A Giant Basal Cell Carcinoma Misdiagnosed and Mistreated as a Chronic Venous Ulcer

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ABSTRACT Basal cell carcinoma (BCC) is the most common cutaneous malignancy. Giant BCCs are quite rare. They can cause extensive local invasion, disfigurement, and metastasis.
We present a case of a 58-year-old woman with an unrecognized and inadequately treated ulcerated giant BCC sized 12.5 × 10.0 cm that occurred on her left lower leg without any sign of metastasis. Neglect and inadequate treatment of the primary lesion are the most important contributing factors responsible for size in giant BCC.

KEY WORDS: basal cell carcinoma; skin cancer; venous ulcer

INTRODUCTION

Basal cell carcinoma (BCC) is a malignant neoplasm derived from non-keratinizing cells that originate in the basal layer of the epidermis (1). BCC predominantly occurs on sun-exposed skin, but may also occur on areas of moderate sun exposure (trunk, upper arms, and lower legs) in both sexes equally (2-4). It is a slowly growing tumor, but if remains unrecognized, neglected, or inadequately treated, it may invade adjacent tissues and produce large tissue defects (3,4). Giant BCC is defined as a tumor larger than 5 cm in its largest diameter (5). Such giant tumors then require extensive and sometimes disfiguring surgery.

CASE REPORT

A 58-year-old-woman was referred to our Department for the treatment of a giant ulcer located on her left lower leg**.** At the time of her first visit to the dermatologist at our Department, the ulcer has been present for three years (Figure 1). It emerged spontaneously in the form of small, 0.5 cm wide erosion, sometimes covered with a scab. The patient denied an insect bite, or any type of trauma. She was generally healthy, reporting only uterine myoma extirpation at the age of 55. The lesion had been treated by the general practitioner as a bacterial skin infection with local and systemic antibiotics, rinsed with antiseptics, and coated with epithelizing creams. Despite the therapy, the ulcer had slowly been getting wider, and 1.5 year after its appearance, the general practitioner advised examination by a plastic surgeon. By then, the ulcer was 6 cm in diameter, and the plastic surgeon suggested reconstruction of the lesion with a split-thickness skin graft, as it was a venous ulcer. Soon after the reconstruction, the graft was rejected, but reconstruction had been tried two more times with the same result, i.e. the rejection of the skin graft. After

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Figure 1. Giant basal cell carcinoma on the lower extremities

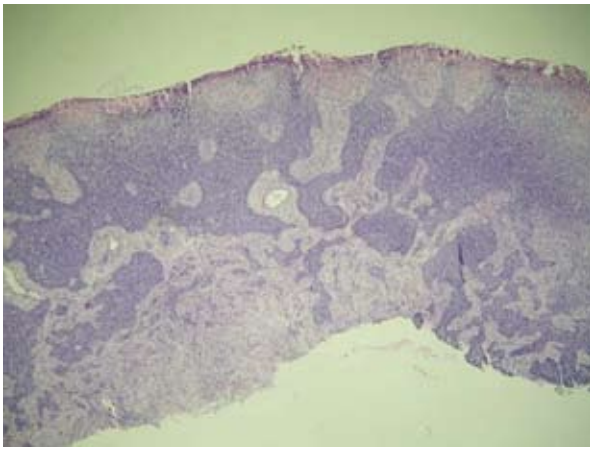

Figure 2. Exulcerated basal cell carcinoma of the infiltrative type in fibromatous stroma (hematoxylin-eosin stain, original magnification ×4)

the third abortive reconstruction of the ulcer, the patient refused further surgical treatment and had been treating the ulcer with hydrocolloid dressings and epithelizing creams. Despite the consistent conservative treatment, there was no therapeutic response. The lesion was spreading, sometimes discharging hemorrhagic exudate. When the patient first visited our Department, she had an ulcer 12.5 × 10.0 cm in size, with irregular, 0.2 cm elevated borders, and the base partially covered with necrotic material (Figure 1). The clinical examination revealed no phlebectasia or varicose veins, or signs of stasis dermatitis. There were only a few teleangiectasias on both thighs. Regional lymph nodes were not palpable. The patient did not report any symptoms of systemic involvement. She was experiencing a mild pain in the ulcer area. The patient had no positive personal history of skin cancer and denied any arsenic exposure, irradiation, or burns. The biopsy specimens were taken from the three different places on the ulcer margin. All three specimen displayed histological features of the "ulcerative BCC" (Figure 2). A chest X-ray, abdominal and lymph node ultrasound, as well as a total body computed tomography scan were performed with no reported abnormalities. The patient was referred to the Department of Surgery, and consultation with a surgeon led to complete excision of the lesion.

DISCUSSION

Basal cell carcinoma (BCC) is the most common nonmelanoma skin cancer in humans (4). Pathogenic factors include exposure to ultraviolet (UV) light, older age, a specific phenotype (fair complexion), genetic syndromes, and exposure to polycyclic aromatic amines (3,4). Characteristically, it arises on normal skin and does not have any known precursor lesions (3). BCC is more common on the sun-exposed skin, but any area of the skin can be affected (2-4,5-9). Early BCC often manifests with a tiny indurated pearly area covered with a few teleangiectasias (3). The patient may complain of a crusted area, which sometimes bleeds after washing, and never heals (3). Thus, any non-healing lesion on the skin should be suspected of being a neoplasm, no matter what the history nor how innocent the appearance (3). BCC has a low mortality and metastasis is rare (8,10,11). Giant BCC is fortunately rare and represents less than 1% of all BCCs (12). It commonly appears on the trunk but it may also develop on the face, lower limbs, abdomen, and on the back where the tumor proportions may be enormous (5-9,13-17). Such destructive tumor lesions then invade and destroy soft tissue, cartilage, and bone which often lead to metastasis (5-9,17). Giant basal cell carcinoma of 10 cm or greater is associated with a high rate of metastasis (17). However, we could not find any evidence of metastasis in our patient. Many vascular, hematological, neuropathic, infectious, malignant, and chemico-physical diseases may be presented with the skin ulcer. On the lower legs, ulcerated BCC may be mistaken for a venous or traumatic ulcer and ignored, and thus it may reach giant proportions (3). The skin is often extensively scaled (18). Varicose veins may not always be apparent, but pitting edema of the extremity is mostly persistent (18). The skin cancer may look clinically similar to a venous ulcer, but the cancer can also be a complication of any chronic leg ulcer (3,4). BCCs on the lower legs have a tendency to ulcerate early, possibly because chronic venous stasis may induce epidermal hyperplasia, which could lead to the development of BCC (19). In our case, it is clear that BCC developed *de novo*, without any sign of chronic venous insufficiency. Biopsy should be performed in any leg ulcer that

does not respond to conservative treatment modalities or has an atypical appearance or location. Usually, several skin biopsies are required to confirm the diagnosis. The rule is to observe the ulcer and biopsy the ulcer border, because tumor cells may be hard to find in the central part of the lesion (3).

CONCLUSION

Non-healing bleeding lesions, whose size is slowly increasing and does not respond to conservative treatments, should raise the suspicion of skin cancer and biopsies should be obtained. Neglect and inadequate treatment of the primary lesion are the most important contributing factors responsible for size in giant BCC.

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