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Primary Secretory Carcinoma of the Lacrimal Gland Report of a New Entity

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Purpose: Secretory carcinoma has been described in the breast, salivary glands, skin and other organs, but has not been reported in lacrimal gland to date. Since lacrimal and salivary glands show similar tumours, we hypothesized that lacrimal secretory carcinoma may exist but has been misclassified in the past.

Design: We undertook a retrospective review of all lacrimal gland tumours at two tertiary institutions with centralized ocular pathology practice.

Methods: 350 lacrimal tumours were reviewed by the authors. Candidate tumours were tested for ETV-NTRK rearrangement by fluorescent in-situ hybridization and the presence of the translocation was confirmed by next generation sequencing.

Results: We identified a single case of secretory carcinoma. The diagnosis was confirmed by demonstrating specific immunohistochemical profile and the presence of *ETV6-NTRK3* gene fusion, which is characteristic of secretory carcinoma of other sites. The tumour occurred in a young man who was treated with surgery alone with no recurrence during 12 years of follow-up.

Conclusion: Secretory carcinoma is a new lacrimal gland carcinoma type which should be added to the spectrum of low-grade lacrimal gland tumors.