

# Chirurgiczne leczenie chorób tarczycy -powikłania pooperacyjne

Complications in surgical treatment of thyroid diseases

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## Summary

**The aim** of this study was examination of laryngeal nerve injury, hypoparathyroidism, bleeding and thyroid storm frequency after thyroidectomy. **Material and methods:** Retrospective analysis of 847 patients surgically treated from 1985 to 2004 due to thyroid cancer (77) or multinodular goiter (770). We analyzed influence of type of thyroidectomy, diagnosis and reoperation on complication rates. Statistical analysis was performed with Chi2 or Fisher exact test. **Results:** Unilateral lobectomy was performed in 195 cases (23%) - total unilateral lobectomy in 51% of patients and partial or subtotal lobectomy in rest of them. Bilateral lobectomy was performed in 652 patients - in 20% of cases it was total thyroidectomy and partial or subtotal thyroidectomy in 524 of patients. There was no mortality in operative or postoperative period. Wound exploration due to bleeding was performed in 3 cases (0,4%) and thyroid storm was noticed in 1,6% of all patients. Unilateral permanent laryngeal nerve injury was in 2,1% of patients, in one patient it was permanent bilateral nerve injury and unilateral temporary nerve injury in 3,2%. We noticed statistically significant differences in permanent and temporary nerve injury between total and partial thyroidectomy groups (7,0% vs 1,3% and 8,6% vs 2,2%;  $p < 0,005$ ) and after primary operation and reoperation groups (8,9% vs 1,7% and 6,7% vs 2,9%;  $p < 0,005$ ). Permanent and temporary recurrent laryngeal nerve injury rates after total thyroidectomy due to cancer or multinodular goiter were not significant (7,8% vs 5,9% and 9,1% vs 7,8%;  $p = 0,72$ ). Temporary hypoparathyroidism was noticed in 34 cases (4%) and permanent in one case. Again temporary hypoparathyroidism was significantly higher after total thyroidectomy compared to partial (18,0% vs 2,1%;  $p < 0,005$ ) and after reoperation (17,8% vs 3,2%;  $p < 0,005$ ). There were no differences in hypoparathyroidism rates after total thyroidectomy due to cancer or multinodular goiter (20,8% vs 13,7%;  $p = 0,35$ ). **Results:** Recurrent laryngeal nerve injury and hypoparathyroidism are most common complications after thyroid surgery. Total thyroidectomy and reoperation are risk factors of recurrent laryngeal nerve injury and hypoparathyroidism.