Bilateral SCC of the Parotid Gland: A Case Report and Literature Review

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Abstract

Background: Salivary gland neoplasms represent rare cancers. Bilateral tumors of the parotid gland is very rare.

Case Presentation: An old man with bilateral parotid mass starting from 3 months ago, he had a history of Squamous cell carcinoma (SCC) of scalp.

Conclusions: The above case of metachronous bilateral squamous carcinoma is exceedingly uncommon. Treatment of malignant bilateral parotid tumors requires bilateral total parotidectomy with lymph node sampling.

Background

Salivary gland neoplasms represent rare cancers, accounting for approximately 3% of all head and neck tumors. Bilateral tumors of the parotid gland represent only 0.6% to 3.5% of all parotid gland tumors. Of these, 80% are benign Warthin tumors of identical histologies (1). Here, we present an extremely rare case of metachronous bilateral parotid gland malignancy with differing histologies; squamous cell carcinoma.

Case Presentation

An 83 years old male, a farmer with bilateral parotid mass starting from 3 months ago, right cheek skin lesion from 2 years ago and no weight loss, right parotid mass 5×5 cm, left parotid mass 7×7 cm with skin erythema and purulent discharge. He had a history of surgery with scalp mass 1 year ago with a pathological finding of squamous cell carcinoma of skin. A CT scan was done which revealed round, stellate ‘round cells and in the deep lobe of the bilateral parotid the result of left parotid incisional biopsy was Squamous cell carcinoma (SCC), Figure 1. Then left total extended parotidectomy bilobe rotation advancement flap left tarsoraphia, upper trunk of facial nerve sacrificed and right total extended parotidectomy ,right tarsoraphia, upper trunk of facial nerve sacrificed was performed Figure 2. Pathology revealed SCC.

Figure 1. Hematoxyline-eosinokleoring stain SCC, infiltrating nests of tumor cells.
Discussion
A case report review of bilateral parotid malignancies was carried out with PubMed. One case with contra lateral parotid adenocarcinoma occurring metachronously with squamous cell carcinoma (1). We present the first case of bilateral SCC of parotid gland. SCC of face and forehead skin is known to have a risk of locoregional involvement (2). Metachronous bilateral squamous carcinoma is exceedingly uncommon. In a recent systematic analysis, the risk of regional metastasis for HNCSCC is reported at about 5% (3). It seems to be that the underlying cause of our patient’s condition is the metastasis of the malignancy of his scalp.

Conclusions
Multiple tumors of the parotid gland can be classified by the time of presentation, the histologic characteristics, and the laterality. Unilateral tumors are the most common tumors. In this situation, a recurrence of the primary tumor is a possibility and must be ruled out before a diagnosis of multiple parotid...
neoplasms can be made. Bilateral tumors of the parotid most often occur metachronously and are of identical histologies (4). Bilateral tumors most often include a Warthin tumor (3). Malignant, bilateral tumors of the parotid are most often acinic cell carcinomas, and have an excellent prognosis (5). The above case of metachronous bilateral squamous carcinoma is exceedingly uncommon. Treatment of malignant bilateral parotid tumors requires bilateral total parotidectomy with lymph node sampling from the tail of the gland, possibly followed by postoperative radiation, as in the case of squamous carcinoma (6).

A small but significant subset of patients with HNCSCC have propensity for spreading into the regional lymphatic. Loco-regional treatment and close follow-up are of vital importance for those cases. Also, long term close follow-up of the patients who were treated for face and forehead skin cancers should not be ignored.

Acknowledgements
Not declared.

Conflicts of Interest
The Authors declare no conflicts of interest.

Financial Support
Not declared.

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