Axillary Basal Cell Carcinoma: Case Report

Aksillar Bazal Hücreli Kanser

Gürol AÇIKGÖZ,[a]
Mutlu ÇAYIRLI,[b]
Şikar HÜSEYİNOV,[a]
Ercan ARCA,[a]
Erol KOÇ,[a]
Ercan ÇALIŞKAN,[a]
Mehmet GAMSIZKAN[c]

Departments of
[a]Dermatology,
[c]Pathology,
Gülhane Military Medical Academy, Ankara
[b]Clinic of Dermatology,
Ağrı Military Hospital, Ağrı

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Yazışma Adresi/*Correspondence:*
Mutlu ÇAYIRLI
Ağrı Military Hospital,
Clinic of Dermatology, Ağrı,
TÜRKİYE/TURKEY
mutlu78tr@yahoo.com

ABSTRACT Basal cell carcinoma (BCC) is the most commonly diagnosed malignant skin tumor. Chronic sun exposure is considered as the main etiologic factor in its development. Therefore it occurs characteristically on sun-exposed areas, such as head and neck. However it is rarely seen on the sun-protected areas such as axillary region. Factors other than ultraviolet radiation likely contribute to the development of BCC, especially at sun-protected sites. Here we report a patient who developed basal cell carcinoma in the axilla. According to the data of literature we were able to reach, this is the first axillary BCC case presented in Turkey.

Key Words: Neoplasms, basal cell; axilla

ÖZET Bazal hücreli kanser (BHK) en sık rastlanılan malin deri tümörüdür. Gelişiminde kronik güneş ışığı maruziyeti en önemli etiyolojik faktör olarak kabul edilir. Bu nedenle tipik olarak baş ve boyun gibi güneşe maruz kalan yerlerde görülür. Bununla birlikte çok nadiren aksillar bölge gibi güneşten korunan bölgelerde de görülebilir. Ultraviyole, radyasyon dışındaki faktörler de özellikle güneşten korunan bölgelerdeki BHK gelişimine muhtemelen katkıda bulunmaktadır. Burada aksillar bölgesinde BHK gelişen bir hastayı sunuyoruz. Ulaşabildiğimiz literatür bilgilerine göre olgumuz Türkiye' den bildirilen ilk aksillar BHK olgusudur.

Anahtar Kelimeler: Tümörler, bazal hücreli; aksilla

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Basal cell carcinoma (BCC) is the most commonly seen cancer of skin. It derives from undifferentiated cells on basal cell layer of the epidermis or outer root sheath cells of the hair follicle.[1] Ultraviolet light exposure is the major etiologic factor in the development of the disease.[2] Although the vast majority of BCCs arise on sun-exposed areas of body such as head and neck, it rarely develops on sun-protected areas.[3] According to the data of literature we were able to reach, approximately 60 cases of BCC of the axilla were reported and to our knowledge this is the first axillary BCC case presented in Turkey.

CASE REPORT

A 91 year-old man presented to our outpatient clinic with a small ulcerative lesion on his left axilla of more than two years duration. The family

history of skin cancer and other internal malignancies were negative. He had no history of trauma, chronic axillary inflammation, immune deficiency or exposure to artificial ionizing radiation. However, he had a history of severe sunburns in childhood. He had Fitzpatrick type III skin. Dermatological examination revealed a well-defined, irregular, 1 cm x 2 cm measured, erythematous, centrally ulcerative plaque lesion on his left axilla (Figure 1). He had no adenopathy and no other significant cutaneous findings except multiple solar lentigines and seborrheic keratosis on his trunk. A clinical diagnosis of nodulo-ulcerative basal cell carcinoma was considered. The lesion was excised completely. Histopathological examination showed lobular proliferation of basaloid cells which were infiltrated into the dermis and peripheral palisading nuclei of lesional cells. In addition, there were variable degrees of cytologic atypia and mitotic activity (Figure 2). The findings were consistent with nodular BCC. After removal of the tumor, there was no evidence of either local recurrence or metastasis during the 6-month follow-up period.

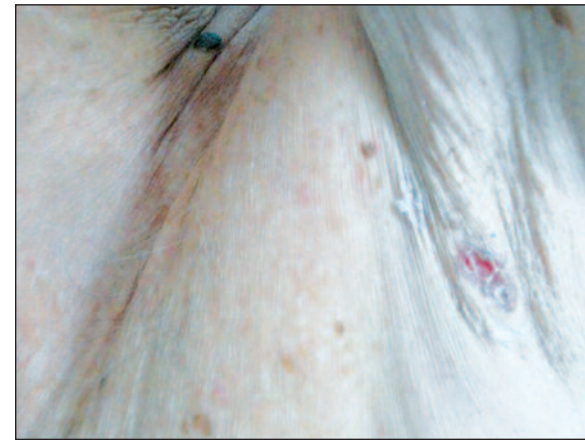

FIGURE 1: Irregular erythematous ulcerative plaque in the left axilla.
(See for colored form http://dermatoloji.turkiyeklinikleri.com/)

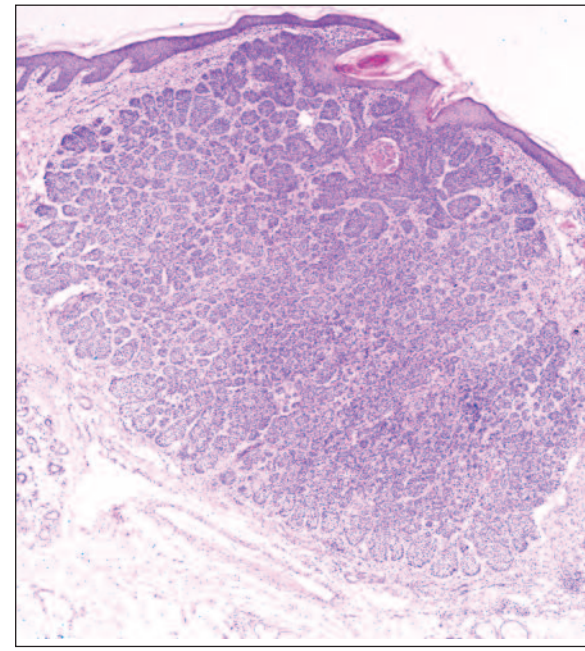

FIGURE 2: Lobular proliferation of basaloid cells which infiltrated into the dermis. (x40, H&E)
(See for colored form http://dermatoloji.turkiyeklinikleri.com/)

DISCUSSION

Ultraviolet (UV) radiation is considered as the most important risk factor for BCC, because more than 80% of BCCs are found in sun-exposed areas of the body, such as the face.[4] Axilla is one of the sun-protected sites where BCC rarely develops. The first axillary BCC case was reported in 1917 by Hazen.[5] Nipple, genital and perianal areas are the other sun-protected regions of body where BCC rarely seen.[6] The reported prevalence of axillary BCC in all BCC patients varies between 0.15 to 0.33 percent.[7,8] When a patient presents with axillary BCC, other etiologic factors should be considered like early in life sun exposure, older age, male gender, light skin, eyes and hair, radiation therapy, alterations in immune surveillance, exposure to coal tar or arsenics, burns, traumatic scars, and chronic skin irritation due to chronic dermatologic conditions such as hidradenitis suppurativa. The etiologic risk factors we detected in our case were older age, male gender, light skin and eyes and a significant history of sunburn in his childhood. However, our case did not remember whether he had axillary sunburn.

LeSueur et al. reported that the most frequent histopathologic type of BCC in the axilla was the nodular type (67%), and the other reported types were superficial (20%).[7] However, in a latest report, Betti et al. declared that the most frequent histopathologic type of BCC in axillary region was

the superficial BCC (64%) and followed by the nodular BCC (28%).[8]

Several hypotheses have been proposed to explain why BCC occurs at sun-protected sites. Heckmann et al. proposed a disturbed cell-matrix interac- tion as a cofactor for developing BCC at low UV exposed areas such as the medial quadrant of the orbit where characterized by a concave shape, reduced skin tension or marked skin folds.[9] Non–sun-exposed sites, including the axilla, may share these same characteristics. On the other hand, mutations in tumor suppressor gene p53 are present in 50% of BCC cases.[8] Genetic defects have been shown to predispose to the development of BCC. For example, a mutation of a gene called PTCH found in basal cell nevus syndrome patients and also in sporadic BCCs substantially increases susceptibility to BCC.[10,11] However, the real cause of axillary BCCs remains unclear.

An important consideration related to uncommon localizations of BCC is the higher risk of developing metastasis.[12] This condition may be related with delay in the diagnosis of BCC on hidden site of the body. Because, like observed in our patient, none of reported cases in literature had infiltrative or morpheaform histological subtype. Hence, it is defined that axillary BCC does not behave more aggressively or recur with higher frequency than BCCs at other locations.

As a conclusion; it is important to perform a complete cutaneous examination including relatively hidden site such as axillary region to avoid to delay in diagnosis and to prevent more extensive surgery.

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