

Giant Basal Cell Carcinoma of the Forehead: A Case Report

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ABSTRACT

Giant basal cell carcinoma (GBCC) is defined as a tumor 5cm or greater in diameter. They present less than 1% of all basal cell carcinomas. We present a case of an 85-year-old male patient with a giant ulcerating tumor of the left forehead (measuring 7x6cm). Under local anesthesia tumor was surgically excised. No involvement of the underlying periosteal or bone structure was noted. Pathohistological exam revealed the giant basal cell carcinoma, with free surgical margins. Giant basal cell carcinomas are rare tumors and are usually result of a long duration and patient neglect. In comparison to the ordinary basal cell carcinoma these tumors have a higher metastatic potential. Surgical resection with negative surgical margin is the best possible treatment option.

Key words: giant, basal cell carcinoma, surgery

Introduction

Basal cell carcinoma (BCC) is the most common malignant skin tumor^{1,2}. It usually appears as painless, no healing ulcer or nodule on the sun-exposed parts of the body. Sun exposure is the primary etiologic agent for the development of the basal cell carcinoma. Risk is related to skin type and the degree of exposure to sunlight, particularly UV-B radiation¹. In addition to environmental factors, host factors (e.g. genetic syndromes and immunologic factors) play a critical role in the pathogenesis of basal cell carcinoma. It has a particular predilection for the upper two thirds of the face². Basal cell carcinoma is usually slow growing tumor, with incidence of metastases less than 0.1%². Four different clinico-pathologic types of basal cell carcinoma exist, each with distinct biologic behavior: undifferentiated, nodular or nodular-ulcerative (more than 60% of all basal cell carcinoma), superficial and morpheaform or sclerosing basal cell carcinoma³. Giant basal cell carcinoma (GBCC) is defined as a tumor 5 cm or greater in diameter. They are very rare and present less than 1% of all basal cell tumors^{2,4,5}. Although the predilection site is also head and neck region, some studies report other location (extremities, trunk)^{2,6-8}. Giant basal cell carcinoma has been associated with higher incidence of metastases²⁻⁴. They are usually result of a long duration, patient ne-

glect and denial. With time they tend to ulcerate, with areas of necrosis and hemorrhage causing severe medical problem to the patient. We present a case of an 85-year-old-male patient that has been admitted to the Ear Nose and Throat Department due to a large tumor mass of the left forehead region. We describe its clinical course, treatment and final outcome.

Case Report

An 85-year-old male patient has been admitted to the Ear Nose and Throat Department due to a giant ulcerating tumor of the left forehead. Over several years prior to admittance the tumor has been slowly growing, with no other symptoms. Several weeks prior to admittance tumor became partially ulcerated with areas of hemorrhage and necrosis. Patient's medical history revealed a poor physical condition with a severe cardiovascular and neurological deficit. Physical finding included a giant ulcerating tumor of the left forehead measuring 7x6cm in diameter (Figures 1a-c). It was tightly attached to the surface. No vital structures have been affected. There was no clinical tumor lymph node involvement or distant metastases present. Due to a poor physical condition of

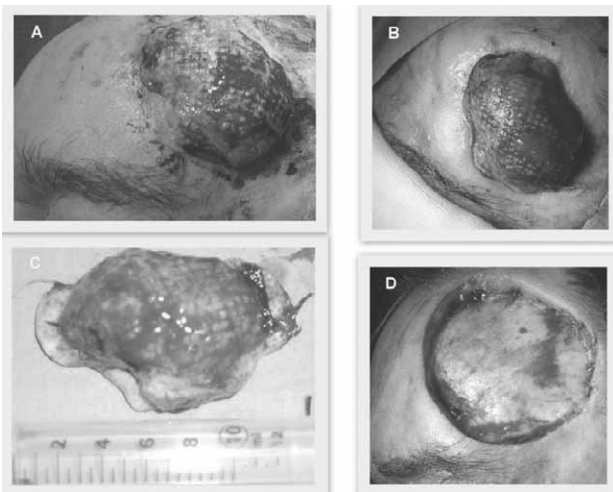


Fig. 1a–b. Forehead skin tumor with areas of hemorrhage and necrosis; 1c. Tumor after excision measuring 7x6 cm in diameter; 1d. No visible periosteal tumor involvement.

the patient he was not a suitable candidate for a surgical procedure under the general anesthesia, thus we decided to remove the tumor under the local anesthesia. Tumor was surgically radically excised. No involvement of the underlying periosteal or bone structure was noted (Figure 1d). The defect was closed using the free tissue transfer (Thiersch skin graft) from the left forearm (Figure 2). Postoperative period was uneventful. Pathohistological analysis revealed an ulcerated tumor mass measuring 7x6x3cm. Tumor consisted of solid infiltrative, epithelial basal cells with palisade formation (Figure 3). Infiltration of the dermis was 1.2cm. Surgical margins were free of any tumor tissue. Final diagnosis was giant basal cell carcinoma. One year following the surgery the patient is free of recurrent disease and the defect site is cosmetically acceptable.

Discussion

Giant basal cell cancers are rare tumors. Risk factors associated with giant basal cell carcinomas are length of time to presentation, patient neglect, previous treatment and an aggressive histological type^{9–13}. In the present case the tumor was slowly growing over the years and patient requested medical attention at the time when tumor became ulcerated with areas of hemorrhage and necrosis, and has become a serious medical problem. The predominant region for these tumors is head and neck^{2,9}. When compared to ordinary basal cell carcinomas these tumors have an increased metastasis potential². In the present case the tumor was located on the left forehead region. There was no local lymph node involvement or any sign of metastases. When metastases are present survival is significantly decreased. Metastasis develops in 38.3% of patients despite optimal therapy¹⁴. The overall optimal cure rate is 61.7%¹⁴. Risk of recurrence is directly related to the initial tumor size. Radiation therapy



Fig. 2. Defect reconstruction with the split-thickness skin-graft (Thiersch).

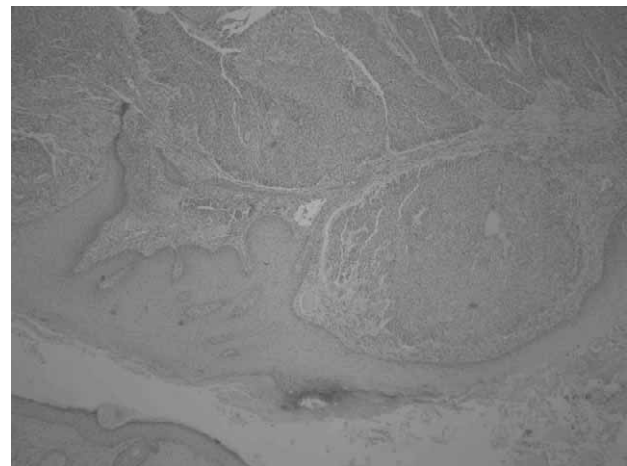


Fig. 3. Pathohistological analysis of the tumor, hemalaun-eosin staining x4.

has been suggested as an alternative to surgical treatment, especially for patient that are not candidates for prolonged anesthesia¹⁵. In the present case the patient was not a suitable candidate for a general anesthesia due to a poor general medical condition. Giving the nature of the tumor that did not include any vital structure and that there was no metastases or local lymph node involvement present, we decided to surgically remove the tumor under local anesthesia, which was very well tolerated by the patient. Reconstructive option for this type of tumor depends on the extent of the disease. It has to be done with careful consideration for the surrounding structures (e.g. eye-structures and hairline). The possible reconstructive options include the use of local flaps (e.g. lateral forehead or Esser cheek rotation flap)¹⁵, free flaps and tissue expansion. In our case after the tumor has been removed and there was no involvement of the deeper structures and with the respect for the poor general patient's condition we decided to close the defect with the split-thickness skin graft (Thiersch) taken from the left forearm. Postoperative period was uneventful and this procedure gave a suitable postoperative cosmetic result.

Conclusion

Giant basal cell carcinomas are rare tumors and are usually result of a long duration and patient neglect.

Compared to the ordinary basal cell carcinoma they have a higher metastatic potential. Surgical resection with negative surgical margin is the best possible treatment option. Regular follow up is mandatory.

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GIGANTSKI BAZOCELULARNI KARCINOM ČELA – PRIKAZ SLUČAJA

SAŽETAK

Gigantski bazocelularni karcinom kože definira se kao tumor kože veći od 5 cm. Ovi tumori predstavljaju svega 1% od svih bazocelularnih karcinoma kože. U radu prikazujemo slučaj 85 godišnjeg bolesnika s velikom, ulcerativnom, tumorskom tvorbom kože čela (veličine 7x6 cm). Tumor je uklonjen u lokalnoj anesteziji. Nije uočeno širenje tumora u okolno tkivo. Patohistološka analiza pokazala je da se radi o gigantskom bazocelularnom karcinomu kože. Gigantski bazocelularni karcinomi kože izuzetno su rijetki tumori i najčešće su rezultat višegodišnjega rasta i nebrige bolesnika. U odnosu na obični bazocelularni karcinom kože, imaju veći metastatski potencijal. Radikalna kirurška ekscizija predstavlja najbolji terapijski postupak.