A Case of Superficial Giant Basal Cell Carcinoma with Satellite Lesions on Scalp

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Giant basal cell carcinoma (BCC), defined as a lesion greater than 5 cm at its largest diameter, is a rare variant of BCC. In contrast to small BCC, giant BCC develops on skin that is not exposed to sunlight, including the back, shoulder, groin and thigh. Most of the histopathologic subtypes of giant BCC are micronodular, morpheaform and nodular, but the superficial subtype is rare. Giant superficial BCC arising on the scalp is extremely rare. We report the case of giant superficial BCC with four satellite lesions on the scalp in a 53-year-old male without predisposing factors. (Ann Dermatol 23(S1) S111 ~ S115, 2011)

Keywords - Cell carcinoma, basal; Giant; Satellite; Scalp; Superficial

INTRODUCTION

Basal cell carcinoma (BCC) is the most common human cancer. Most are small and usually occur on sun-exposed areas. The rare variant designated giant BCC has an unusually large size (> 5 cm in diameter) and often develops multiple lesions, which frequently occur on skin that is not typically exposed to sunlight, including the back, shoulder, groin and thigh. Patients with giant BCC are more likely to have a tumor that displays an aggressive histologic subtype (morpheaform, micronodular, or metatypical). Giant superficial BCCs limited to the scalp are exceedingly rare. We report a case of giant BCC with four satellite lesions on the scalp that was treated with 5% imiquimod cream and cryosurgery.

CASE REPORT

A 54-year-old man presented with an asymptomatic dark-colored patch on the frontal scalp. The lesion had been growing very slowly for 15 years, without concern or need for medical attention by the patient. The patient was in good health with no pertinent medical history or concurrent symptoms. There was also nothing contributory from his family history.

Physical examination revealed a 6×8 cm, well-defined, round black-colored patch on the frontal scalp. On closer examination, four other dark-colored macules were observed around the main lesion (Fig. 1A). Regional lymph nodes were not palpable and the remainder of physical examination was not contributory. Laboratory test results including complete blood cell count, urine analysis, liver function test, chest X-ray and electrocardiogram were within normal limits or negative.

Biopsy specimens were obtained from the center of main lesion and the four satellite lesions. A biopsy specimen from the main lesion showed budding and irregular proliferation of tumor tissue attached to the undersurface of the epidermis. The peripheral cell layer of the tumor formations usually displayed palisading. In addition, a mild amount of a nonspecific chronic inflammatory infiltrate was present in the upper dermis, which is a typical feature for superficial BCC (Fig. 1B, C). A biopsy specimen taken from the satellite lesions showed similar histological findings (Fig. 2).
The giant BCC was treated a combination of with 5% imiquimod and cryosurgery combination, given the patient’s reluctance for an operation and since the lesion was too large to recover by a skin graft. Cryosurgery consisted of 2∼3 freeze-thaw cycles (15 seconds of freezing with an intervening 60 second thaw period). Four days later, the patient topically applied 5% imiquimod once. This procedure was done four time. Topical treatment with imiquimod cream was then continued for 4 months. The satellite lesions were addressed by simple excision with a 3 mm margin; free margin resection resulted.

Two months after the last treatment, a clinical examination revealed only atrophic and hypo-pigmented areas, without any signs of residual tumor (Fig. 3A). Seven months later, follow-up biopsies were performed at three points (center, 6 o’clock and 12 o’clock) at the original site of the giant BCC; the biopsy samples demonstrated only cicatricial fibrosis. At the time of manuscript submission, the patient has been under complete remission for 1 year (Fig. 3B-D).

**DISCUSSION**

The American Joint Committee on Cancer Classification of tumors is based on the largest diameter: (T1, ≤ 2 cm; T2, >2 cm but < 5 cm; T3, ≥5 cm). Giant BCC is a T3 tumor.

Giant BCC presents some common epidemiological factors that include race, multiplicity of tumors, development on sun-covered areas, neglect and tumor chronicity. Fear may be the underlying factor leading to neglect and chronicity of the tumor. Immunodeficiency and genetic predisposition to BCC in other family members are not consistent factors. In contrast to patients who develop a single small BCC, giant BCC frequently develops on skin that is not typically exposed to sunlight, including the back, shoulder, leg and thigh. The scalp is not a commonly-reported site of giant BCC. Yet, it is conceivable that the presence of scalp hair allows a patient who is fearful of the findings of a medical examination to conceal the tumor, allowing the tumor to become chronic and...