Letter to the Editor: "Rare Presentation of Primary Hyperparathyroidism in a Young Woman"

Carta ao Editor: "Apresentação Rara de Hiperparatiroidismo Primário numa Mulher Jovem"

Keywords: Bone Diseases/etiology; Hypocalcemia; Hyperparathyroidism; Primary/complications; Vitamin D/administration & dosage
Palavras-chave: Doenças dos Ossos/etiologia; Hipocalcemia; Hiperparatiroidismo Primário/complicações; Vitamina D/administração e dosagem

Dear Editor,

We commend the authors for the insightful article "Rare Presentation of Primary Hyperparathyroidism in a Young Woman",[1] published in Acta Médica Portuguesa. The detailed case description caught our attention and holds significant value for the medical community.

Over the past years, the clinical profile of primary hyperparathyroidism (PHPT) has evolved from a highly symptomatic disease to one that is most often asymptomatic, albeit with evidence of subclinical target organ involvement. The incidence of PHPT increases with age and is more frequent in women, with most cases being diagnosed in the first-decade post-menopause.[2] In this article, a 32-year-old female patient presented with symptomatic PHPT manifested by significant clinical disease, including nephrolithiasis and extensive bone involvement. She underwent parathyroidectomy, with histology confirming a parathyroid adenoma, and subsequently developed hungry bone syndrome (HBS), a condition of severe hypocalcemia during the postoperative period, which results from the avid uptake of calcium and phosphate by the bone due to the sudden reduction of PTH levels, resulting in additional morbidity and a prolonged hospital stay. We want to highlight two missing considerations for this clinical case: (1) the critical importance of evaluating and supplementing vitamin D levels prior to surgery; (2) the necessity of considering genetic syndromes associated with PHPT, notably if present in young patients.

Hypocalcemia due to HBS is a well-known complication following parathyroidectomy for PHPT. Several risk factors contribute to its development, including high preoperative levels of calcium, alkaline phosphatase, and PTH, large parathyroid adenoma volume, radiological evidence of PHPT-related bone disease, and low preoperative 25(OH) D concentrations.[3] In this patient, preoperative 25(OH)D levels were not mentioned. Vitamin D inadequacy is linked to more severe bone disease and an increased risk of hypocalcemia due to HBS.[4] Therefore, we would like to reinforce that it is highly recommended that patients with vitamin D deficiency begin supplementation before surgery to prevent HBS.[3]

Additionally, given the patient's young age, it is important to consider that PHPT may present as part of inherited syndromes, such as multiple endocrine neoplasia (MEN) types 1, 2, and 4, hyperparathyroidism jaw tumor syndrome, and familial isolated hyperparathyroidism (FIH).[3] Incorporating genetic testing in young patients allows for tailored surveillance protocols and early detection of other endocrine neoplasms, such as pituitary and neuroendocrine pancreatic tumors, which are commonly associated with MEN-1.[5] This proactive approach, through referral to endocrinology and genetics specialists, can significantly impact treatment decisions and improve patient outcomes through multidisciplinary intervention.

In conclusion, we reiterate our appreciation to the authors for their significant contribution. This case report underscores the importance of clinical vigilance and interdisciplinary collaboration in managing PHPT, especially in young patients. Preventing HBS through preoperative vitamin D supplementation and considering genetic testing for inherited syndromes are crucial steps. Such measures allow for tailored surveillance protocols and early detection of associated endocrine neoplasms.

AUTHOR CONTRIBUTIONS

All authors contributed equally to this manuscript and approved the final version to be published.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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