

IS TOTAL THYROIDECTOMY FOR GRAVES' DISEASE DURING HYPERTHYROIDISM A RISK FOR THYROID STORM?

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Conclusions: The study found no increased intraoperative elevations in thyroid hormone and cortisol levels, recognized risk factors for thyroid storm, in patients with hyperthyroid Graves' disease. Therefore, total thyroidectomy appears to be a safe procedure in this population.

Purpose: To evaluate the risk factors for thyroid storm in Graves' patients with poorly controlled thyroid hormones undergoing total thyroidectomy.

Methods: 38 patients were included. Patients with elevated thyroid hormone levels were classified into a hyperthyroid group, while others constituted the normal thyroid group (Table 1).

Table 1. Clinical and biochemical data of the study population

Variables	ALL (n=39)	NT group (n=22)	HT group (n=17)	P value **
Age	41.6 ± 16.3	40.4 ± 17.0	43.4 ± 15.6	0.576
Sex (M/F)	8/31	3/19	5/12	0.355
BMI (Kg/m ²)	22.0 ± 2.6	22.8 ± 2.8	21.0 ± 2.0	0.032
Surgical findings				
Operation time (min)	103 ± 26	104 ± 19	102 ± 33	0.497
Amount of bleeding (g)	22 ± 19	19 ± 11	25 ± 24	0.652
Excised amount of thyroid gland (g)	78 ± 51	82 ± 51	74 ± 51	0.524

NT, normal thyroid hormone; HT, hyperparathyroidism;
* Values are presented as mean ± SD.

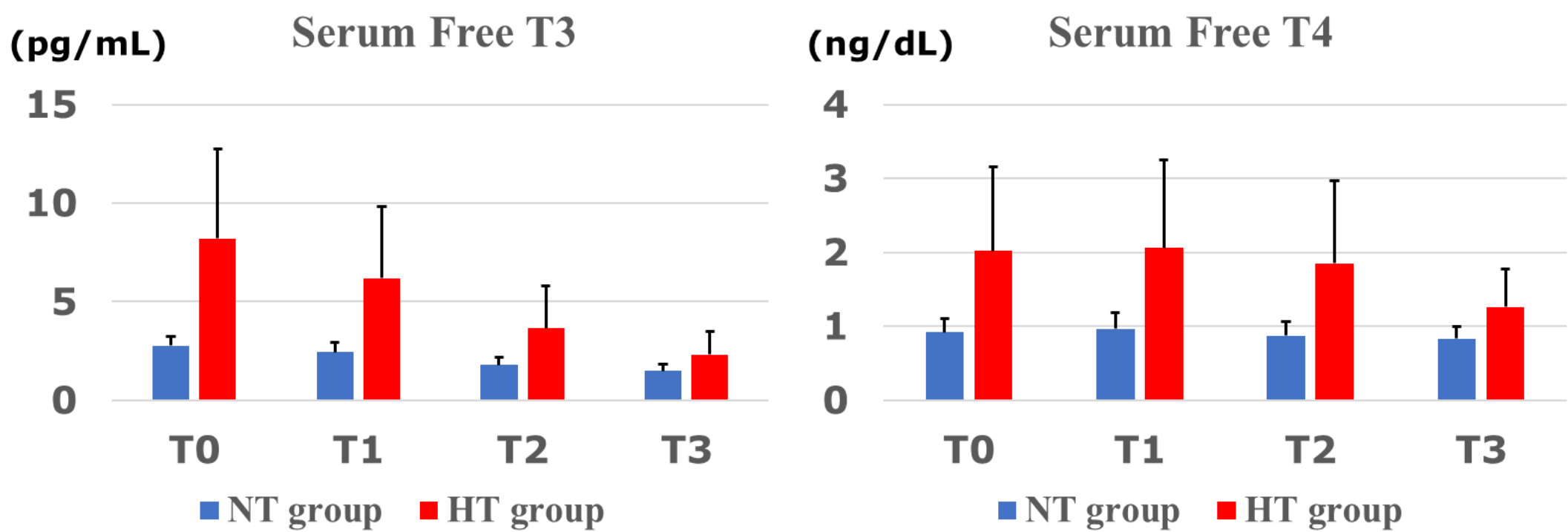


Figure 1

Serum free T3 levels at 15 minutes post-thyroidectomy showed a significant decrease in both groups, with no cases of elevation in the HT group.

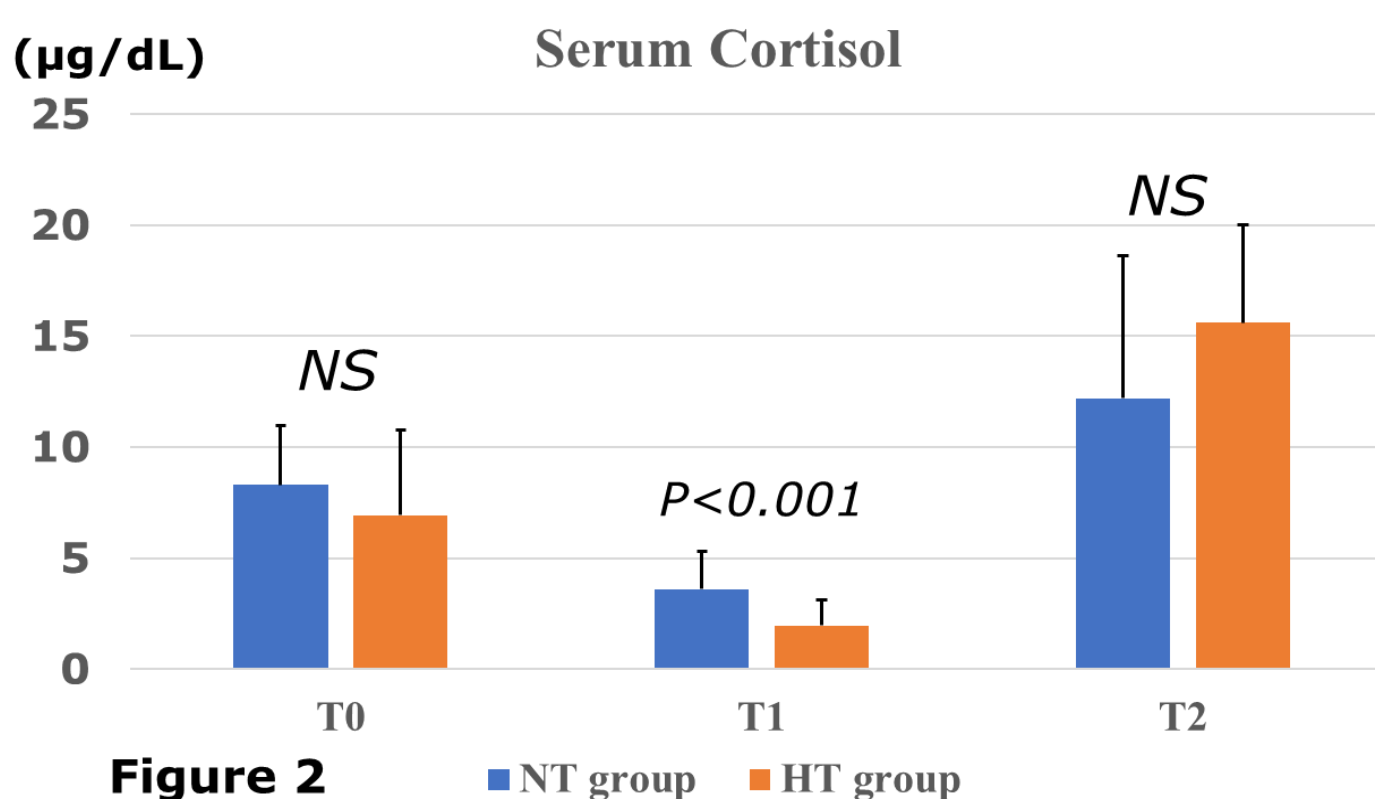


Figure 2

The HT group values of cortisol were significantly lower than the NT group only at 15 minutes post-extraction.