

Título artículo: Unexpected serum parathyroid hormone profiles in some patients with primary hyperparathyroidism. **Revista:** Clin Chem. 2006; 52(4): 757-60 **Autores:** Boudou P; Ibrahim F; Cormier C et al. **Abstract original:** **BACKGROUND:** Third-generation parathyroid hormone (PTH) assays have been reported to measure only intact PTH(1-84), in contrast to second-generation assays, which also detect PTH(7-84) fragments. Higher PTH measurements were observed with third- than with second-generation PTH assays in a few patients with either severe primary hyperparathyroidism or parathyroid carcinoma. **METHODS:** We analyzed biological data [second- and third-generation PTH assays, 25-hydroxyvitamin D (25-OHD), calcium, and phosphate concentrations] obtained before and after surgery for 2 groups of patients selected from a large series of consecutive patients with primary hyperparathyroidism (PHPT): 7 female patients with surgically and histologically confirmed PHPT (group 1) and a matched group (group 2). **RESULTS:** For group 1 but not group 2, PTH concentrations measured by third-generation PTH assays before surgery were higher than those measured by the second-generation assays. Circulating 25-OHD, calcium, and phosphate concentrations were similar in both groups. In addition, PTH values measured with the third-generation PTH assays in group 1 decreased after surgery. **CONCLUSIONS:** Our results confirm that third-generation PTH assays do not measure only PTH(1-84). The frequency of this unexpected finding of markedly lower PTH concentrations than previously reported was approximately 5% in patients with PHPT without malignancy. We do not know whether the presence of this unexpected profile is predictive of malignancy.