A Case of Triple Collision Malignancies in Cervical Lymph Nodes

Hiroyuki Harada, Shogo Shinohara, Keizo Fujiwara, Masahiro Kikuchi, Yuji Kanazawa, Risa Tona, Ippei Kishimoto and Yasushi Naito

Collision tumors are rare entities that consist of multiple neoplasms of distinct origin found in a single anatomic location. Several papers have mentioned collision tumors with two different malignancies in the head and neck. We report herein on a case with triple collision tumors in pathological neck dissection-lymph nodes. A 58-year-old male underwent a total laryngectomy and bilateral neck dissection under the diagnosis of supraglottic squamous cell carcinoma cT4aN2cM0. The dissection of the central compartment (level VI) with subtotal thyroidectomy was simultaneously undertaken due to the subglottic extension of the primary tumor. Histopathological examination revealed metastases of papillary thyroid carcinoma in the right lymph nodes, level III to V, in the left at level II, III and VI as well as metastases of squamous cell carcinomas in the right and left at level III and level II, respectively. Moreover, small lymphocytic lymphoma cells were found to have infiltrated the lymph nodes bilaterally at level II to IV. Histology of the right level III, specimen revealed that these 3 kinds of tumor had collided in one lymph node. Multiple micropapillary carcinomas (4 mm maximum diameter) were also detected in the resected thyroid specimen. After the pathological report, we reviewed the preoperative FDG-PET/CT and found that only the existence of SCC showed an high accumulation of FDG on PET/CT. Considering the prognoses of each malignancy, postoperative radiation for squamous cell carcinoma was performed because lymphovascular invasions were pathologically seen at the primary site. It was decided to place the thyroid cancer and small lymphocytic lymphoma under observation without additional therapeutic intervention because the former was considered to be an incidental microcarcinoma and the latter was an indolent type lymphoma.

To our knowledge, this is the first reported case of triple collision tumors in one cervical lymph node.

Keywords: collision tumors, neck dissection, squamous cell carcinoma, papillary thyroid carcinoma, small lymphocytic lymphoma

References
1) 甲状腺外科研究会: 発見動機による甲状腺癌の分類. 甲状腺癌取扱い規約 第6版.3頁, 金原出版, 東京, 2005.
2) 九州大学外科学会, 甲状腺外科学会: 甲状腺微小乳頭癌（腫瘍径 1 cm 以下）において，たやすく手術を行わずに手術経過観察を行い得るのではどのような場合か？ 甲状腺癌診療ガイドライン 2010年版.82-84頁, 金原出版, 東京, 2010.

Department of Otolaryngology, Kobe City Medical Center General Hospital

Corresponding Author Address: Hiroyuki Harada
ntybt959@ybb.ne.jp


---

a: Histopathological findings show three kinds of tumor in the right lymph node, level III (A: squamous cell carcinoma, B: papillary carcinoma, C: small lymphocytic lymphoma, HE staining, x40).
b: Histopathological findings show two kinds of tumor in the left lymph node, level II (A: squamous cell carcinoma, C: small lymphocytic lymphoma, HE staining, x200).
c: Histopathological findings show micropapillary carcinoma in the resected thyroid specimen (HE staining, x40).