

Case Report

Treatment Management of Bilateral Lower Eyelids Basal Cell Carcinomas with Total Lower Eyelid Reconstruction

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REZUMAT

Managementul terapeutic în cazul unei paciente prezentand carinoame bazocelulare multiple la nivelul pleoapelor inferioare

Obiectivele studiului: Carcinomul bazocelular este cel mai frecvent cancer al pielii, 90% dintre localizări întâlnindu-se la nivelul capului și gâtului. Pleoapele sunt afectate în 10% din cazuri, fiind cel mai frecvent tip de cancer al pleoapei. Scopul acestei lucrări este de a prezenta managementul terapeutic al carcinoamelor bazocelulare prezente bilateral la nivelul pleoapelor inferioare la o pacientă de 64 de ani, cu multiple comorbidități.

Metodologia studiului: Este prezentat cazul unei paciente de sex feminin, în vârstă de 64 de ani, ce s-a prezentat în cadrul Departamentului de Chirurgie Plastică cu numeroase formațiuni tumorale localizate la nivelul pleoapelor inferioare. Tratamentul a fost chirurgical și a constat în excizia formațiunilor tumorale în limite de siguranță oncologică, în două etape, cu reconstrucția pleoapei inferioare folosind o greșă cartilagi-noasă și lambouri geniene. Rezultatul histopatologic a evidențiat prezența carcinoamelor bazocelulare la nivelul ambelor piese excizate cu limite laterale și profunde libere de celule tumorale.

Concluziile studiului: În ciuda dimensiunilor și a invaziei tumorale, a fost posibilă excizia completă a acestora și o reconstrucție adecvată, cicatricile postoperatorii neridicând probleme funcționale sau estetice. Carcinomul bazocelular prezent la nivelul pleoapei inferioare este rar întâlnit, diagnosticul precoce și excizia acestuia fiind importante pentru tratamentul adecvat și pentru prevenirea apariției complicațiilor.

Cuvinte cheie: reconstrucție palpebrală totală, carcinoame bazocelulare, greșă compozită

ABSTRACT

The objectives of the study: Basal cell carcinoma is the most common skin cancer, 90% occurring on the head and neck. The eyelid is involved in 10 % of the cases, being the most common type of eyelid cancer. The

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purpose of this paper is to present the therapeutic management of bilateral basal cell carcinomas on the lower eyelids in case of a 64-year old woman, with multiple comorbidities.

Used methodology: We describe the case of a 64-year old woman admitted in the Plastic Surgery Department with bilateral lesions on the inferior eyelids. The treatment consisted in the excision of the tumors in two different surgeries, with reconstruction of the eyelids using a cartilage graft and genian flaps. The result of the histopathological examination was bilateral basal cell carcinomas completely resected, with safe margins.

The conclusions of the study: Despite the size and the invasion of the tumors on the lower eyelids, complete resection was possible with an adequate reconstruction, the postoperative scars being functionally and cosmetically acceptable with no evidence of recurrence after 6 months. Bilateral basal cell carcinoma of the eyelids is a rarely seen situation, early diagnosis and excision being important in treating it adequately and in preventing complications.

Key words: total eyelid reconstruction, basal cell carcinomas, composite graft

INTRODUCTION

Basal cell carcinoma (BCC) is known as the most common type of skin cancer with a rapidly rising incidence, 90 % of the cases occurring in the head and neck region. (1) The eyelids are involved in 10% of these cases, making it the most prominent eyelid malignancy. (2)

It predominantly affects fair-skin individuals, notably type I and II Fitzpatrick photo types, most of them presenting with a positive history of chronic sunlight exposure. Etiology may be multifactorial, but sun exposure has been involved in most of the cases. (3) Basal cell carcinomas arise from the basal layer of the epidermis, probably as a result of activating the proto-oncogenes and inactivating the suppressor genes in the keratinocytes. (4)

Basal cell carcinoma has multiple histological classifications, but the most common are the clinicopathological subtypes: nodular-ulcerative, superficial, pigmented, infiltrated, micronodular, cystic and morpheaform, which has the highest recurrence rate. (5)

There is a wide variety of surgical and non-surgical therapies available for basal cell carcinoma, depending on the size, depth and location. The goal of the treatment is to eliminate the tumour and to preserve the function and the physical appearance. (6)

Even though basal cell carcinoma is rarely associated with death, due to its slowly growing and rarely metastasizing pattern, if left untreated it can cause significant local morbidity due to its localized tissue invasion and destruction. (7)

In this article, we present a case with multiple bilateral basal cell carcinomas of the lower eyelids.

CASE REPORT

We describe the case of a 64-year old woman, admitted in our Plastic Surgery Department, presenting multiple bilateral lesions of the lower eyelids.

The patient presented with a history of chronic sunlight exposure, as she was a dweller of a rural area and spent many daylight hours working outdoors. She was non-smoker, with a record of moderate alcohol consumption and she also associated multiple comorbidities such as ischemic heart disease, arterial hypertension and bipolar personality disorder, for which she was currently under treatment.

The initial clinical examination found an overweight patient, in a good general condition, with normal BP, without any particular systemic findings.

Local examination revealed on the left inferior eyelid 3 slightly elevated, infracentimetric, ill defined lesions, with rolled irregular borders, either ulcerated and partially covered with haematic crusts or with a pearly surface.

On the other side, also on the lower eyelid, 2 dome-shaped, infracentimetric, ill-defined nodular papules with scattered telangiectasia and a pearly-like appearance. (Fig. 1)

Clinically, no regional adenopathies were discovered.

The patient mentioned first noticing the lesions nearly two years earlier, the evolution being relatively linear with cyclical bouts of erosion, bleed-



Figure 1.



Figure 2.

ing and scabbing resulting in a never healing lesion. Local pain or discomfort was not reported.

Head and neck CT revealed no sign of bone or soft tissue invasion or significant regional adenopathies.

Histopathological examination following incisional biopsy found that both lesions were nodular basal cell carcinomas.

Surgical treatment was decided and performed under general anaesthesia. It consisted of total tumoral excision in two different surgeries with a 4-month interval in between.

Considering the dimensions and the periorbital positioning of the tumours, in order to achieve histological negative borders without resulting in significant facial deformity, 4 mm safe margins were decided on both sides.

The first surgery was conducted on the left eyelid because of the more severe, ulcerative pattern. The tumours were removed through simple surgical excision resulting in a 5/7 cm defect that was addressed by rotating an ipsilateral genian flap. (Fig. 2)

The second surgery was performed on the right lower eyelid 4 months later. Tumor excision was carried out and included more than half of the lower tarsal plate. (Fig. 3)

The subsequent defect was managed by means of a composite graft comprising cartilage and mucosa harvested from the nasal septum: the mucosal layer facing the cornea and the cartilaginous component serving as substitute for the former tarsal plate. (Fig. 4) Afterwards the graft was covered with a genian flap rotated from the same side.



Figure 3.



Figure 4.

RESULTS

The histopathological examination of the surgical specimens confirmed the diagnosis of nodular basal cell carcinoma, correctly excised with clear resection margins.

Postoperative results were favourable. No local complications were encountered, including orbital hematoma or corneal injury. Six months follow-up revealed no evidence of recurrence. Good cosmetic results were obtained and no functional impairment was observed. (Fig. 5)

CONCLUSIONS

Although non-life-threatening, basal cell carcinoma is a potentially locally invasive lesion, especially when located in high-risk areas such as the head and neck. Facial positioning also increases the odds of tumoral growth into underlying tissues, which increases the difficulty of the reconstructive procedures post-resection.

Periocular basal cell carcinoma is rarely seen (10%), the lower eyelid being frequently involved (50-70%); bilateral BCC of the eyelids is a very rare situation. (8)

Treatment option is individualized according to the patient's particular risk factors and preferences but in almost all cases, the recommended treatment modality for basal cell carcinoma is surgery (9).

Early diagnosis and excision with adequate margins are essential for optimal results and for preventing local recurrence. (10)

For reconstructing a full-thickness defect of the eyelid, a nasal chondromucosal graft was elected, seeing that it is a one-stage operation and it provides a thin and mobile eyelid, with an anatomically complete reconstruction.

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Figure 5.

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