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SUMMARY CASE

78-year-old male with a bulging and bleeding lesion in the caruncle of the right eye, with adhesion to the tarsal conjunctiva of the nasal third of the lower eyelid, with some keratinized areas. Resection of the lesion.

DIAGNOSIS: ADENOSQUAMOUS CARCINOMA OF THE CARUNCLE.

CLINICAL HISTORY: 72-year-old male who consulted due to ocular tearing in the right eye. The general practitioner observed a protrusion in the internal angle, and referred the patient to an ophthalmological consultation, which was carried out 2 weeks later, where a bulging lesion was observed at the caruncle of the right eye, with some keratinized area. Pending surgery, the patient went to the emergency service due to bleeding from the lesion with mild symblepharon and papillary reaction. Medical treatment is performed.

Finally, surgery was performed under local anaesthesia and sedation, removing a lesion located in the caruncle and adhered to the tarsal conjunctiva of the nasal third of the lower eyelid.

HISTOPATHOLOGICAL DESCRIPTION:

Our Department received some tissular fragments that together measured 1.2 x 1.2 x 0.3 cm, in which, in addition to conjunctival and squamous epithelium, the latter with dysplastic changes, a neoplastic proliferation with epithelial appearance was observed, arranged in large nests and solid areas, with infiltrative pattern. Cellularity was squamoid in appearance, with well-defined cell membranes. The cytoplasm was clear or eosinophilic. Large clear cytoplasmic vacuoles were present in some cells, but fine vacuolization was not seen. Mitoses were abundant (4-5 mitoses per high magnification field). Focally, the appearance was of infiltrating squamous cell carcinoma, with cellular atypia and wide and angular cytoplasm. Some horn pearls are also seen, although surrounded by epithelial cells with mild atypia. Focally, some lumens with weakly basophilic content or with central eosinophilic condensation were identified. PAS with diastase and Alcian Blue stains were positive in these lumens.

The immunohistochemical studies showed diffuse positivity for Epithelial Membrane Antigen, Cytokeratin 7 and cytokeratin BER-EP4, focal positivity for Carcinoembryonic Antigen, p63 and p40, and negativity for Androgen Receptors and Gross Cystic Disease Fluid Protein-15 (GCDFP-15). The S100 protein was positive in occasional cells with a dendritic appearance. There was focal p53 overexpression.

FOLLOW-UP: MRI was performed after surgery, showing no residual lesion, although signs of recurrence were observed clinically one month later. Topical treatment was initially carried out with 5-fluorouracyl and later with Mitomycin C, but due to the lack of response, the patient was referred to a reference centre, where re-excision was performed with widening of the margins, identifying two residual foci of 0.2 cm, and new lesion-free margins. Subsequently, local adjuvant 14 GY radiotherapy was applied. Currently there is no evidence of recurrence or metastatic spread, ten months after the diagnosis.

DISCUSSION

This case raises several diagnostic possibilities: Adenosquamous carcinoma, in which, in addition to the squamous component, we identify glandular lumens with positive mucinous material for PAS and Alcian Blue. Positivity for CEA in the glandular areas favours this diagnosis.

The possibility of sebaceous carcinoma is also raised, but we did not identify the characteristic fine vacuolization, although this is not essential. Squamous and glandular differentiation and diastase-resistant PAS-positive cytoplasmic content may also be seen in sebaceous carcinoma. Despite the positivity for BER-EP4 and Cytokeratin 7, the negativity for androgen receptors and the positivity for Carcinoembryonic Antigen do not favour this diagnosis.

The presence of focal positivity for p63 and p40 favours the presence of a squamous cell carcinoma component, but positivity for CEA suggests that it is not a pure squamous cell carcinoma. The morphology could also suggest a clear cell squamous cell carcinoma, but then we would expect diffuse cytoplasmic stain for PAS. Positivity for BER-EP4 does not favour this diagnosis either. Positivity for this antigen could be observed in clear cell basal cell carcinoma, but there is no peripheral palisade or basaloid appearance of the cells to suggest this diagnosis.

In summary, we consider that the diagnosis of adenosquamous carcinoma of the caruncle is the most appropriate in this case.

Adenosquamous carcinoma of the caruncle and conjunctiva has also been described as mucoepidermoid carcinoma, but since intermediate cells are not usually seen in this location, the latter seems inappropriate. The case that we have described would probably fit into the subgroup of squamous cell carcinomas with mucinous differentiation (1).

Adenosquamous carcinoma of the conjunctiva and caruncle can have an aggressive course, with local recurrence that can be extensive and affect the globe and orbit. Lymph node metastases are rare and mortality from this neoplasm is considered exceptional (2).

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