

Secretory Carcinoma of Salivary Gland - Recently Described Rare Entity: A Case Report

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Secretory carcinoma of salivary glands, first described in 2010 is a rare entity characterized by morphological, immunohistochemical and genetic resemblance to mammary secretory carcinoma which displays the characteristic translocation $t(12;15)(p13;q25)$ resulting in ETV6-NTRK3 gene fusion. In laboratories lacking the resources to analyze the specific molecular alterations, histomorphology and immunohistochemistry are the key tools to establish the accurate diagnosis. A 40 year old female patient was presented with a history of progressively enlarging, lump over left parotid region for one year duration. A superficial parotidectomy was performed, following radiological detection of a mass with a lobulated contour. Sectioning of the mass showed solid areas and cysts filled with gelatinous material. Hematoxylin and Eosin stained sections revealed an ill-defined tumour predominantly composed of papillary-cystic with peripherally located microcystic areas. Tumour cells are cuboidal to polygonal and contain eosinophilic cytoplasm and uniform nuclei. Some cells contain vacuolated cytoplasm. Intraluminal PAS positive, colloid like secretions are seen. Tumour cells show strong and diffuse nuclear and cytoplasmic positivity for S-100 immunostain. Secretory carcinoma of salivary gland mimics acinic cell and low grade mucoepidermoid carcinoma histomorphologically. Diffuse strong S-100 immunoreactivity, presence of PAS positive intraluminal secretion and absence of PAS positive cytoplasmic granules in secretory carcinoma exclude the other two differential diagnoses. Although the detection of ETV6-NTRK3 gene fusion resulting from translocation of $t(12;15)(p13;q25)$ is the gold standard for diagnosis, as in this case, when molecular confirmation is lacking, the comprehensive knowledge on histomorphological and immunohistochemical features of new entities of salivary gland carcinoma, warrant an accurate diagnosis.

Keywords: *secretory carcinoma, papillary cystic growth pattern, ETV6-NTRK3 gene fusion*