

Double staged sleeve resection of laryngotracheal tumour of papillary and follicular thyroid carcinoma

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ABSTRACT

Introduction: Thyroid cancer has been increasingly prevalent in the recent decade mainly attributed to the rise in papillary thyroid carcinoma (PTC) rates while follicular thyroid carcinoma (FTC) rates only rising minimally. The management of thyroid carcinoma with infiltration into the aerodigestive tract has been widely discussed and yet no consensus has been achieved regarding the best surgical technique. We aim to review the outcomes of sleeve resection of laryngotracheal tumour in patients with papillary thyroid carcinoma (PTC) and follicular thyroid carcinoma (FTC) who underwent total thyroidectomy. **Methods:** Retrospective review of six patients with PTC and FTC complicated with intraluminal laryngotracheal infiltration who had undergone laryngotracheal sleeve resection with partial closure and insertion of tracheostomy. The medical records of these patients were reviewed and clinical data collected including the presentation of the patient, the extent of laryngotracheal intraluminal infiltration on endoscopy, radiological findings, staging and surgery. **Results:** Six patients were included in this review with ages between 44 to 74 years old. Three patients (50%) were female while the remaining three (50%) were male. Average post-operative follow up was 21 months. Post-operatively, one patient (16.6%) had hematoma requiring evacuation. Two patients (33.3%) had injury to recurrent laryngeal nerve (RLN) in which ansa cervicalis-to-RLN repair was performed for one patient with severed RLN. The other patient had RLN neuropraxia and regained normal vocal cord mobility few months post-surgery. Decannulation was successful in all patients within 3 months on average. One patient died 2 months post-operatively due to concomitant angiosarcoma. All except one patient were free from recurrence on follow-up. **Conclusion:** Complete resection of laryngotracheal tumour extension of thyroid carcinoma was achieved through laryngotracheal sleeve resection with partial closure and tracheostomy tube insertion. This procedure was chosen due to the urgency of performing the surgery in these patients with airway compromise and the limited post-operative Intensive Care Unit bed availability.

OP-10

Lymph node metastasis and adverse features evaluation in laryngeal cancer

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ABSTRACT

Introduction: Laryngeal cancer is still counted as one of 5 most frequent head and neck cancer in Indonesia. Neck metastasis is frequently found in level II-IV, and metastasis to level I, IIB and V is considered rare. Adverse features implied important prognostic factors and risk of local recurrence thus need to be included in post-operative evaluation. **Methods:** Data of all patients underwent total laryngectomy, neck dissection and thyroidectomy in our center was collected from December 2018 until March 2021. Cell differentiation, keratinization and adverse features profile; margin of incision, lymphovascular invasion, perineural invasion and extra capsular extension were recorded. **Results:** One female case was treated of 26 total cases studied. The youngest age recorded was 43 years old and the oldest was 77 years old. T4 stage was mostly found (50%) then followed by T3 (38.5%) and T2 (11.5%). Level II and III lymph node were frequently involved (38% and 35% respectively) with unilateral neck involvement found in 64.3% while bilateral neck involvement found in 35.7%. Level I and IIB positive only found in one case. Thyroid was confirmed positive in 30.8% case. N0 was found in 50% cases, N2 and N1 was recorded respectively in 34.6% and 15.4%. Results of adverse features evaluation showed mostly free surgical margin (76.9%) meanwhile superior positive margin was found in 5 cases (75% in T4 cases); extra capsular extension (19.2%); lymphovascular invasion (34.6% in T2, T3 and T4) and perineural invasion (7.7%, all in T4). All cancer cells in this study were keratinized and 11.6% showed poor differentiation. **Conclusion:** Locally advanced cancer was predominant in this study with frequently involved level II and III of neck node. Evaluation of neck metastasis and adverse features were important to confirm the N staging and determine the prompt post-operative treatment for laryngeal cancer.