VALIDATION OF INTRA-OPERATIVE PARATHYROID HORMONE 20MIN AFTER TOTAL THYROIDECTOMY: TRACING HYPOCALCEMIA-PRONE PATIENTS AND ADJUSTING A PROTOCOL FOR POSTOPERATIVE CALCIUM SUPPLEMNETATION. A PROSPECTIVE COHORT STUDY.

Contact name: Chereau, Chereau
Institution/company: Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris
Phone: 2147483647
Country: France
E-mail: nathalie.chereau@aphp.fr
Type of communication: ORAL
Number Abstracts: 112

Chereau Chereau Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris; Godiris-Petit Godiris-Petit Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris; Noullet Noullet Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris; Tezenas du Montcel Tezenas du Montcel Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris; Leenhardt Leenhardt Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris; Menegaux Menegaux Sorbonne University, Hospital Pitié Salpêtrière, APHP, Paris

Abstract body (should contain maximum 300 words)

Introduction: Identifying patients with hypocalcemia may facilitate early discharge after total thyroidectomy (TT). Intraoperative parathyroid hormone (IO-PTH) levels have been shown to be an interesting tool. The aim of this prospective study was to evaluate reliability of IO-PTH levels at 20 minutes after TT (IO-PTH20). Patients and Methods: This is a single-institution study of consecutive patients who underwent TT in one step between November 2016 and December 2017. In a first 6-month period, we investigated the correlation between serum IO-PTH20 and POD1 calcium levels, to define an optimal cut-off in IO-PTH20. In a second 6-month period, we prospectively enrolled patients adjusting postoperative calcium supplementation to the IO-PTH20 cut-off (1.54g/day from POD0 for 15 days in case of PTH < cut-off). We defined postoperative hypocalcemia as serum calcium level <8.0 mg/dL at any time after surgery. Results: 904 patients underwent TT, including 355 carcinomas (39%): 417 during the 1st period, and 487 in the 2nd period. Populations were equivalent in the two periods. The most accurate IO-PTH20 level in predicting hypocalcemia was 20pg/mL (sensibility:95%; specificity:69%). The mean (±SD) serum calcium concentration on POD 1 was 8.7(±0.6) mg/dL in the 1st period and significantly increased in the second period to 9.2(±0.7) mg/dL (p<0.001). Temporary hypocalcemia (<6 months) rates were less common in patients who were subject to our algorithm (13% vs. 24%; p<0.001). Conclusion: Patients with an IO-PTH20 >20 ng/L could be early discharged without prophylactic calcium. For IO-PTH20< 20 ng/L, a systematic prophylactic oral calcium supplementation decreases the risk of hypocalcemia.