The Extent of Surgery in Thyroglossal Cyst Carcinoma

Sohail Bakkar* **and Paolo Miccoli**

*Asst. Prof. Endocrine & General Surgery

Department of Surgery, Faculty of Medicine, the Hashemite University, Zarqa 13131-Jordan

E-mail: sohail.bakkar@gmail.com, Mobile: 0796787778

ORCID ID: 0000-0001-8479-5901

Abstract

Purpose. The optimal management of thyroglossal cyst carcinoma, particularly the extent of surgery required is controversial. The aim of this study was to evaluate the need for routinely adding total thyroidectomy to Sistrunk's operation in the management of this condition.

Methods. The clinical records of 19 patients with a diagnosis of thyroglossal cyst carcinoma encountered in an 11-year period (2004–2015) were reviewed. All patients underwent total thyroidectomy in addition to Sistrunk's procedure. The rate of concomitant thyroglossal cyst and thyroid carcinomas was calculated and cancers were staged according to the AJCC-TNM staging system. Patients were divided into two groups: those with thyroglossal cyst carcinoma only (group A) and those with a synchronous or metachronous thyroid carcinoma as well (group B). The need for radioactive iodine ablation therapy in group A was assessed. The ability to omit total thyroidectomy based on thyroglossal cancer size and a negative thyroid ultrasound was also evaluated.

Results. The rate of concomitant thyroid cancer was 63.2 % (12/19). Based on stage, three out of the seven patients in group A required radioactive iodine ablation therapy. Total thyroidectomy was ultimately justifiable in 78.9 % (15/19) of cases. Omitting total thyroidectomy in T1 thyroglossal cyst cancers or based on a sonographically normal thyroid was associated with a 43 % risk of missing thyroid malignancy.

Conclusion. The routine addition of total thyroidectomy to Sistrunk's procedure seems to be appropriate for comprehensive loco-regional control especially that selecting a subset of patients in which it could be omitted is a difficult task.

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