

Androgen Deprivation Therapy In Salivary Duct Carcinoma: A Case Report

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Salivary duct carcinoma (SDC) is a rare, aggressive tumor representing high rates of distant metastasis and recurrence after local treatment. SDC differs from squamous cell carcinoma found in head and neck in terms of histology and characteristics. Recent studies have reported that SDC expresses estrogen, progesterone and androgen receptor like breast cancer. We present a case of patient with recurrent SDC expressing androgen receptor which showed good response to androgen deprivation therapy (ADT) after surgery and postoperative CCRT. **Case:** A 69-year-old male with right neck mass visited. Computed tomography (CT) of neck revealed 6 cm sized mass on right parotid gland and multiple enlarged lymph nodes in both neck. On percutaneous needle biopsy, SDC was found on right parotid gland and ipsilateral supraclavicular lymph nodes. Patient underwent total parotidectomy with bilateral neck dissection. On pathology report, the mass was accompanied with perineural and lymphovascular invasion. Cancer cells were found in 103 of 122 dissected lymph nodes and extracapsular extension was shown in most of lymph nodes. Immunohistochemical stain showed positive stain for androgen receptor. The patient received post-operative CCRT (total 66 Gy) with weekly cisplatin (35 mg/m²). After CCRT, he took 2 cycles chemotherapy for consolidation (cisplatin 60 mg/m², 5-FU 750 mg/m², every 4 weeks). After 2nd chemotherapy, neck CT showed no residual tumor. However, chest CT revealed growing lymph nodes in right axilla area which were not seen in previous images. On biopsy of axillar lymph nodes, SDC expressing androgen receptor was seen. Because SDC was recurrent immediately after sufficient treatments, we decided to start ADT with bicalutamide and monthly leuprolide. 2 months later, the size of right axillar lymph node was decreased on chest CT. Still, the patient has maintained androgen deprivation therapy without any toxicity. **Conclusions:** Recent studies have been reported that ADT shows a benefit to SDC expressing androgen receptor. In this case, we prove that ADT is effective in these patients. Therefore, clinicians should consider ADT in recurrent or metastatic SDC expressing androgen receptor.

Clinical implication of Interim PET for predicting prognosis in patients with head and neck cancer

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Background: In the treatment of head and neck squamous cell carcinoma (HNSCC), the number of patients with HNSCC who were treated with radiotherapy has been increased over decades. The prognostic role of pretreatment 18F-Fluorodeoxyglucose (FDG) positron emission tomography (PET) has been demonstrated in many studies. However, the prognostic and predictive value of interim 18F-FDG PET during radiotherapy is unclear. **Objective:** We investigated the prognostic value of interim 18 F-FDG PET in patients with HNSCC during radiotherapy. **Methods:** Patients with HNSCC who underwent radiotherapy with or without chemotherapy were selected. The pretreatment and interim FDG PET scans had been taken. The FDG uptake between pretreatment and interim FDG PET were measured using the maximum standard uptake value (mSUV). Overall survival (OS) and progression free survival (PFS) were analyzed according to the interim mSUV and reduction ratio of mSUV (SRR). **Results:** A total of 31 patients were included: median age 64 years (range, 33-83), M/F 24/7, Oropharynx/ Nasopharynx/ Hypopharynx 17/7/7, smoker 20 (64.6%), Stage I/II/III/IV 8/3/6/14. The median duration of follow up was 30 months (range, 4-82). The median radiation dose was 74 Gy (range, 60.0-79.4). Low interim mSUV (mSUV0.61) had superior treatment outcome compared to patients with low SRR in 2YOSR (90%, 70.7%, respectively; $p=0.188$) and 2YPFSR (84.6%, 60.0%, respectively; $p=0.260$). **Conclusions:** SRR and interim mSUV of primary lesion was associated with favorable outcome following radiotherapy. Further validation with large prospective cohort to show the prognostic implication of interim 18F-FDG PET is warranted.