Letter: Primary Hyperparathyroidism after Roux-en-Y gastric Bypass

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To the Editor:

We read with great interest the article by Chen Y et al. [1] recently published in *Obesity Surgery*, which retrospectively investigated all patients with the diagnosis of primary hyperparathyroidism (PHPT) and previous Roux-en-Y gastric bypass (RYGBP). They found ten cases since 2000, and four patients did not have their calcium normalized after the cervical operation.

Like Chen et al. [1], along with 18 years of follow-up of 300 RYGBP patients, we also had two cases of PHPT. Informed consent was obtained from all individual participants included in the study.

Seven and 16 years after RYGBP, two women 50- and 62-years-old, respectively, were diagnosed with PHPT. The diagnostic criteria of PHPT were hypercalcemia, high PTH, with normal 25-hydroxy vitamin D, phosphorus and renal function. The patients were submitted to cervical exploration and a single adenoma was detected in both, with postoperative calcium and PTH normalization.

Both made irregular use of the calcium and of the vitamin D in most of the follow-up visits after operation. Besides, similarly to the findings of Chen et al., both presented biochemical deficiency of vitamin D. After bariatric surgery, the attrition rates of vitamin and mineral supplementation are high [2]. We wonder

if the irregular use of vitamin D and calcium supplementation, along with the duodenal exclusion and lower absorption, could generate a persistent stimulation of parathyroid glands, like in chronic renal dysfunction [3]. In other words, it is plausible that a longstanding secondary hyperparathyroidism, despite being sometimes “under biochemical control”, could—in fact—generate a tertiary hyperparathyroidism.

Despite the important role of bariatric surgery in the control of weight and obesity-related comorbidities in the long term, the multidisciplinary team and patients must be aware of the potential emerging problems during the postoperative follow-up. The interesting paper of Chen et al. reinforces the necessity of a long term follow-up and of mineral and vitamins prescription to patients submitted to RYGBP, in order to prevent longstanding parathyroid stimulation and autonomy.

Thank you,

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