defined as first occurrence of eGFR <60 mL/min/1.73 m^2 confirmed by a second measurement ≥3 months after. Risk of CKD was assessed in a Kaplan-Meier analysis and a Cox proportional hazards model adjusted for demographic characteristics, baseline clinical conditions (including acute manifestations of hypoparathyroidism), and baseline laboratory measurements. The analysis included 118 pts in the rhPTH(1–84) cohort and 478 pts in the control cohort. Pts in the rhPTH(1–84) cohort, compared with pts in the control cohort, were younger (mean ± SD age, 45.3±11.4 vs 51.5±16.2 years; P<0.001), a higher proportion were White (97.5% vs 81.6%; P<0.001), and a lower proportion had acute manifestations of hypoparathyroidism before the index date (15.3% vs 73.2%; P<0.001). In a Kaplan-Meier analysis, rhPTH(1–84)-treated pts had a significantly reduced risk of developing CKD compared with pts in the control cohort, with 11.0% and 27.0% of pts in each cohort, respectively, developing CKD during follow-up (P<0.01). The adjusted hazard ratio of developing CKD associated with rhPTH(1–84) treatment vs no rhPTH(1–84) treatment was 0.47 (95% CI, 0.25−0.88; P<0.05). Pts with chronic hypoparathyroidism treated with rhPTH(1–84) in long-term clinical trials had a significantly reduced risk of developing CKD compared with pts in a control cohort who did not receive rhPTH(1–84). These results should be viewed in light of possible treatment differences in the studied cohorts (ie, predefined trial protocols vs real-word practice for the control cohort).

Bone and Mineral Metabolism
PARATHYROID AND RARE BONE DISORDERS

Secondary Hyperparathyroidism Among Bariatric Patients: Unraveling the Prevalence of an Overlooked Foe.

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Introduction: Bariatric surgery (BS) is an effective therapeutic approach for obese patients. It is associated with important gastrointestinal anatomic changes, predisposing these subjects to altered nutrient absorption that impact phosphocalcium metabolism. This study aims to clarify the prevalence of secondary hyperparathyroidism (SHPT) and its predictors in patients submitted to BS. **Methods:** Retrospective unicentric study of 1431 obese patients who underwent metabolic surgery between January/2010 and June/2017 and who were followed for, at least, a year. In this group, 185 subjects were submitted to laparoscopic adjustable gastric banding (LAGB), 830 underwent Roux-en-Y gastric bypass (RYGB) and 416 sleeve gastrectomy (SG). Data comprising 4 years of follow-up were available for 333 patients. We compared the clinical and analytical characteristics of patients with and without secondary hyperparathyroidism (considering SHPT a PTH>69pg/mL), taking also into account the type of surgery. A multiple logistic regression was performed to study the predictors of SHPT after BS. **Results:** The overall prevalence of SHPT before surgery was 24.9%, 11.2% one year after surgery and 21.3% four years after surgery. At 12 months after surgery, LAGB had the highest prevalence of patients with SHPT (19.4%, N=36), RYGB had 12.8% (N=274) and SG 5.3% (N=131). At 48 months after surgery, RYGB had the highest prevalence of SHPT (27.0%, N=222), LAGB had 13.2% (N=53) and SG 6.9% (N=58). Multi-variate logistic analysis showed that increased body mass index and age, decreased levels of vitamin D and RYGB were independent predictors of SHPT one year after surgery. The only independent predictor of