

# Invasive basal cell carcinoma: A case report

*Carcinoma basocelular invasivo: relato de caso*

*Carcinoma basocelular invasivo: reporte de caso*

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## Abstract

Basal cell carcinoma (BCC) is an epithelial tumor of low-grade malignancy, recurrent, with capacity for local invasion and destruction of adjacent bone or cartilage, yet rare metastasis. It presents as superficial, fibro-epithelial, nodular, sclerosing or pigmented. The best treatment is surgical excision; and frequently the cancer has a good prognosis. The purpose of this article is to study and discuss the clinical, histopathological and treatment of BCC.

**Descriptors:** Maxillofacial Abnormalities; Neoplasms; Carcinoma, Basal Cell; Diagnosis; Therapeutics.

## Resumo

O carcinoma basocelular (CBC) é uma neoplasia epitelial de baixo grau de malignidade, recidivante, com capacidade de invasão local, destruição do osso ou da cartilagem adjacente, porém com metástase rara. Pode apresentar-se nas formas superficial, fibroepitelial, nodular, esclerosante e pigmentado. O tratamento mais indicado é a excisão cirúrgica, e frequentemente esta neoplasia possui um prognóstico bom. O objetivo deste artigo é estudar e discutir as características clínicas, histopatológicas e tratamento do CBC.

**Descritores:** Anormalidades Maxilofaciais; Neoplasias; Carcinoma basocelular; Diagnóstico; Terapêutica.

## Resumen

El carcinoma basocelular (CBC) es una neoplasia epitelial de bajo grado de malignidad, reincidente, con capacidad invasiva local, destrucción del hueso o del cartilago adyacente, sin embargo con metástasis infrecuente. Puede presentarse en las formas superficial, fibroepitelial, nodular, esclerosante y pigmentado. El tratamiento más indicado es la excisión quirúrgica, y frecuentemente esta neoplasia posee un pronóstico bueno. El objetivo de este artículo es estudiar y discutir los rasgos clínicos, histopatológicos y tratamiento del CBC.

**Descritores:** Anomalías Maxilofaciales; Neoplasias; Carcinoma basocelular; Diagnóstico; Terapêutica.

## INTRODUCTION

Basal cell carcinoma (BCC), more common in caucasians, represents 80% of skin cancer cases<sup>1,2</sup>. It is an epithelial tumor of low-grade malignancy, recurrent, with local invasive capacity<sup>1,3,4</sup>, but metastasis is extremely rare<sup>1,3,5,6</sup>.

BCC presents differing clinical forms: pigmented, sclerosing, superficial, fibro-epithelial and nodular<sup>2,5,7</sup>, the latter being the most prevalent<sup>2,5,8-10</sup>. It begins as papules being the color of the skin, pearly, or erythematous. They grow slowly, telangiectasia appears on the skin surface, and the presence of ulcerations is not uncommon<sup>2,5,11</sup>.

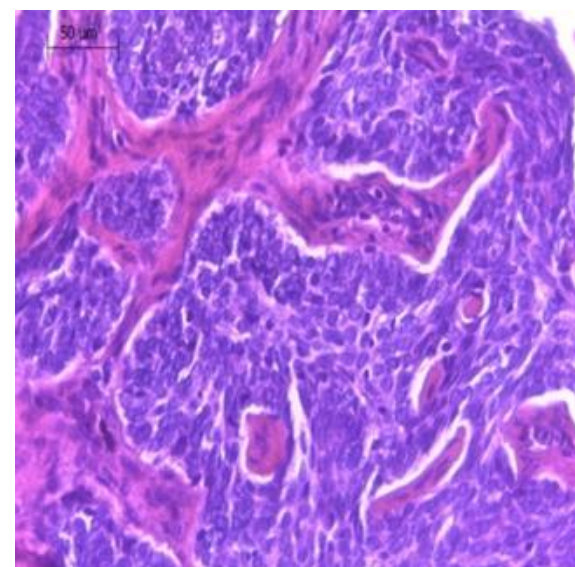
The most effective option in the treatment of BCC is surgical excision. Radiation therapy, if required, helps prevent recurrence. To avoid skin damage, chemoprevention can be used, as well as vitamin A analogues and their retinoid derivatives<sup>3,8,10,12,13</sup>.

BCC prevention resides in the application of early diagnoses and adoption of preventive measure which themselves result from epidemiological studies and data that allow identification of behavioral elements, phenotypes, configuration groups, and risk factors<sup>2,3,6,14</sup>.

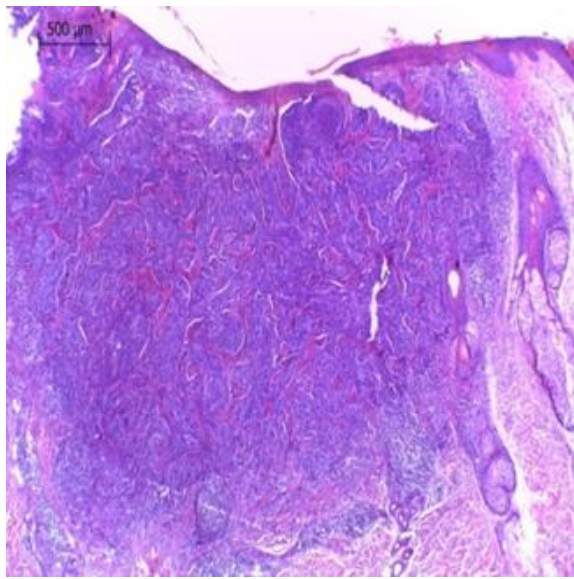
## CASE REPORT

A female patient, 51 years old, leucoderma, arrived at the Stomatology Clinic of the State University of Paraíba complaining of "a lump in the nose". During anamnesis she spoke of sun exposure, absence of symptoms, bleeding, and that the injury became obvious about three months ago. With extra-oral physical examination, a nodular lesion, sessile, well

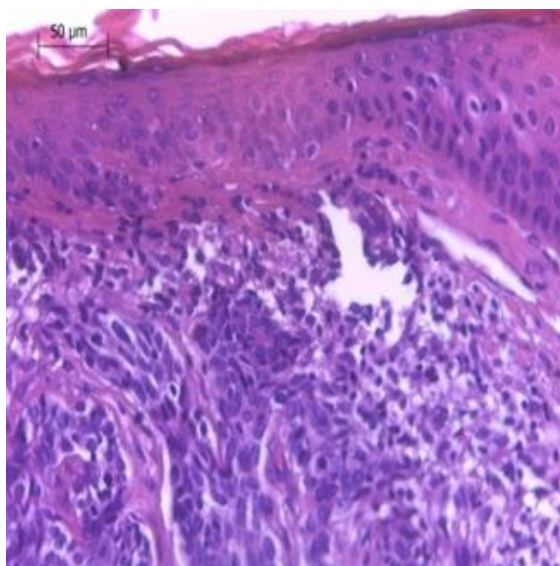
circumscribed and slightly raised, of brown-grayish color, measuring 0.6 cm in major axis, hardened, with a scaly surface, located on the left nose wing was observed. Clinically, diagnosis was issued suggestive of basal cell carcinoma and keratoacanthoma. The patient was referred to a head and neck surgeon, who performed the surgical removal of the lesion. Histologically (Figures 1, 2, 3 and 4) the result was solid pattern BCC, invasive, evidencing an aggregate of neoplastic basaloid cells connected to the epidermis, organized in islands, characteristically having peripheral cells in palisades invading the underlying dermal connective tissue.



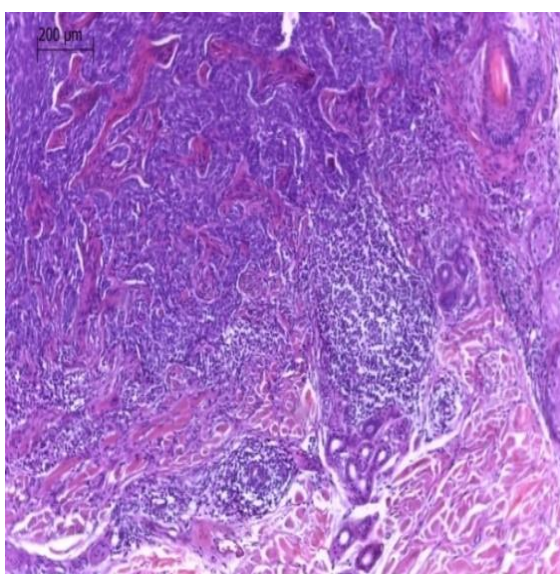
**Figure 1:** Augmented photomicrography displaying numerous basaloid cells, hyperchromatic nuclei and scant cytoplasm intermingled with collagenous beams (HE, 400X).



**Figure 2:** Photomicrograph showing neoplastic proliferation in solid infiltrative pattern with numerous hyperchromatic cells (HE, 40X).



**Figure 3:** Augmented photomicrograph showing a proliferation of basaloid and hyperchromatic cells (HE, 400X).



**Figure 4:** Photomicrograph showing the frontal area of tumor invasion, the presence of intense chronic inflammatory infiltrate. In the right area of the field can still observe the presence of sebaceous glands (HE, 100X).

The tumor cells had hyper-chromatic nuclei, uniform, rounded, standard monomorphic, and not displaying anaplastic features. The cytoplasm of some cells was sparse giving the appearance of basaloid cells. Tumor cell masses penetrated the dermis, stromal retraction or gap formation around the tumor was observed. At certain points on the slide the presence of keratin production was observed. The stroma involving cell nests presented numerous young fibroblasts arranged in parallel bands with a mucinous appearance. Solar elastosis was also observed. The lateral and deep surgical lesion margins were free of cancer.

The patient received guidance on the importance of solar radiation as a risk factor for skin cancer, including the use of solar protection, and is under observation for a year after treatment.

## DISCUSSION

Exposure to ultraviolet radiation is the main environmental risk factor associated with the onset of the BCC<sup>2,3,6,13</sup>. However, it is important to be aware of other risk conditions for the development of this cancer, such as skin carcinoma family history, advanced age, immunosuppression, clear phenotypes, freckling in childhood and genetic changes<sup>2,3,6,13,14</sup>. This corroborates the clinical case study, with two important risk factors: skin color of the patient and the intense exposure to solar radiation.

A study that evaluated 66 patients who underwent surgical treatment for non-melanoma type skin cancer in Brazil between the 2008 and 2010, found that 66.7% were BCC. Of these, 62.1% of the lesions were located on the face. The results confirmed that chronic exposure to ultraviolet rays is the biggest agent implicated in inducing cancer, followed by the presence of unfavorable phenotypes<sup>15</sup>.

Diagnosed with BCC, 5.254 patients showed a higher incidence in the population over 40 years of age (88.9%), the nose being the most commonly affected, representing from 25 to 30% of cases<sup>16</sup>. This data is consistent with the findings of this study, since the patient was, at the time of diagnosis, 51 years old and the injury was located in the nose wing.

The most common complaints related to skin cancer are the stain, itching of the skin, pain, bleeding, scaling; a wound that doesn't heal within four weeks; changing color, elevation, or a lump with limited size increase and having a pearly, translucent, reddish or dark appearance<sup>17</sup>. The clinical aspect of the BCC in association with the history of the patient is of great importance for the diagnosis. In this study, the patient complained of a nodular lesion, scaly, with no healing for a period of about three months.

BCC treatment depends on the size and location of the lesion<sup>3,8,12</sup>. Small lesions (<1 or 1-2 cm) are treated by routine surgical excision<sup>3,8,12,13</sup>, laser ablation or electrodesiccation and curettage<sup>3,12,13</sup>. The patient in the present study showed a lesion measuring 0.6 cm in its major axis, with lateral surgical margins and free of deep neoplasia and had as a treatment, surgical removal.

Radical surgical excision combined with radiotherapy is recommended for larger, locally invasive, and aggressive lesions involving vital structures. When BCC is properly treated, recurrence<sup>12</sup> and metastasis is exceptionally rare<sup>3,6,12</sup>. This cancer often has a good prognosis.

## CONCLUSION

Among other malignant skin tumors, BCC is considered as having the best prognosis with a reduced metastasis potential, while presenting great histological differentiation from the standard cell, low-grade malignancy. In cases where locally the tumor invades vital structures, the prognosis can become worrying; reflecting mostly in tumor recurrence and metastases. Thus, periodic patient proservation is required.

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## CONFLICTS OF INTERESTS

The authors declare no conflicts of interests.

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