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CASE REPORT

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Giant basal cell carcinoma, experience and challenges at a public hospital in Peru

Carcinoma basocelular gigante, experiencia y desafíos en un hospital nacional del Perú

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ABSTRACT

Basal cell carcinoma is the most common neoplasm worldwide, affecting mostly photoexposed areas of the skin. It manifests as lesions that do not exceed 2 cm in diameter, have low metastatic potential, and are locally aggressive. However, there are atypical cases where these lesions are equal to or greater than 5 cm in diameter, exhibit aggressive behavior with high recurrence and metastatic potential, acquiring the name giant basal cell carcinoma. We present the case of an elderly adult with long-standing disease and extensive skin tumor who required a comprehensive evaluation and radical surgical management with curative intent, this presentation and approach being uncommon.

Keywords
Basal Cell Carcinoma; Skin; Neoplasm; Surgery; Peru (source: MeSH-NLM).

RESUMEN

El carcinoma basocelular es la neoplasia más frecuente en todo el mundo, afectando las áreas fotoexpuestas de la piel en su mayoria, manifestándose como lesiones que no sobrepasan los 2 cm de diámetro, presentan bajo potencial metastásico y son localmente agresivas; sin embargo, existen cuadros atípicos donde estas lesiones son iguales o mayores a los 5 cm de diámetro, tienen un comportamiento agresivo con alta recurrencia y con potencial metastásico, adquiriendo la denominación de: carcinoma basocelular gigante. Se presenta el caso de un adulto mayor con enfermedad de larga data y tumoración extensa en la piel quien requirió una evaluación integral y manejo quirúrgico radical con intención curativa, siendo esta presentación y el abordaje poco frecuentes.

Palabras clave
Carcinoma Basocelular; Piel; Neoplasia; Cirugía; Perú (fuente: DeCS-BIREME).

INTRODUCTION

Basal cell carcinoma represents the most frequently diagnosed skin neoplasm, with a higher level of incidence in Caucasian people [1,2]. This neoplasm appears mainly in photoexposed areas, covered by hair follicles, has a slow growth rate, it's locally destructive, shows little metastatic potential; therefore, it is rarely lethal [3].

Giant basal cell carcinoma is defined as a lesion with a diameter equal or greater than 5 cm by the American Joint Committee of Cancer; it is a rare entity with an incidence of 0.5 to 1%, more aggressive locally and with a higher metastatic potential [3,4]. Most common risk factors include a lower socioeconomic level and a late diagnosis, which are determining for the size of the lesion and its unusually aggressive behavior [5-7].

This case study fits the aforementioned association between poverty and lack of timely medical care, leading to this rare condition and highlighting the importance of early diagnosis and treatments, which are usually less aggressive in this particular type of skin cancer.

CASE REPORT

Seventy-five-year-old mixed-race male, low-income, native to Ancash, a province in the Peruvian highlands with extremely high radiation levels, who never wore photoprotection; presents a skin lesion at the left scapular level with a 10-year of slow and progressive growth, characterized by presenting intense itching, occasional stabbing pain and serous secretions that can stain clothing. Upon physical examination, he presents a neoformative extensive lesion, plaque type, of 11x5.5 cm, with a flaky/scaly base, with smooth pearly edges, with presence of telangiectasias and minor ulcers smaller than 1 cm of diameter, no peripherical adenopathy was identified (Figure 1).

A diagnostic incisional biopsy was performed with a pathological result: basal cell carcinoma with a nodular and infiltrative pattern. A dermatoscopy showed large pigment blood cells, ovoid nests, ulceration and whitish striations (Figure 2). Radiographic and hematological studies were conducted, with no alterations.

A wide local excision of the lesion was performed with a 1 cm margin following the application of a modified tumescent solution. The incision was made vertically with a cold scalpel, until reaching the muscle fascia, which is resected along with the excised tissue and the edges were oriented with suture thread, hemostasis is checked and the defect is closed with local flaps using the V-Y technique; drains were not put in place (Figure 3).

The histopathological report of tumor excision came out injury free. Currently, the patient has regular checkups at the Department of Oncological Surgery (Figure 4).

Currently, the patient presents quarterly medical checkups, with no evidence of local recurrence and adequate lifestyle/quality of life.

Ethical considerations

Informed consent and assent were requested and obtained from the patient. The confidentiality of the data obtained from the medical records was maintained.

Figure 1. Preoperative image showing giant basal cell carcinoma of the left scapular region, where the edges of the lesion were previously demarcated.

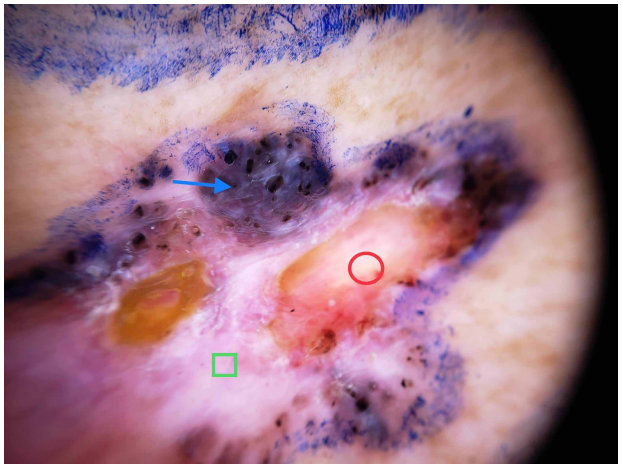

Figure 2. Dermatoscopy (10X) (DermLite DL4 dermatoscope) Confluent globules in greyish blue nests (blue arrow), ulcerations (red circle) and bright white lines (green square) on a milky pink background on a milky pink background without structure.

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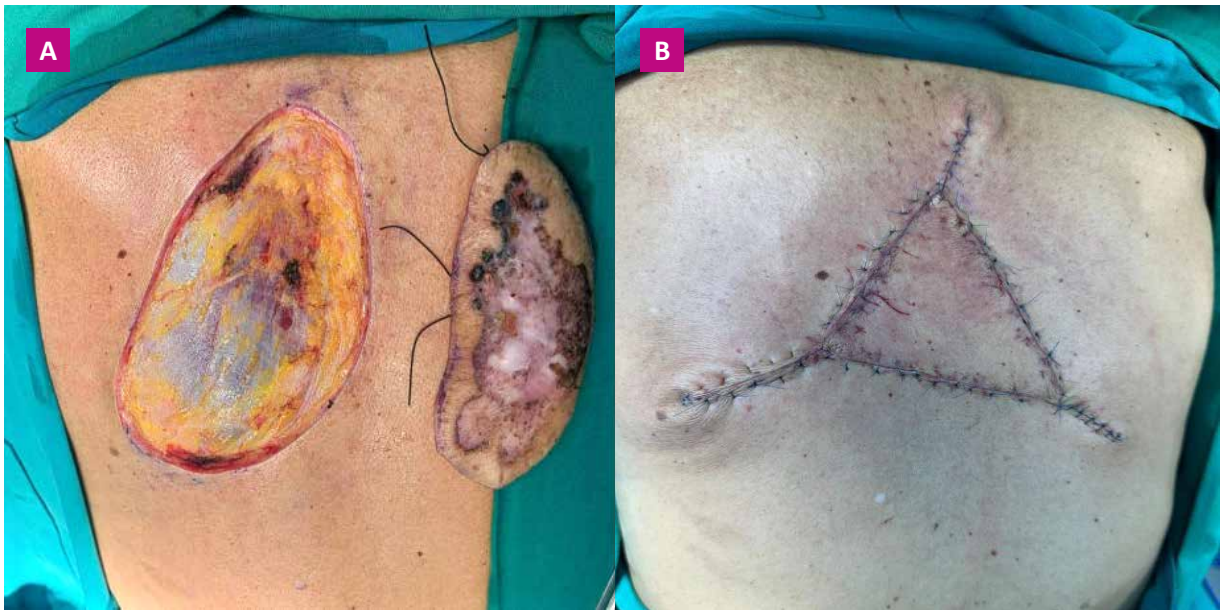

Figure 3. A) Intraoperative image showing the resected specimen of the left scapular region with 1cm margins on each side including muscle fascia and protocol signaling threads, as well as the surgical bed. **B)** Primary closure with a V-Y advancement flap.

DISCUSSION

Chronic solar skin damage, advanced age and Fitzpatrick I and II skin types are the main risk factors for the development of basal cell carcinoma and, on a smaller scale, chronic immunosuppression, arsenic exposure and drugs that increase photosensitivity [8,9,10]. Type B ultraviolet radiation (UVB) and the mutation that it produces on the gen PTCH1, which encodes an oncosuppressor protein of the hedgehog pathway in hair follicles stem cells, are the most widely accepted theory regarding histogenesis and why it shows in areas exposed to sunlight with pilosebaceous units[11-13]. Due to its locally aggressive nature and low metastatic potential, the therapeutic approach proposed is mainly surgical. A complete excision with margins of healthy tissue is the standard treatment. In selected cases, such as facial lesions, Mohs surgery is the treatment of choice [9].

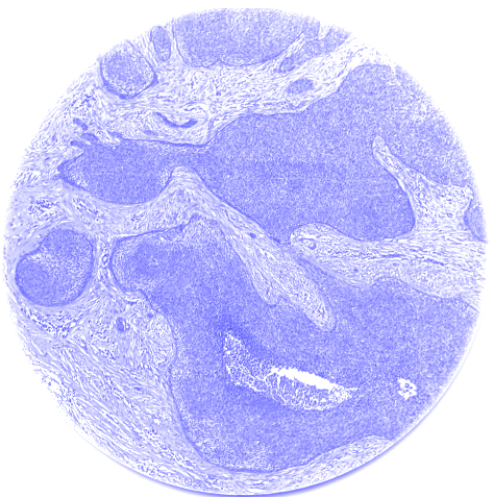

Figure 4. Hematoxylin and eosin staining (10X) shows nests of basaloid-pattern cells, sclerotic stroma and retraction areas, lesion-free edges.

Giant basal cell carcinoma is a rare variant, whose presentation is frequent in the dorsal region and face, in elderly patients in their seventies [14]. Due to the local aggressiveness of the condition and its metastatic potential, surgery is the most widely accepted [2]; nevertheless, in selected cases or for those that refuse surgery, topical treatments and/or photodynamic therapy will be used [15-18].

In our case, we noticed that the presentation site in the dorsal region is consistent with the most common location of this carcinoma [19,20]. Moreover, the low socioeconomic level of the patient and his lack of knowledge of the local aggressiveness of the condition were the main risk factors for the development of this neoplasm, as reported by Zaldo *et al*. [21]. Due to the accessibility of the compromised area, as well as the local aggressiveness of this type of neoplasm, we decided to perform an excision of the lesion with 1 cm margins that included muscle fascia, following recommendations by Zoccali [19].

To conclude, the approach used in this atypical cases is multidisciplinary, with the complete excision of the lesion with wide margins being the cornerstone of the entire process. Close follow-ups, prevention through the use of sunscreen and photoprotection measures, as well as an early and timely diagnosis, will provide us with less aggressive and outpatient treatment alternatives.

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