

Letter to the Editor

Epithelial tumours of the lacrimal gland: a clinical, histopathological, surgical and oncological survey

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Editor,

Sarah Line'a von Holstein and associates present a review of the primary epithelial tumours of the lacrimal gland describing in the first part the frequency, demographics, clinical presentation and diagnostic features (von Holstein et al. 2013). In the second part, primarily tumour-specific histological characteristics are given. Finally, treatment modalities including surgical procedures and medical oncology as well as prognosis are discussed. Authors are to be commended for their effort to have performed such wide review on epithelial tumours of the lacrimal gland. Those orbital lesions, in fact, still represent a challenge for both clinicians and researchers. However, some relevant information regarding the pathological features and the prognosis was missed. In the section on pathology and molecular characteristics of those tumours, the authors reported that the immunohistological staining of biomarkers, including the androgen receptor, p53 and the HER-2/neu oncoprotein, is strong and diffuses in the malignant area. In this context, it would be important to report even the relation between the expression of apoptosis-related markers and the malignant epithelial tumours of the lachrymal gland (Strianese et al.

2007). Particularly, it was found in a re-examination of the 21 specimens of malignant epithelial tumours of the lacrimal gland that the expression of p53 was directly correlated with the apoptotic index, while expression of Bcl-2 was inversely correlated (Strianese et al. 2007). This expression pattern has been already described in other tumours (Greenblatt et al. 1994). Presumably, the correlation between apoptotic index, p53 and Bcl-2 indicates that tumour cells have lost or down-regulated their survival gene Bcl-2 and up-regulated the expression of p53, to attempt damage repair. Studies on apoptosis and apoptosis-related factors in salivary gland tumours have shown similar correlation as that found in lacrimal gland tumours (Soini et al. 1998). In addition, a statistically significant positive relationship for number of apoptotic cells (TUNEL) and p53, and an inverse correlation for Bcl-2 staining, was demonstrated with overall survival (Strianese et al. 2007). The correlation with survival of apoptotic index, p53 and Bcl-2 expression suggests that the more tumour cells go in apoptosis, up-regulating p53 and down-regulating Bcl-2, the better the survival of patients. As a role of apoptosis regulatory proteins in the pathogenesis of malignant epithelial lacrimal gland tumours was established, the hypothesis that evaluation of the expression of apoptosis-related markers in these tumours may provide a prognostic tool was reported (Strianese et al. 2007). This latter information should be mentioned in a review on epithelial tumours of the lacrimal gland, to provide adequate information for the clinician on prognostic factors of those tumours. As these tumours are rare (Bonavolontà et al. 2013), very little information about the molecular changes leading to their development and progression has so far been reported. Studies on targeting of the apoptosis pathway in epithelial tumours of the lacrimal gland repre-

sent an interesting new insight and, indeed, are considered by most researchers the new frontier for the understanding and management of the malignancies (Chaabane et al. 2013). Eventually, this letter may complete the wide review of van Holstein and associates.

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