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Nodular basal cell carcinoma in non-exposed skin: a case report

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Abstract

Basal cell carcinomas (BCC) are among the most common cancers in humans. It generally occurs on sun-exposed areas of the body. The incidence of BCC increases with age. Rarely, BCC can arise on areas unexposed to sunlight such as perianal, groin and genital region. The etiology of basal cell carcinoma is not known. Basal cell carcinoma in the groin can recur following simple excision, and metastases have been reported. Early diagnosis is the most important factor in the treatment of basal cell carcinoma. We report the case of a 68 year old woman who presented with an unusual case of basal cell carcinoma located in the groin.

Key Words: Basal cell carcinoma, vulva, groin

Introduction

Basal cell carcinoma (BCC) is the most common malignancy of the skin. BCC predominantly occurs on sun-exposed and sun-damaged skin [1]. Accordingly, about 75% of BCC occur on the head and neck, with only about 10 % found on the non-sun-exposed trunk. However, BCC may also develop in relatively sun protected areas, such as buttock, groin, and axilla as well as in completely covered skin such as perianal and genital regions. The etiology of the tumor is unknown, but lifetime ultraviolet radiation damage is the most important factor in etiopathogenesis [1,2,3]. We report the case of a 68- year- old female patient who presented with an unusual case of BCC located in the groin.

Case Report

A 68-year-old female presented with an itchy, bleeding lesion of ten years duration on the left upper aspect of the vulva. The lesion had enlarged slowly. Recently, the lesion grew up, became

ulcerated and started to bleed. Physical examination, revealed a partially hyperpigmented, well-demarcated nodulo-ulcerative lesion **(Fig 1)**. The diagnosis of BCC was confirmed with incisional biopsy. Inguinal lymph nodes were not palpable. Neither ultrasonography nor CT detected any intraabdominal metastases. Then, wide local excision of the tumor was performed as a curative treatment choice. No recurrence or metastasis occurred during the next six months. Macroscopic examination of the excised specimen revealed a nodulo-ulcerative lesion with an elevated telangiectatic border measuring approximately 2.5x2 cm in size with the surrounding skin from the groin. Histopathological examination revealed large lobules of basaloid cells with peripheral palisading nuclei that project into the reticular dermis and deeper, under the thinned ulcerated surface epithelium. Cleft formation and melanin deposits were present. Final pathological examination of the excisional biopsy was reported as nodular type BCC **(Fig 2)**. The lateral and deep excisional margins were all free of the tumor.

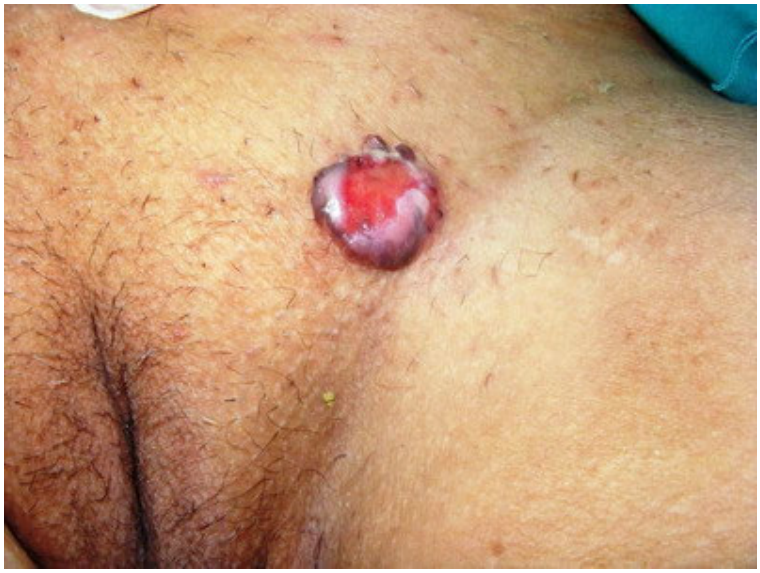

Fig 1: Basal cell carcinoma in the groin (nodular type). The lesion is well defined.

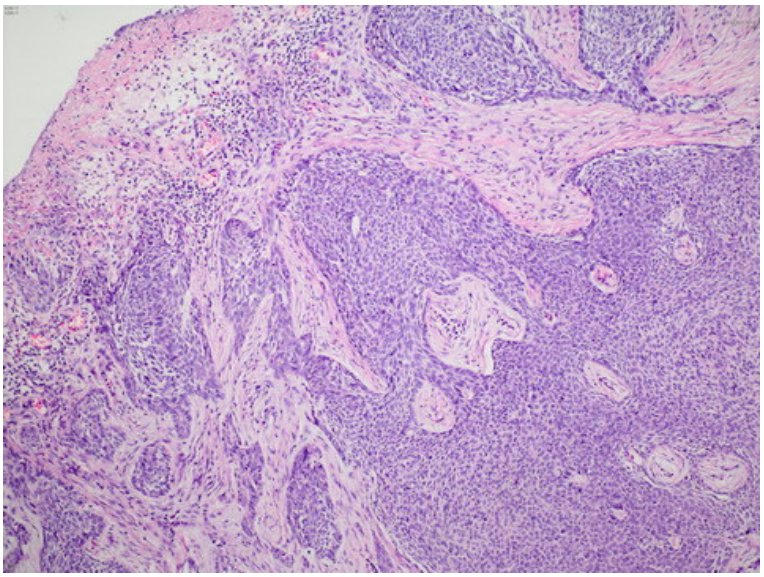

Fig 2: Basal cell carcinoma, nodular type. The nodular aggregates of basaloid tumor cells, with peripheral palisading, are invading the dermis (H&EX100).

Discussion

BCC is the most common type of human cancer. It develops predominantly on the head and neck (%75) and rarely on the trunk and limbs [1,2]. The lesion was located in the groin, which is an uncommon location for BCC. BCC in the groin often causes symptoms such as discomfort, pain, bleeding, and pruritus that may be the presenting sign. BCC in the groin may manifest as any type of clinical BCC. Usually, it is presented as nodular or ulcerated lesion like in our case. However, it may also have a non-specific and indolent clinical appearance. It may mimic other dermatological pathologies such as eczema, psoriasis and seborrheic keratosis. Therefore, all suspicious skin lesions must be biopsied for early diagnosis. The lesions were presented as ulcerated (28%) and pigmented (3%).[4,5] Our case is 68-years old and lesion size was 2.5 cm both ulcerated and pigmented.

The pathogenesis of BCC on completely covered anatomical sites of the body is unknown. Risk factors include radiotherapy to the pelvic region, chronic irritation, chronic vulvovaginitis, chronic exposure to arsenic, X-ray treatment, local trauma, certain genetic conditions such as basal cell nevus syndrome and xeroderma pigmentosum. The role of ultraviolet radiation is conflicting. Human papillomavirus (HPV) types, that seem to play a co-carcinogenic role in non-melanoma skin cancers, have been detected exceptionally in genital BCC. On the other hand, mutations in the p53 gene may contribute to the development of BCC [6,7,8,9].

Metastatic BCC is a rare entity, with an incidence of 0.0028 to 0.1 %. The mean time from initial presentation to metastasis is 9 years. Metastatic BCC in the groin was noted usually in aggressive histologic patterns (e.g., morpheaform, metatypical type) Metastasis of regional lymph nodes and perineural invasion were reported [10,11]. In our case, BCC is diagnosed as nodular type. Metastasis, perineural invasion and lymphatic involvement were not present.

Successful BCC treatment depends on a high cure rate, good cosmetic results, low treatment

costs, and high patient satisfaction. There are several reports in literature on recurrence rates. In a large series with 278 patients, the recurrence rate was 2.8% . Surgical excision is the most commonly used method of treatment [7,12]. In our case we performed a wide local excision. Surgical margins were tumour negative. Local recurrence and metastases were not found.

In conclusion, any chronic, persistent lesion in the groin, especially in elderly women should be subjected to histological examination. Clinical appearance of BCC in the groin is similar to that of other diseases; therefore clinicians should be careful to avoid misdiagnosis.

References

1. Kikuchi M, Yano K, Kubo T, Hosokawa K, Yamaguchi Y, Itami S. Giant basal cell carcinoma affecting the lower abdominal, genital and bilateral inguinal regions. Br J Plast Surg.55;2002:445-8.

2. Sahl WJ, Snow SN, Levine NS. Giant basal cell carcinoma. Report of the cases and review of the literature.J Am Acad Dermatol.30;1994:856-9.

3. de Giorgi V, Salvini C, Massi D, Raspollini MR, Carli P. Vulvar basal cell carcinoma: retrospective study and review of literature.Gynecol Oncol.97;2005:192-4.

4. Beckenstein MS, Windle BH. Basal cell carcinoma in the groin of a black patient with femoral vessel invasion and a second primary malignancy. Plast ReconstrSurg.98;1996:872-5.

5. Kanitakis J, Vidal EA, Faure M. Extensive pigmented vulvar basal-cell carcinoma presenting as pruritus in elderly women. Dermatology Online Journal17(1);2011:8.

6. Pfister H, Ter Schegget J. Role of HPV in cutaneous premalignant and malignant tumors. Clin Dermatol.15(3);1997:335-47.

7. K?se R, Tuna ABK, Saral Y. Clinical and histopathologic finding of basal cell carcinomas on completely covered anatomical sites of the body. Eur J Plast Surg 33 (4);2010:177- 81.

8. Gilchrest BA, Eller MS, Geller AC, et al. The pathogenesis of melanoma induced by ultraviolet radiation. N.Engl J Med.340;1999:1341-8.

9. Barret TL, Smith KJ, HOdge JJ, Butler R, Hall FW, Skelton HG. İmmunohistochemical nuclear staining for p53, PCNA, and Ki-67 in different histologic variants of basal cell carcinoma. J Am Acad Dermato.37;1997:430-7.

10. Mulayim N, Foster Silver D, Tolgay Ocal I, Babalola E. Vulvar basal cell carcinoma. Two unusual presentation and review of the literature. Gynecol Oncol.85(3);2002:532-7.

11. Farmer ER, Helwig EB. Metastatic basal cell carcinoma:a clinicopathologic study of seventten case. Cancer.46;1980:748-57.

12. Thomas J, Mc KiernanM, Rao GS. Basal cell carcinoma: how long a follow-up is needed? . Eur J Plast Surg.19;1996:318-9.