Osmangazi Tıp Dergisi
Osmangazi Journal of Medicine 2020; 42(3):334-338

Olgu Sunumu / Case Report

Atypically Located Basal Cell Carcinoma: Three Case Reports

Nadir Lokalizyon Yerleşimli Bazal Hücreli Karsinom: Üç Olgu Sunumu

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Abstract: Basal cell carcinoma (BCC) is the most common malignant tumor in humans. It can be seen anywhere in the skin, although more than 80% occurs in areas exposed to the sun, such as the head and neck. Chronic exposure to sunlight is thought to be the main etiological factor. Although the risk of metastasis in BCC is very low, the tumor may be locally aggressive and cause tissue destruction. We present three cases of BCC in atypical locations, the waist region, the lateral femoral region, and the perineal region. No predisposing factor in terms of etiology of BCC was encountered in these patients' histories. We are presenting our cases, together with a discussion of the current literature, to emphasize that BCC should be considered even in atypically located lesions.

Keywords: Basal cell carcinoma, clinical variants, atypical involvement

Özet: Bazal hücreli karsinom (BHK) insanda en sık görülen malign tümördür. Deride herhangi bir yerde görülebilmekle birlikte, %80'den fazlası baş ve boyun gibi güneşe maruz kalan alanlarda ortaya çıkmaktadır. Gelişiminde kronik güneş ışığına maruziyet, ana etyolojik faktör olarak düşünülmektedir. Biz burada; bel bölgesinde, femur lateral bölgede ve perine bölgesinde olağan dışı yerleşim gösteren BHK'lı üç olgu sunduk. Hastaların öykülerinde bu bölgelerde BHK gelişimi açısından etyolojik herhangi bir predizpozan faktöre rastlanmamıştır. BHK'da metastaz riski çok nadir olmasına rağmen, tümör lokal agresif seyredebilir ve doku destrüksiyonuna neden olabilir. Bu nedenle; atipik lokalizyonlarda yerleşim gösteren lezyonlarda da BHK akla gelmesini vurgulamak amacıyla vakalarımız literatür eşliğinde tartışılarak sunulmaktadır.

Anahtar Kelimeler: Bazal hücreli karsinom, klinik varyant, atipik tutulum

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Received 28.08.2019 ***Accepted*** 26.12.2019 ***Online published*** 28.04.2020

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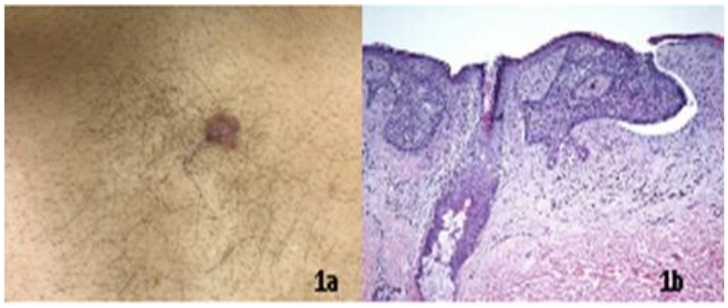
Cite this article as:
Karagun E, Gamsizkan M, Eyup Y, Bahcivan A, Ozcan Y, Buyucek S, Atypically Located Basal Cell Carcinoma: Three Case Reports, Osmangazi Journal of Medicine, 2020; 42(3): 334-338 ***Doi:*** *10.20515/otd.612342*

1. Introduction

Basal cell carcinoma (BCC), a non-melanoma skin cancer (NMSC), is the most common cancer in humans, and the incidence is rising. NMSC constitutes approximately 40% of all cancers in humans, while BCC represents 80% of NMSC. It arises from undifferentiated cells in the basal cell layer of the epidermis or from the outer root sheath of a hair follicle (1). It can be seen anywhere in the skin, although more than 80% occurs in areas exposed to the sun, such as the head and neck (2). We present three cases diagnosed histopathologically as BCC and located in the right lateral femoral, waist, and right perineal regions. These are discussed in the light of the current literature to emphasize their rare locations.

Case 1

A 71-year-old man presented to our clinic with a wound in the lumbar region persisting for the previous 10 years. Dermatological examination revealeda 1x1.5-cm oval, pink-violet colored lesion with distinct margins on the midline of the lumbar region (Figure 1a). His own and family background weren't notable. Biopsy was taken from the lesion with preliminary diagnoses of Bowen's disease, superficial BCC, and squamous cell carcinoma (SCC). Histopathological examination: revealed a tumor attached to the epidermis exhibiting invasion in the form of budding into the dermis. The tumor caused peripheral palisading and marked retraction artefact, and was diagnosed as superficial-type BCC (Figure 2b). Cryotherapy was applied to the lesion, and significant improvement was observed after the third session.



Figüre 1a. 1x1.5-cm oval, pink-violet colored lesion with distinct margins on the midline of the lumbar region
Figure 1b. Tumor islets attached to the epidermis causing peripheral palisading and marked retraction artefact in the form of budding into the dermis (H&E, x200)

Case 2

An 84-year-old man presented to our clinic with a wound on the lower extremity persisting for the previous 15 years. Dermatological examination revealed five pale pink, occasionally squamous lesions, one 2x1cm, three 0.5x0.5 cm, and one 1x0.5 cm in size, in the lateral femoral region of the right lower extremity (Figure 2a). Personal and family histories were unremarkable.

Histopathological examination: revealed a tumoral formation exhibiting minimal invasion to the dermis, widely attached by epidermis and with artefact retraction. Occasional mitosis, consisting of narrow cytoplasmic, hyperchromatic basaloid cells, was observed in the tumor. The tumor was diagnosed as superficial-type BCC (Figure 2b). Treatment could not be initiated since the patient did not continue with follow-ups.

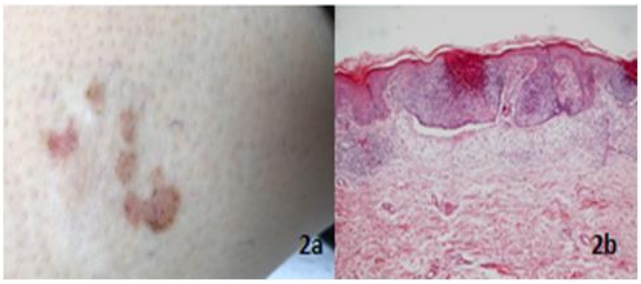


Figure 2a. Five pale pink, occasionally squamous lesions, one 2x1cm, three 0.5x0.5 cm, and one 1x0.5 cm in size, diffusely located in the lateral femoral region of the right lower extremity **Figure 2b.** Tumor islets consisting of narrow cytoplasmic, hyperchromaticbasaloid cells, widely attached by epidermis and exhibiting minimal invasion to the dermis (H&E, x200)

Case 3

A 70-year-old man presented to our clinic with a growing lesion in theinguinal region for the previous two years. Dermatological examination revealed a verrucous lesion with occasional erosion, 5x4 cm in size, in the right perineal region (Figure 3a). His own and family histories were unremarkable. Biopsy was taken from the lesion with preliminary diagnoses of squamous cell carcinoma (verrucous carcınoma, Buschke-Lowenstein tumor) and condyloma acuminatum. Histopathological examination: revealed tumoral infiltration consisting of basaloid cell nests causing superficial ulceration, with basaloid cells in a palisade in the periphery of the nests (Figure 3b). The tumor was diagnosed as BCC. The patient was referred to the plastic surgery unit for total excision of the lesion. Histopathological examination of the excised lesion was also reported as BCC.

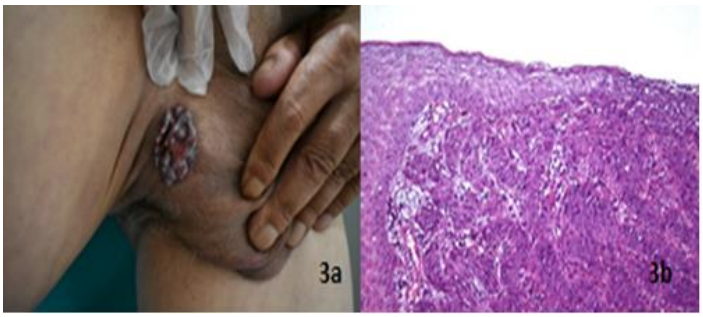


Figure 3a. Verrucous lesion with occasional superficial erosion, 5x4 cm in size, in the right perineal region **Figure 3b.** Tumoral infiltration consisting of basaloid cell nests causing superficial ulceration, with basaloid cells in a palisade in the periphery of the nests (H&E, x200)

2. Discussion

BCC is the most common malignant tumor in humans. It is frequently seen in areas exposed to the sun, such as the head and neck region. The tumor is very slow-growing, and apart from exceptional circumstances, it does not metastase and is therefore one of the malignant tumors with the best courses (3). It is more common in males than in females. The incidence of BCC increases with age, and mean age at diagnosis is 68 years (4). It is classified under three main groups, depending on the growth pattern noduloulcerative (62-70%), superficial multicentric (9-17.5%), and morphoeic/sclerosing (0.5-16.6%) (2). Based on histology, it is divided into nodular, micronodular, superficial, cystic, morpheaform, and infiltrative (5). Clinically, BCC frequently commences in the form of pink-red, bright, round-oval, shiny, papulonodular lesions exhibiting superficial

telangiectasia. The center may gradually become ulcerated, and the ulcerated areas are usually covered in a crust (6). Superficial BCCs are pink-red in color, squamous, and macule or patch-shaped, and the lesions may contain telangiectasia. The most commonly involved areas are the shoulders, chest or back, and multiple lesions may be present. Clinically, BCC may resemble inflammatory dermatoses such as eczema or psoriasis, and superficial BCC should be considered when permanent, erythematous, squamous lesions are encountered. Superficial BCC can sometimes turn into nodular BCC (7). The best prognosis in terms of clinical types is in the superficial multicentric type, while the morphoeic type, with very pronounced subclinical infiltration, exhibits the worst prognosis. Histopathologically, the superficial subtype possesses small basaloid cell islets in the epidermis, with no dermal invasion. This is therefore the BCC with the best prognosis (7). Metastatic BCC (1%) tumors exhibit more aggressive histopathological patterns (morphea form, basosquamous, perineural infiltration). Metastasis is generally to the regional lymph nodes, bones, and lungs. The majority of BCCs can be easily treated if diagnosed early (2,7,8).

BCC can be seen anywhere in the skin, although more than 80% occur in areas exposed to the sun, such as the head and neck, while 16% occur on the trunk, and 4% in the upper and lower extremities. BCC subtypes vary depending on the area of involvement. The nodular type is seen in the head and neck region, while the superficial multicentric type is more common on the trunk (2). Chang et al. investigated 243 BCC patients, and observed nodular BCC in 131 (53.9%), superficial BCC in 46 (18.9%), infiltrative morphoeic BCC in 45 (18.5%), micronodular BCC in nine (3.7%), and other subtypes in 12 (4.9%). BCC was most common in the head and neck region, in 188 patients (77.4%), followed by the trunk in 34 (14.0%), and the extremities in 21 (8.6%) (upper extremity in two, and lower extremity in 19) (2). Pranteda et al. determined locations of the head in 197 out of 306 patients (64.4%), the neck in six (1.9%), the trunk in 73 (23.9%), the perineum in two (0.6%), the upper extremity in four (1.3%), and the lower extremity in 24 (7.9%). They identified BCCs as generally nodular in the head and neck region (44.7%), and superficial in the trunk (34.3%), while all BCCs in the lower extremity were ulcerated lesions (9). In our series, lesions were in the lumbar region in patient 1, the right lateral femur in patient 2, and the right perineal region in patient 3. Our first and second patients were diagnosed with superficial. Implicated factors in BCC developing in these regions that are rarely exposed to the sun include chronic irritation, trauma, arsenic, immunosuppressive drugs, and radiation (3). Other factors capable of increasing the risk of BCC development include genodermatoses (basal cell nevus syndrome, Bazex syndrome, epidermolysis bullosa simplex, oculocutaneous albinism, Rombo syndrome, and xeroderma pigmentosum) (10). The human papilloma virus is the agent in perianal region squamous cell carcinomas, but does not constitute a risk factor the development of BCC (11). No cause has been identified in patients investigated in terms of predisposing factors.

Approximately 100 cases of perianal region BCC have been described to date (11). The lesion in our second patient, with superficial BCC, was chronic eczematous in type. The lesion in our patient with BCC in the perianal region was verrucous in form, in contrast to clinically observed subtypes.

In conclusion, although BCCs are seen in the head and neck region, they must also be considered in atypical locations. They should be considered in lesions resembling inflammatory dermatoses with a long-term history and at differential diagnosis of verrucous lesions in the perianal region.

Written informed consent was obtained from the patients to publish their photographs.

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