

Radioiodine Treatment Outcomes of Well Differentiated Thyroid Cancer Patients Post Lobectomy and Total or Near Total Thyroidectomy

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ABSTRACT

Background and Objective: Well differentiated thyroid cancer (DTC) arises from the follicular cells. Papillary thyroid cancer is the most common followed by follicular thyroid cancer while the Hurtle cell cancer is very rare. Surgery is the first-line of treatment followed by risk-adapted postoperative radioiodine therapy. However, controversy exist on the extent of surgery. The American thyroid association recommends thyroid lobectomy (TL) for patients with unifocal intrathyroidal low risk tumors less than 4 cm in diameter with no family history of thyroid cancer or clinically visible lymph nodes. The Swiss guidelines recommends TL for low-risk papillary cancer with tumor size less than 2 cm in diameter. For other cases total or near total thyroidectomy (TT) is recommended. This study aimed at determining radioiodine treatment outcomes of patients who underwent lobectomy and total or near total thyroidectomy.

Methods: A retrospective study. Patient information that includes: gender, histology, age, diagnosis, the nature of surgery (TT or TL), date of ablation and quantity of administered radioiodine was retrieved from files of DTC patients treated from 2007 to 2013 at a tertiary hospital in South Africa.

Results: Sixteen patients met the study criteria (i.e., having undergone either TT or TL) followed by radioiodine therapy. Eleven patients underwent TT while five underwent TL. Five TT patients who complied with radioiodine treatment schedules were declared disease free and discharged within two years while three none compliant cases remained on treatment despite having started treatment at the same time. Three TT patients who remained on treatment had commenced two years later. Only one TL patient was discharged after two years while four remained on treatment despite compliance and commencement of treatment at the same time with discharged TT patients.

Conclusion: TT optimizes patients for radioiodine treatment resulting higher discharge rates while the role of TL remains debatable.

Keywords: Total thyroidectomy, Thyroid lobectomy, Radioiodine therapy, Differentiated thyroid cancer, Surgery

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