

CASE REPORT

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Trichoblastoma on the Eyelid: So What to Do Now?

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ABSTRACT TBL is considered benign and is very similar to and often confused with basal cell carcinoma. Only 6 cases have been reported in the periocular region, and this rare mass should be kept in mind because it can develop malignant transformation. An 81-year-old male patient had a lesion of approximately 25x10 mm in size, covering 2/3 of his right eyelid. Basal cell carcinoma was considered as a preliminary diagnosis and the Hughes procedure was performed. Histopathologically, a tumoral lesion with basaloid cell morphology was observed, located just under the atrophic epidermis, dermally located, well-circumscribed, not connected to the epidermis, nodular in nature, containing peripheral palisading and separations in some places, and monotonous in appearance. There were neoplastic mesenchymal cell foci resembling papillary mesenchymal bodies closely associated with epithelial cells. In the immunohistochemical study, BE-ep4 was positive and Bcl-2 and CD10 stromal cells were positive. The lesion was reported as “TBL (large nodular variant)”. No additional surgery was performed on the tumor.

Keywords: Trichoblastoma; eyelid; basal cell carcinoma

Trichoblastoma (TBL), first described by Headington in 1970, is considered a rare benign tumor arising from the follicular germ cell line.^{1,2} It most commonly occurs as papules or nodules in the head and neck area in adults aged 40-50. TBL is considered a benign mass and is very similar in appearance to basal cell carcinoma (BCC) and is often confused with it. Only 6 cases have been reported in the periocular region, and this rare mass should be kept in mind because it can develop malignant transformation and metastasis.³

CASE REPORT

An 81-year-old male patient had a lesion of approximately 25x10 mm in size, covering 2/3 of the right eyelid, with vascularity around it and a hemorrhagic

crust in the middle (Figure 1, Figure 2). The patient had a complaint for 2 years. He had no additional diseases. Informed consent form was obtained from the patient. BCC was considered as a preliminary diagnosis, and a tarso-conjunctival flap and skin graft were taken from the upper lid (Hughes procedure) and a frost suture was placed on the lower lid (Figure 3). The frost suture was removed after 5 days. After 4 weeks, a tarso-conjunctival flap was cut from the lid gap to form the lower lid (Figure 4). At the 6th postoperative month, the patient's lower lid appeared cosmetically good. In the histopathological examination of the tumor, a tumoral lesion with basaloid cell morphology was observed, located just below the atrophic epidermis, dermally located, well-circumscribed, not connected to the epidermis, nodular in nature, with peripheral palisading and separations in

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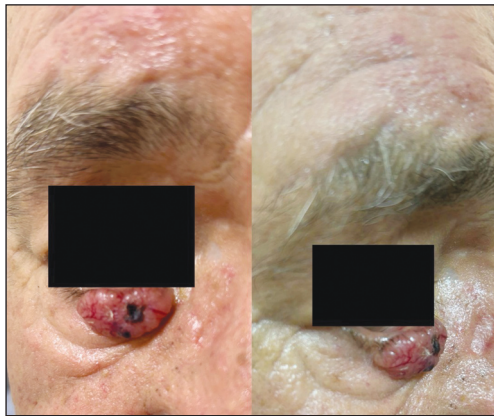


FIGURE 1: Preoperative appearance

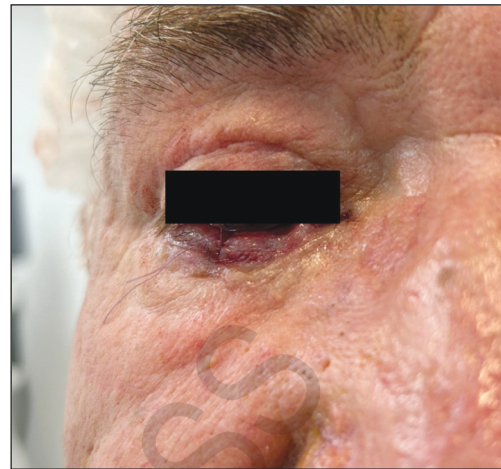


FIGURE 4: Appearance after flap excision



FIGURE 2: Excised view



FIGURE 3: Hughes procedure

some places, and monotonous appearance. Neoplastic mesenchymal cell foci resembling papillary mesenchymal bodies closely related to epithelial cells were noted in the tumor. No extension of the tumor into the subcutaneous fat tissue was observed (Figure 5). In the immunohistochemical study, BE-rep4 was positive and Bcl-2 and CD10 stromal cells were positive. The lesion was reported as “TBL (large

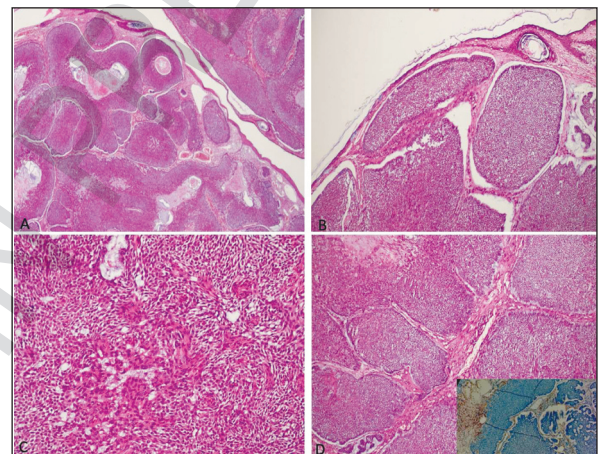


FIGURE 5: A, B) Dermal located basaloid tumoral lesion with no connection to the epidermis (H&E, x40 and H&E, x100), C) Monotonous tumor cells and papillary mesenchymal bodies associated with these cells (H&E, x200), D) Fibrotic stroma between tumor nodules, CD10 antibody positivity in the stroma (small figure)

nodular variant)”. No additional surgery was performed on the tumor, whose pathological diagnosis was trichoblastoma.

DISCUSSION

TBL, trichoepithelioma and BCC are dermatological tumors of the follicular germ cell line. The term TBL has changed over time, and finally benign neoplasms of hair follicles took the term “trichogenic tumors”.^{4,5} Since the clinical and histological features of trichogenic tumors (rare, benign epithelial tumors) and BCC (the most common, malignant skin cancer) are similar, their diagnosis can be confusing.^{6,7} Making the correct diagnosis is very important and changes

the treatment: BCC requires clean resection with free-edge surgical margins, whereas TBL requires simple surgical resection.⁸ In differential diagnosis: While there is many cytokeratin expressions in both tumors, it is important to detect CK8 and CK15 cytokeratin expression only in TBL.⁹ CD34 and CD10 positivity are other differential diagnoses.¹⁰ The presence or absence of androgen receptor expression in the tumor is another marker that can be used in differential diagnosis; In the study conducted by Izikson et al. it was determined that androgen receptor expression was seen in 78% of BCC but not in TBL.¹¹ Histologically trichoblastoma; It has a structure consisting of oval-shaped cells arranged in a palisadic manner, containing monomorphic cells that are symmetrical, separated from the environment by sharp boundaries, and show little mitotic activity. If BCC; It is a tumor that shows exophytic and endophytic growth, has an aggregation of pleomorphic basaloid cells, is in the form of an asymmetric nodule, shows excessive mitotic activity, and is accompanied by cell necrosis.¹² In our case, the tumor was differentiated from BCC because it was unrelated to the epidermis, was dermally located, well-circumscribed, and had a nodular appearance, and no pleomorphism was observed in the tumor. In addition, in the immunohistochemical

study, the fact that CD10 was positive in stromal cells and BCL2 was stained in stromal cells, not in tumoral cells, contrary to expectations in BCC, were also supportive for the diagnosis.¹³

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Betül Dertsiz Kozan, Mehtap Savar Çağlayan; **Design:** Betül Dertsiz Kozan; **Control/Supervision:** Tuğçem Bıçak; **Data Collection and/or Processing:** Betül Dertsiz Kozan; **Analysis and/or Interpretation:** Mehtap Savar Çağlayan; **Literature Review:** Betül Dertsiz Kozan, Tuğçem Bıçak; **Writing the Article:** Betül Dertsiz Kozan; **Critical Review:** Mehtap Savar Çağlayan, Tuğçem Bıçak; **References and Fundings:** Tuğçem Bıçak; **Materials:** Mehtap Savar Çağlayan.

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