Abstract

Introduction: Thyroid damage is a complication of total laryngectomy (TL) and may be caused by manipulation of the gland. There are isolated descriptions in the literature related to transient hyperthyroidism (HT) post-head and neck surgery. The aim of this study was to determine the frequency of HT after TL and to evaluate its relationship with the surgical procedure. Methods: Retrospective cohort study. Forty-four patients were included and stratified in Group 1 (TL + pharyngectomy), and Group 2 (TL + neck dissection). Post-op thyroid function was measured in all patients. Results were analyzed with chi square plus Yates and OR (p<0.05). Results: Twenty-four patients (54.6%) developed HT, with a mean TSH 0.11±0.09 uU/ml and a median FT4 1.5 ng/dl (1.2-1.8, IQR 0.30). Four patients (16.6%) required a pharmacological approach, because of their clinical course. Patients in Group 1 showed significantly more hyperthyroidism compared to Group 2 (p=0.04, OR 4, CI 95% CI,1.03-15.53). All became euthyroid before discharge. Conclusion: We found a high prevalence of HT after TL, and it was related indeed to the surgical procedure. All patients became euthyroid before discharge. We suggest to check thyroid function in routine lab tests in this setting. The hypothetical repercussion of these findings on resting energy expenditure and haemodynamics requires further studies.

Keywords

Transient hyperthyroidism, Total laryngectomy, Laryngeal cancer.