PAROTID ADENOCARCINOMA, NOT OTHERWISE SPECIFIED (NOS) MANIFESTATES AS FACIAL PALSY

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Background: Adenocarcinoma not otherwise specified (Adenocarcinoma NOS) has glandular or secretory differentiation and lack the histomorphologic features of other defined salivary carcinoma. The tumor is uncommon and appears to be more common in the major salivary gland, especially the parotid gland [1].

Method:
We report a 65-year-old woman had suffered from a rapid growing mass in her right pre and infra-auricular area for 4 weeks. On physical examination, the mass exhibited poor mobility, that was extremely hard and 6 cm in diameter. Facial paralysis and post-auricular pain were recorded. Computed tomography revealed an ill-defined mass about 3.6 × 2.4 × 3 cm at right parotid area, with heterogeneous enhancement and several enlarged LNs among right neck. Bony decay was noticed over adjacent condylloid processs (Fig 1.). The fine needle aspiration was performed and the cytologic finding was poorly differentiated carcinoma.

Results: The extended parotidectomy with supraomohyoid neck dissection and marginal mandibulectomy were perfomed under the tentative diagnosis of malignant parotid tumor. We traced the frozen section of facial nerve that revealed tumor invading till main trunk, and the involving portion was sacrificed later (Fig 2). Salivary gland parenchyma infiltrated by poorly differentiated tumor cells with hyperchromatic and pleomorphic nuclei, occasional nucleoli, and eosinophilic cytoplasm arranged in solid nests, cords, or tubules (Fig 3). These tumor cells are positive for CK7,
focally positive for P63, and negative for CK20, TTF-1 (Fig 4). The formal pathological report was adenocarcinoma, not otherwise specified (Adenocarcinoma NOS) with neck metastasis, the other differential diagnosis includes carcinoma ex pleomorphic adenoma, dedifferentiated adenoid cystic carcinoma, and salivary duct carcinoma. TMN staging was pT4aN2b stage IVa. The adjuvant radiotherapy and chemotherapy was scheduled. No local recurrence after 1 year follow-up.

**Conclusion:** The current data demonstrate the surgical eradication of high grade adenocarcinoma NOS is considered. In case of advanced tumors, or high grade lesions, radiation therapy is recommended [2]. Although some investigators believed that adenocarcinoma NOS seemed to be of relatively lower radiosensitivity. Information on the role of chemotherapy is spared. Here we raise this case to share our experience in managing this kind of tumor.

**Reference**

Figure 1. Axial view (a) The ill-marginated tumor infiltrated to deep lobe of right parotid gland, the mandible is partial eroded (red arrow); Coronal view (b) lymphadenopathy (yellow arrow)

Figure 2. (a) Extended parotidectomy is performed with supraomohyoid neck dissection. The main tumor, facial nerve, branches of external carotid artery and partial mandibular condyle are excised. (b) The main tumor is solid with irregular appearance.

Figure 3. The neoplastic cells with abundant eosinophilic cytoplasm and large nuclei containing small but significant nucleoli grow forming large islands. Duct-like structure with mucin production is evident. The cellular atypia is relatively prominent.
Figure 4. Immunostains are positive for CK7 (a), focally positive for P63 (b), and negative for CK20 (c), TTF-1 (d)