

EXCELLENT RESPONSE OF LOW-RISK DIFFERENTIATED THYROID CANCER PATIENTS WHO DID NOT UNDERGO RADIOIODINE REMNANT ABLATION AFTER TOTAL THYROIDECTOMY

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Background/Purpose: Radioiodine remnant ablation (RRA) in low-risk differentiated thyroid cancer is generally not recommended, because of the low risk of relapse and cancer specific mortality.

Our objectives were to evaluate the follow-up of low-risk thyroid cancer patients treated with total thyroidectomy, who did not undergo RRA, and to determine which exam best predicts a disease-free follow-up: a basal sensitive Tg, stimulated thyroglobulin or whole body scan (WBS) uptake.

Methods: We evaluated 54 patients with papillary thyroid carcinoma who underwent total thyroidectomy with low-risk (T1/T2N0, with non-aggressive histology, according to ATA). Soon after surgery, serum sensitive thyroglobulin and neck ultrasonography were performed with suppressed TSH. These patients were submitted to a stimulated Tg and WBS after recombinant human TSH (rhTSH) 3-12 months after surgery. One year later, the patients were evaluated with neck ultrasonography and another measurement of serum sensitive thyroglobulin with a TSH 0.5-2.0mUI/mL.

Results: After total thyroidectomy, the mean basal thyroglobulin with suppressive therapy was 0.25ng/dL (<0.1-4.4). rhTSH WBS showed thyroid bed uptake (0.1-6.4%) and the median stimulated thyroglobulin was 2.15ng/dL (<0.1-10.1).

These patients were followed-up by a period of 6 to 60 months, without any sign of recurrence: mean sensitive thyroglobulin 0.18ng/dL and negative neck ultrasonography.

Discussion & Conclusion: After 1-year follow-up, all patients presented an excellent response to initial surgical therapy with negative neck ultrasonography and Tg 0.18ng/dL with TSH 0.5-2.0mUI/mL. Our data suggests that a basal thyroglobulin after surgery lower than 0.25ng/mL is a good predictor for excellent response and that, in these low-risk patients, there is no need of WBS and stimulated Tg to determine a successful follow-up.