

## **PREVENTION AND TREATMENT OF POSTOPERATIVE HYPOPARATHYROIDISM**

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**Background/Purpose:** Postoperative hypoparathyroidism (PHPT) has appeared due to damage or inadvertent removal of parathyroid glands (PTG).

**Purpose:** to decrease the rate of clinical and asymptomatic PHPT by improvement of thyroidectomy (TE) technique and using of calcium mineral complex (CMC) in all thyroid patients since the first postoperative day.

**Methods:** Our research consists of anatomical and clinical parts. The anatomical study was performed at 40 organ complex of 20 patients (mean age 64.6), died of different but not thyroid diseases. In clinical research were identified sources of all PTG blood supplying during 170 thyroid operations.

Postoperatively were investigated level dynamics of calcium, parathyroid hormone (PTH), with and without of patients supplementation by CMC after TE or subtotal TE in Diffuse Toxic Goiter (DTG), Papillary Thyroid Cancer (PTC) and Nodular Euthyroid Goiter (NEG) cases.

**Results:** 1. Anatomical research demonstrated that ligation of inferior thyroid artery or its branches does not lead to serious PTH blood supply deficiency. 2. Subtotal TE for DTG leads to more serious temporary hypocalcaemia in compare to subtotal TE for NEG. 3. TE for PTC, DTG and NEG goes with temporary asymptomatic HPT. The rate of serum calcium and PTH decreased in line: DTG, TC, NEG. 4.

Postoperative temporary hypocalcaemia in TC patients after subtotal TE with central lymphadenectomy is higher than in patients with NEG after TE. 5. Replacement by CMC effectively prevents postoperative clinical and asymptomatic HPT.

**Discussion & Conclusion:** Worked out an effective program of surgical and medicamentary prevention and correction of PHPT.