A Case of Branchiogenic Carcinoma

Toshiya Kimura, Tohru Sogami, Akifumi Mizukoshi, Tsunehisa Ohno and Hisanobu Tamaki

A case of branchiogenic carcinoma is reported herein. The patient was a 59-year-old female who noticed a mass on the left neck and visited our hospital. CT and echography revealed a cystic lesion, and PET disclosed multiple abnormal accumulations on the bilateral cervical lymph nodes and pharynx. First of all, we suspected the tumor as being a malignant lymphoma or metastatic carcinoma. We resected the tumor under general anesthesia for biopsy. The histopathological diagnosis was squamous cell carcinoma arising from a branchiogenic cyst. We examined the whole body and added the biopsies of the epipharynx, palatine and lingual tonsils which revealed no malignancy and no other primary lesions existed. The tumor was therefore diagnosed as a branchiogenic carcinoma. Bilateral radical neck dissection, and postoperative chemotherapy and radiotherapy were performed. The patient has survived until the time of writing for 30 months without recurrence.

Keywords: branchiogenic carcinoma, squamous cell carcinoma, branchiogenic cyst, chemotherapy, radiotherapy

References
10) 新井啓仁,増田祥子,上田雅代,他：病理学的に確認された鰓性癌の1例.京都市病紀 26: 69-72, 2006.
Echography
Cervical echography reveals a 40 x 25 mm mass in the left neck.

Enhanced CT
Cervical enhanced CT reveals a mass with a maximum diameter of 50 mm which looks like a group of lymph nodes in the superior or middle internal jugular chain.

PET
Accumulations of FDG exist in A) the posterior wall of epipharynx, and B) the anterior and lateral wall of mesopharynx. C) In the left cervical mass, accumulations are low in the center, but high in the margin. High accumulations are also found in the right cervical lymph nodes.

Histopathological findings
A: Cyst and lymphoid tissue are confirmed with a loupe.
B: The left arrow shows the epitheliums with decapitation secretion, and the right arrow shows cells invading the cyst wall.
C: From the right, normal stratified squamous epitheliums, atypical squamous epitheliums, carcinoma in situ, and remarkably invasive squamous cell carcinoma exist continuously on the line.