

4th European Otolaryngology-ENT Surgery Conference

&

3rd International Conference on Craniofacial Surgery

August 15-17, 2019 Rome, Italy

The Incidence of Thyroid Gland Invasion in Advanced Laryngeal Squamous Cell Carcinoma

Hadi Al-Hakami

KSAU-HS, Jeddah, KSA

Objectives: To evaluate the frequency of the thyroid gland invasion in patients with advanced laryngeal squamous cell carcinoma submitted to total laryngectomy and thyroidectomy and to determine whether clinical and pathological characteristics of laryngeal carcinoma can predict glandular involvement.

Methods: A retrospective case series with chart review, from March 2009 to January 2018, was undertaken in the Princess Norah Oncology Center, King Abdul-Aziz Medical City, Jeddah / KSA. An inception cohort of 56 patients with laryngeal squamous cell carcinoma was considered. Nine cases were excluded. All patients had advanced stage cancer larynx (clinically T3-T4) and underwent total laryngectomy in association with thyroidectomy. Total thyroidectomy was performed in all bilateral lesions or if there was suspicion of contralateral lobe involvement. Hemithyroidectomy was performed in all lateralized lesions. Retrospective histopathologic analysis of thyroid specimens was subsequently performed. The frequency of thyroid gland invasion was calculated and analysis of demographic, clinical and pathological characteristics associated with thyroid gland invasion was performed.

Results: In all, 47 patients underwent total laryngectomy (40 treated with primary laryngectomy and seven treated with salvage laryngectomy following radiation failure or chemoradiation failure). Hemithyroidectomy was performed in 42 patients and the total thyroidectomy was performed in five patients. The overall frequency of invasion of the thyroid gland was 4.3%. Glandular involvement was seen in one advance transglottic squamous cell carcinoma and one subglottic. In spite of thyroid cartilage invasion in 25.5% of cases detected in the preoperative radiological imaging, only one case demonstrated microscopic thyroid gland invasion.

Conclusions: Invasion of the thyroid gland is not a general feature of advanced laryngeal carcinoma. There is no need for performing thyroidectomy in all total laryngectomy cases. The thyroidectomy may only be required during total laryngectomy for selected cases of advance transglottic tumors and tumors with subglottic extension more than 10 mm.