



Adenocarcinoma not otherwise specified or cribriform adenocarcinoma on dorsum of tongue?

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Market Velker *et al.*¹ recently reported an unusual case of adenocarcinoma arising from the minor salivary gland located on the dorsum of the posterior one third of the tongue in a 66-year-old woman. The authors interpreted the mass as adenocarcinoma not otherwise specified of minor salivary gland origin, and they provided valuable analysis of previously reported adenocarcinoma not otherwise specified in the oropharynx. However, the pathologic diagnosis of this case is questionable.

Histologically, the tumour was predominantly solid, composed of variably-sized nodules intermingled with areas of cribriform and tubular growth pattern. The neoplastic cells were cuboidal in shape, with large nuclei having small nucleoli and a clear chromatin pattern (Figure 2 in the article). Immunohistochemically, the tumour cells were positive for cytokeratin 7 and S-100, but negative for cytokeratins (34βE12, 8/18, and 20), smooth muscle actin, and smooth muscle myosin. In my opinion, the histopathologic and immunohistochemical features of this tumour were consistent with cribriform adenocarcinoma of minor salivary gland (CAMSG), a newly characterized salivary gland tumor².

Cribriform adenocarcinoma of minor salivary gland was originally described by Michal *et al.*³ in 1999 under the term “cribriform adenocarcinoma of the tongue” on a small series of 8 tumours, all affecting the tongue. It was recognized by the latest issue of the World Health Organization classification⁴ as a possible variant of polymorphous low-grade adenocarcinoma, but it was not clear at that time whether it represented a genuine entity. In 2011, Skálová *et al.*² published the largest series so far, comprising 23 new cases among more than 5000 salivary gland tumours in their archives. Their study showed that CAMSG is a distinct tumour entity

that differs from polymorphous low-grade adenocarcinoma by location, cytology, histologic architecture, and behavior, and they proposed the term CAMSG. Most often, CAMSG occurs in the posterior tongue, and the frequency of cervical lymph node metastasis at presentation is high (74%)⁵. However, despite frequent positive nodal status, the prognosis of CAMSG appears favourable. Morphologically, CAMSGs are low-grade malignancies most strikingly characterized by optically clear nuclei resembling those of papillary thyroid carcinoma. The tumours exhibit diverse histologic architecture, but are often dominated by cribriform and solid growth patterns. Immunohistochemically, CAMSG shows diffuse expression of cytokeratin, vimentin, and S-100 protein, and variable expression of basal or myoepithelial cell markers such as smooth muscle actin, calponin, and p63 protein.

Cribriform adenocarcinoma of minor salivary gland is an under-recognized salivary neoplasm, previously diagnosed mainly as polymorphous low-grade adenocarcinoma. In addition, CAMSG had also previously been diagnosed as mucoepidermoid carcinoma, adenoid cystic carcinoma, cystadenocarcinoma, low-grade myoepithelial carcinoma, and adenocarcinoma not otherwise specified². The case reported by Market Velker *et al.*¹ seems to be another example of CAMSG.

Recognition of CAMSG is important because of its clinical behaviour, which differs from that of other salivary gland tumours.

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CONFLICT OF INTEREST DISCLOSURES

The author has no financial conflicts of interest to declare.

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