

## SURGICAL TREATMENT OF GRAVES DISEASE TOTAL THYROIDECTOMY YES OR NO?

**Summary:** Graves disease is serious medical problem. Surgery is applied in selected cases to control the disease by removing the functioning tissue of the target organ. Postoperative function depends upon the amount of the remnant thyroid tissue.

Several years ago, subtotal bilateral lobectomy was the most common surgical procedure in Graves's disease. Upon the prospective clinical study of 60 patients operated from 1996-2000, influence on the postoperative function of the remnant have the higher preoperative antithyroid antibodies, degree of lymphocyte inphylation, number and the size of intrathyroid lymph follicles, sex and the type of the operative procedure. These results changed the operative strategy towards more radical excision.

From 1995 to 2004 we operated upon 1061 patient with Graves disease, 106 men and 955 women. Total thyroidectomy was done in 438, bilateral subtotal in 327, total on one and subtotal on the other side in 297 oof which in 61 the remnant was in the region of upper poole on oone side. Recurent nerve palsy and postoperative hypoparathyrodism occured in less than 2% of patients. Relapse of the remnant was evident only after bilateral subtotal lobectomy in 3% of cases.

Improving of the operative technique, favorable effect on autoimmune processes and radical control of the disease are the facts that favor total thyroidectomy in majority cases of Graves disease nowadays in specialized surgical centers. The need for permanent replacement therapy is acceptable as the drug is available almost everywhere in the world.

Although not applied so often as before, subtotal thyroidectomy has its place in our center even nowadays, with certain modifications. It is applied in selected cases under several conditions: 1.no thyroid tumor requesting total thyroidectomy, 2. No concomitant diseases that request special preoperative preparation that could be necessary to repeat again in the case of the recurrence, 3. No extended autoimmune disease such as serious opthalmopathy or myasthenia that could suggest higher recurrence rate, 4. Skilled surgeon familiar with the technique of the procedure. 5. If the patient does not accept total thyroidectomy.

We suggest that all the remnant tissue should be left on only one side in the region of the upper pole of thyroid lobe, far from important structures to avoid damage in the case of relapse. In that way, removing of the hypertrophic remnant is safe without the risk of complications such as laryngeal nerve palsy or damaging parathyroid glands. The procedure we called atypical subtotal lobectomy.