

Recurrent periorbital BCC after ocular exenteration

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Sir,

Basal cell carcinoma (BCC) is the most common malignant periocular tumor, accounting for 90% of malignant palpebral lesions [1]. It occurs most frequently in fair-skinned older individuals and is associated with ultraviolet exposure [2]. We report a case of a recurrent BCC after orbital exenteration.

A 43 years old man with a history of prolonged sun exposure. He underwent surgery in 2001 for a BCC of the medial cantus of the right eye and then in 2009 for a recurrence in the same location. The evolution was marked 4 years later by a recurrence with invasion of the eyeball, for which he underwent ocular exenteration with a cover flap followed by radiotherapy sessions.

The patient consulted for a blackish lesion of the left eyebrow, asymptomatic for 4 months. Dermatologic examination found a 3.5-mm homogeneous pigmented macule with a slightly keratotic surface, located on the cover flap in contact with the root of the left eyebrow (Fig. 1). Dermoscopic examination revealed blue-black globules without ulceration (Fig. 2). An excisional biopsy was performed, confirming the diagnosis of recurrent keratinizing and infiltrating nodular BCC with healthy borders. After tumor board meeting, the patient underwent radiation therapy after surgical excision and is currently under surveillance.

(BCC) is the most common malignancy of the skin and its incidence is increasing [3]. BCCs have a low mortality but can cause significant morbidity, mainly by local destruction [4].

Periorbital location of BCC is of significant frequency, requiring careful locoregional clinical examination for signs of orbital invasion [5]. The most common periocular site of BCC is the lower eyelid, followed by the medial canthus, upper eyelid and lateral canthus [5].

Clinical presentations of BCC with orbital invasion include the presence of a visible mass, a mass attached to the bone, limitation of ocular motility, displacement of the eyeball, ptosis or epiphora [5].

The incidence of orbital invasion is approximately 2% to 4%, and risk factors include male gender, multiple recurrences, large lesion size, aggressive histologic subtype, perineural invasion, medial canthal location, and advanced patient age [5]. The management of periocular BCC with orbital invasion often requires a multidisciplinary approach. It is generally accepted that exenteration is the treatment of choice for orbital involvement, followed in some cases by radiation therapy. However, the recurrence rate is estimated to be as high as 28.5% [5].

Tumor recurrence is defined as the appearance of a lesion at the same or adjacent location where it first appeared [6]. Sometimes, the distinction between a tumor recurrence and a new lesion can be difficult. The recurrence rate of periocular BCC varies from 0 to 9.7% depending on the series. In our patient, the lesion presented on the cover flap and the bluish color on dermoscopy suggested dermal tumor proliferation or exogenous pigmentation secondary to radiotherapy, and histology confirmed recurrence of an infiltrating BCC.

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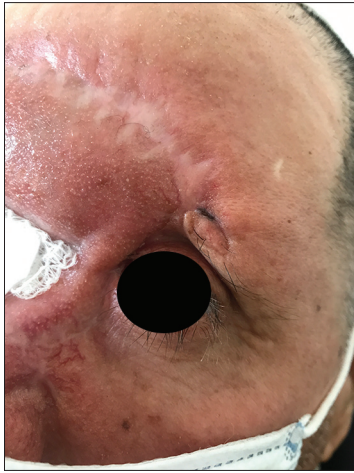


Figure 1: Homogeneous pigmented macule of 3.5 mm with a slightly keratotic surface.



Figure 2: Blue-black globules without ulceration or vascular structures.

The most common histologic subtype of BCC is nodular (64%) [6]. Infiltrative subtypes account for only 6% of all cutaneous BCCs in the literature.

Because orbital exenteration is a disfiguring procedure, the need for surgical intervention can be reduced by appropriate removal of the margin-controlled lesion at the time of primary surgical excision [7].

Standard follow-up of patients after BCC excision should be performed every 6 months for the first 2 years, and once a year for 5 years [7].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

The authors certify that they have obtained all appropriate patient consent forms, in which the patients gave their consent for images and other clinical information to be included in the journal. The patients understand that their names and initials will not be published and due effort will be made to conceal their identity, but that anonymity cannot be guaranteed.

REFERENCES

1. Knani L, Romdhane O, Ben Rayana N, Mahjoub H, Ben Hadj Hamida F. Étude clinique et facteurs de risque de récurrence des carcinomes basocellulaires des paupières: résultats d'une série tunisienne et revue de la littérature. *Journal Français d'Ophthalmologie*. 2014;37:107-14.
2. Wong JC, Thampy R, Cook A. Life expectancy following orbital exenteration. *Br J Ophthalmol*. 2015;99:1-4.
3. Rogers HW, Weinstock MA, Feldman SR, Coldiron BM. Incidence Estimate of Nonmelanoma Skin Cancer (Keratinocyte Carcinomas) in the U.S. Population, 2012. *JAMA Dermatol*. 2015;151:1081-6.
4. Iuliano A, Strianese D, Uccello G, Diplomatico A, Tebaldi S, Bonavolontà G. Risk factors for orbital exenteration in periocular Basal cell carcinoma. *Am J Ophthalmol*. 2012;153:238-41.
5. Sun MT, Wu A, Figueira E, Huilgol S, Selva D. Management of periocular basal cell carcinoma with orbital invasion. *Future Oncol*. 2015;11:3003-10.
6. Sagiv O, Ding S, Ferrarotto R, Glisson B, Altan M, Johnson F, et al. Impact of food and drug administration approval of vismodegib on prevalence of orbital exenteration as a necessary surgical treatment for locally advanced periocular basal cell carcinoma. *Ophthalmic Plast Reconstr Surg*. 2019;35:350-3.
7. Gąsiorowski K, Iwulska K, Zapala J, Wyszynska-Pawelec G. Periocular basal cell carcinoma: recurrence risk factors/when to reoperate? *Post Dermatol Alergol*. 2020;37:927-31.

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