

# Aggressive Recurrent Basal Cell Carcinoma: A Case Report

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## Abstract

Basal cell carcinoma (BCC) was first described in 1824 by Jacob who called it "ulcus rodens": Its current nomenclature was proposed by Krompecher in 1903. It is the most common type of nonmelanoma skin cancer and the most common malignancy in humans. BCC is typically slow-growing tumor, for which metastases are rare, it can be locally destructive and disfiguring. The current mainstay of BCC treatment involves surgical modalities such as excision, electrodesiccation and curettage, cryosurgery, and Mohs' micrographic surgery. The rates of recurrence are variable in the literature, between 10% and 40 %.

**Key words:** Basal cell carcinoma, Recurrence, Ulcus rodens

## INTRODUCTION

Basal cell carcinoma (BCC) or rodent ulcer is a malignant skin tumor that causes significant morbidity by its local invasion and destruction of normal tissue. Most commonly, BCC occurs on the lower eyelid, followed by the medial canthus, upper eyelid, and lateral canthus.<sup>[1]</sup> If BCC on the head and neck is allowed to grow that it may invade the central nervous system and may lead to serious complications, including death. Its clinical appearance is variable, and diagnosis requires a high level of suspicion and careful observation.

The treatment is primarily aimed at the removal of the BCC in its entirety. An orbital exenteration refers to the surgical removal of the globe from the orbit, involving the separation of all connections between the globe and the surrounding tissues (including transection of the optic nerve). Recommending enucleation is one of the most difficult therapeutic decisions in ophthalmology, as the surgeon takes into account the patient's psychological makeup, the visual potential of the eye, the patient's

cosmetic concerns, and the potential for complications. It is a major operation which is usually customarily undertaken to remove a malignant tumor involving the eyelids or structures around or behind the eye, and if not done, so then metastatic spread may occur through local extension or through the bloodstream. This surgery is planned to perform when all other options of retaining vision are ruled out. Other two most common indications for enucleation are intraocular trauma and a blind and painful eye.<sup>[2,3]</sup> Favorable therapeutic outcomes not only depend on the characteristics of the BCC but also depend on timely diagnosis and treatment.

## CASE REPORT

A 65-year-old female presented with a history of ulcerated lesion on the left upper eyelid, which was excised in June 2017. The histological diagnosis was BCC. The patient had no significant medical and family history. Clinical examination revealed a mass arising from the upper eyelid and involving orbital soft tissues. Magnetic resonance imaging showed 4.4 cm × 3.4 cm × 2.7 cm mass lesions involving entire left orbital content with the erosion of supraorbital rim and abutting left frontal sinus with no intracranial extension. Inferiorly lesion is infiltrating skin and subcutaneous plan anterior to the left maxillary sinus. Similar lesion anterolateral left parotid gland measuring 14 mm × 12 mm with few enhancing left cervical nodes [Figure 1]. Histological examination revealed recurrent basosquamous carcinoma

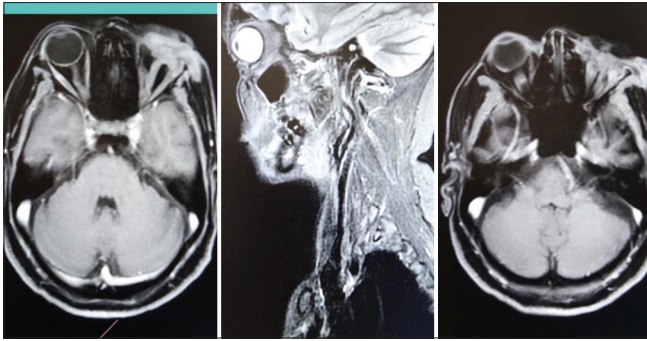
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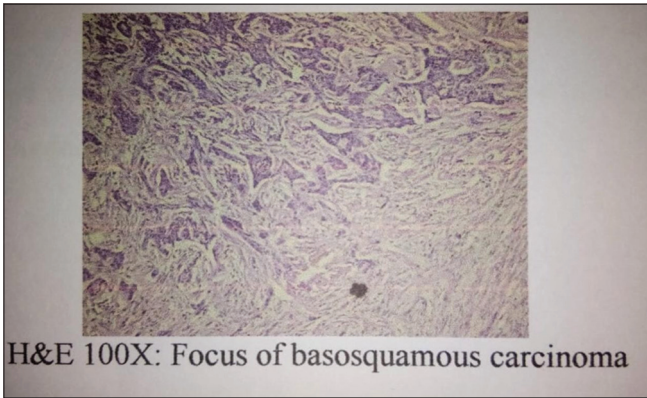
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**Figure 1: Magnetic resonance imaging revealed mass lesion involving entire left orbital content with no intracranial extension**



**Figure 2: Microscopic examination revealed basosquamous carcinoma with small, uniform, and hypochromatic neoplastic cell with peripheral palisading noted with stromal collagen deposition, occasional basaloid cells have eosinophilic cytoplasm with variable keratinization. Keratin pearls noted. Foreign body giant cell reaction noted**



**Figure 3: Pre-operative basal cell carcinoma involving entire left orbit and post-operative picture of orbital exenteration and reconstruction with free anterolateral thigh flap**

[Figure 2]. The plan was to do left orbital exenteration along with the excision of parotid node, followed by reconstruction with free anterolateral thigh flap [Figure 3].

## DISCUSSION

BCC is the most common tumor affecting the eyelids and is responsible for considerable morbidity due to its locally invasive nature. BCC arises from the basal layer of the epidermis and accounts for 85–90% of lid malignancies, two-thirds of which are seen in the lower lid itself. Spread to surrounding skin is generally slow; failure to get appropriate treatment can lead to a considerable area of skin being destroyed.<sup>[4]</sup> A study done by Leibovitch *et al.*, in 2005, on invasive BCC found that the most common tumor site was the medial canthus, suggesting that medial canthus BCC possessed the highest risk of orbital invasion. Another study also showed the site incidence for BCC as the medial canthus (53.6%), followed by the lower eyelid (35.7%), the upper eyelid (7.1%), and the lateral canthus (3.6%), with a statistically significant difference between the disease sites.<sup>[5,6]</sup> In our present case, it was seen in the left upper eyelid which is not very common.

BCC is most commonly seen between 40 and 80 years of age, with a male preponderance.<sup>[7]</sup> Classically, the lesion of BCC appears as a slowly enlarging ulceration with raised and pearly border. Multiple clinical manifestations of this malignancy occur, which include nodular pigmented, morpheiform or sclerosing cystic, superficial, basosquamous, and telebrating. The lesion may develop telangiectasia (a reddish hue caused by dilated capillaries).<sup>[8-11]</sup> In our present study, the lesion was basosquamous carcinoma with small, uniform, hyperchromatic, and basaloid cells.

The primary goal of treatment is the complete eradication of the BCC. The secondary goals are maintenance of lid function and cosmesis. The choice of treatment depends on a number of factors, including the size, location, and histologic type of BCC. The usual course of the disease is a gradual enlargement of the lesion with underlying tissue destruction necessitating treatment. Different modalities of treatment are cryotherapy, radiation therapy, chemotherapy, laser ablation, and electrodesiccation, but the most widely accepted choice is surgical excision.<sup>[10]</sup> The overall cure rate for BCC is between 95% and 100%. The recurrence rate ranges from 1% to 40%, depending on the type of treatment, size and histologic makeup, and location.<sup>[12,13]</sup>

While performing surgical excision, a wide safety margin is chosen around the clinically identified margins, as the true borders of the tumor, however, cannot be determined clinically. This “safety” margin reduces the probability of recurrence but with the side effect of larger wound, which requires more extensive reconstruction. A retrospective study done by Hamada *et al.* reported that there was zero recurrence of non-infiltrative BCC and 4.35% recurrence

with infiltrative BCC using a 4 mm margin.<sup>[14]</sup> Hsuan *et al.* reported an alternative approach using 2 mm margins and delayed repair for nodular BCC.<sup>[15]</sup> Luliano and associates in their study could achieve negative margins in only half (12 out of 24) of patients after orbital exenteration for periocular lesions.<sup>[16]</sup> In our present case, *en bloc* resection was done with clear margin and reconstructed with anterolateral thigh flap with microvascular anastomosis.

## CONCLUSION

Basal cell carcinoma is most common non-melanoma skin cancer, which is locally aggressive and causes significant destruction by invasion in surrounding tissues. However it rarely metastasizes to distant tissues. Recurrence rate varies from 10 % to 40 %. The mainstay of treatment of BCC is surgical excision.

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