

Title: **Recurrent and metastatic papillary thyroid microcarcinoma presenting as toxic multinodular goiter**

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Abstract

Background: Hyperthyroidism does not safeguard individuals from developing thyroid cancer. Papillary thyroid microcarcinoma, notwithstanding its torpid course and low risk classification, has a propensity to induce significant morbidity despite radioactive iodine treatment.

Clinical case: We present the unusual case of a 37-year old, Filipino male who demonstrated typical signs and symptoms of toxic multinodular goiter (TMG) including anterior neck mass, tremors, weight loss, excessive sweating, palpitations, easy fatigability and bilateral proptosis. The patient, upon follow up, was found to have agranulocytosis attributed to being on anti-thyroid medication for two years. The patient was then subjected to total thyroidectomy with a histopathology report showing colloid goiter with concomitant papillary thyroid microcarcinoma (0.9 cm in widest diameter). Initial radioactive iodine (RAI) therapy was initiated following surgery and subsequent ^{131}I whole body survey (WBS ^{131}I) a year after, showing a negative result; however, after 2 months of WBS ^{131}I, there was locoregional recurrence detected by neck ultrasound and CT scan, and eventually confirmed on lymph node biopsy after modified radical neck dissection (MRND). In an attempt to ablate the probable micrometastases, a second RAI therapy with a higher dose was administered; and subsequent post-therapy scan revealed recurrence of cancer on the thyroid bed and distant metastasis on the right lower quadrant of the abdomen. Currently, the patient is on suppression therapy and constantly monitored for progression of the disease.

Conclusion: Even when aided with strict protocols, clinicians must recognize that guidelines are not surrogate to clinical judgment and that prompt institution of treatment is critical to circumvent potential pitfalls. This case further illustrates the avenue of championing the use of radioactive iodine (RAI) therapy just as in the low risk stratification.

Keywords: hyperthyroidism, papillary thyroid cancer, radioactive iodine therapy, toxic multinodular goiter

Biography

Dr. Shelton Tacang is a graduate of BS Nursing and has completed his medical degree from the Davao Medical School Foundation in the Philippines. He is currently a senior resident of the Department of Nuclear Medicine at Jose R. Reyes Memorial Medical Center.

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