

Neoadjuvant chemotherapy in technically unresectable adenocarcinoma of parotid

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Dear Editor,

Salivary gland tumors are rare and constitute about 5%–6% of all head-and-neck cancer.^[1] In view of their rarity, no randomized controlled trials are available to guide treatment decisions. However based on various prospective and retrospective data, surgery is the cornerstone of treatment in localized tumors. Studies comparing primary radiotherapy to surgery have consistently shown superior survival with surgery.^[2] Unresectable or technically unresectable tumors are treated with radical radiotherapy and have inferior outcomes when compared to resectable tumors. In oral cavity cancers, neoadjuvant chemotherapy has shown to downstage technically unresectable tumors to resectable tumors in around 40% of patients, almost doubling their overall survival.^[3]

Similar strategy has never been tried in salivary gland tumors. We report here a case of technically unresectable carcinoma of parotid where the use of neoadjuvant chemotherapy resulted in downstaging of the tumor leading to its successful surgical resection.

A 52-year-male patient presented with the complaints of swelling over the right parotid region with facial weakness for 2 years. Fine-needle aspiration cytology from the swelling was suggestive of high-grade adenocarcinoma of the parotid. His positron-emission tomography (PET) scan image showed fluorodeoxyglucose (FDG)-avid soft-tissue mass with necrotic areas involving superficial and deep lobes of the right parotid gland (4.2 cm × 4.2 cm, maximum standardized uptake value [SUVmax] 22.87) and FDG-avid multiple necrotic right level II, III, and IB nodes (largest 2.5 cm, SUVmax 16.91). His tumor staging was cT4aN2bM0.

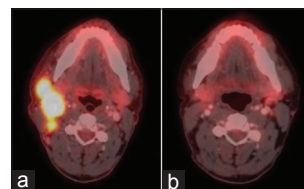


Figure 1: (a) The status of disease before chemotherapy. (b) The status of disease after chemotherapy

The patient was seen in multidisciplinary clinic and in view of extensive disease, abutting mastoid, and involving stylomastoid foramen and he was deemed technically unresectable. He was then planned for neoadjuvant chemotherapy and received paclitaxel (175 mg/m²) and cisplatin (75 mg/m²), every 3 weeks for three cycles. Response assessment with PET scan showed significant regression in the parotid mass which now measured about 1.2 cm × 1.3 cm with SUVmax 3.72 and complete resolution of cervical adenopathy. He then underwent right parotidectomy with modified neck dissection [Figure 1]. Postsurgery histopathology report showed no residual tumor suggestive of complete pathological response.

Patient has been regular follow-up since then and is disease-free at 2 years.

In our center, we have used neoadjuvant chemotherapy in technically unresectable advanced head-and-neck malignancies. This approach has helped downstage the tumor making them amenable for surgical resection in a significant proportion of patients.^[3] Although the definitive treatment for parotid gland tumors remains surgery,^[4] neoadjuvant chemotherapy has been tried in these tumors. However, there is scarce literature regarding neoadjuvant chemotherapy in salivary gland tumors.^[5] Our case report has shown that neoadjuvant chemotherapy can be considered in advanced technically unresectable parotid gland tumors to make them amenable to resection.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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