

Thyroid Cancer Treatment in Yemen Under Blockade Conditions and Absence of Radioactive Iodine

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Abstract : Introduction: The World Health Organization (WHO) classifies malignant epithelial thyroid tumors into four major groups (papillary, follicular, medullar and undifferentiated) . Papillary thyroid carcinoma (PTC) is the most common type, for about eight out of ten thyroid cancers belong to this histological type. Radioactive iodine (RAI) is considered effective for patients with total or nearly total thyroidectomy, but the beneficial effects of RAI are still controversial. War conditions forced us to study alternative methods of using radioactive iodine in the treatment of patients with PTC. Material and methods: Between January 2014 and June 2021, in Al-Yakhiri hospital, 57 Total Thyroidectomy with Radical Bilateral Neck Dissection (RBND) were performed, 50 for malignant disease, 7 for false positive cytology. RBND involves surgical clearance of Levels II-VI. Mean age was 40.7 years old and 92% of the patients were female. 7(14%) patients had hypothyroidism which required preoperative thyroid hormone treatment. The Thyroid Stimulating Hormone- Suppression Therapy (TSH-ST) immediately started after RBND for most patients on the first day. It consisted in reducing the level of TSH < 0.1 mIU/L. Results: The Apron flap was used on most operations (40)80% and with lateral extensions had 10(20%). RBND involves surgical clearance of Levels II-VI performed in all operated patients, besides that, 4(8%) of them had resection of sternocleidomastoid muscle (SCM) and accessory nerve (XI) and internal jugular vein (IJV) with clearance of Levels IB. The PTC was the most common 80.9% (38 patients from 47) by histopathological report. and 4(8%) patients of 50 had resection of sternocleidomastoid muscle (SCM) and accessory nerve (XI) and internal jugular vein (IJV). The postoperative mortality rate not observed (0%). The postoperative morbidity rate was 22.8% (n =13). Seroma(8.7%), Hypocalcemia(7%), Wound infection(5.3%), Bleeding(1.8%). To suppress TSH and growth of any residual thyroid the TSH-ST (levothyroxine 150 - 600mcg) was performed in all patients 57(100%) on the first day after RBND. We tracked the results of treatment for two years in 30 patients with PTC, only 3 of them received radioactive iodine abroad. Biennial Recurrence rate for PTC appeared in one woman (2%), who had RAI postoperatively in the form of neck lymph nodes metastasis. Conclusion: For patients with PTC, thyroidectomy plus prophylactic RBND is a safe and efficient procedure and it results in lower recurrence rate. Postoperative treatment with exogenous thyroid hormone in doses sufficient to suppress TSH (not less than 150mcg), decreases incidence of recurrence. Total Thyroidectomy with RBND followed by TSH-ST, in our opinion, applicable optimal treatment scheme care for this patient population.

Keywords : thyroid cancer, Yemen war, absence of radioactive iodine, neck dissection, surgery results

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