ASFALT ZİFTİNE BAĞLI GELİŞEN NON-SENDROMİK BAZAL HÜCRELİ KANSER: BİR OLGU SUNUMU

Non-syndromic Basal Cell Carcinoma Due to Asphalt Bitumen: A Case Report

Pınar ÖZUGUZ[1], Seval DOGRUK KAÇAR[1], Vildan MANAV[1], İlyas ÖZARDALI[1]

[1]Afyon Kocatepe Üniversitesi, Tıp Fakültesi, Dermatoloji Anabilim Dalı, Afyon

ÖZET

Bazal hücreli karsinom (BHK), en sık görülen deri kanseridir. Erkekler kadınlara göre biraz daha sık etkilenir. BHK etyopatogenezinde immün yetmezlik, iyonize radyasyon, sebase nevus, skar dokusu, genetik yatkınlık, açık göz ve saç rengine sahip olmak, arsenik maruziyeti gibi predispozan faktörlerin yanında direkt olarak güneş maruziyeti suçlanmaktadır. BHK genellikle tek lezyon şeklinde görülmekle beraber, özellikle de predispozan sendromlarla nadiren birden fazla lezyon oluşabilir. Öte yandan, çok sayıda lezyon olduğunda nüks olması da nadirdir. Burada sendromik olmayan, risk faktörü olarak çocukluk döneminde saç çıkarması amacıyla kafa derisi için lokal olarak zift kullanan, birden fazla ve tekrarlayan BHK'li 67 yaşındaki bayan hastayı bildiriyoruz.

Anahtar kelimeler: *Bazal hücre karsinom; Asfalt zifti; Kimyasal karsinojenler,*

ABSTRACT

Basal cell carcinoma (BCC) is the most common form of skin cancer. Men are affected slightly more often than women. Ethiopathogenesis of BCC is directly related to sun exposure while genetic predisposition, immune deficiency, ionizing radiation, sebaceous nevus, scar tissue, light eyes and hair, history of exposure to arsenic are all considered as predisposing factors. Although BCC typically occurs as a single lesion, multiple lesions may rarely occur especially in predisposing syndromes. On the other hand, recurrences in multiple lesions are rare. Here we reported the patient 67 year-old female patient with non-syndromic multiple and recurrent BCC who as a risk factor previously used tar on to her scalp to provide hair regrowth in childhood.

Keywords: *Basal cell carcinoma; Bitumen tar; Chemical carcinogenesis;*

Pınar ÖZUGUZ, Yrd. Doç. Dr.
Seval DOGRUK KAÇAR, Yrd. Doç. Dr.
Vildan MANAV, Dr.
İlyas ÖZARDALI, Doç. Dr.

İletişim:
Yrd. Doç. Dr. Pınar ÖZUGUZ
Afyon Kocatepe Üniversitesi,
Tıp Fakültesi, Dermatoloji
Anabilim Dalı, Izmir Yolu 8.Km Afyon
Tel: 00902722463300
e-mail:
pozoguz@yahoo.com.tr

Geliş tarihi/Received: 11.10.2013
Kabul tarihi/Accepted: 25.04.2014

Bozok Tıp Derg 2014;4(3):87-9
Bozok Med J 2014;4(3):87-9

Bozok Tıp Derg 2014;4(3):87-9
Bozok Med J 2014;4(3):87-9

INTRODUCTION

Basal cell carcinoma (BCC) is the most common form of skin cancer. Etiology of BCC is multifactorial, environmental factors on genetic basis seem to play role (1,2). Here, we reported the patient with non-syndromic multiple and recurrent BCC who used tar on her scalp in childhood.

CASE REPORT

A 67 year-old female patient, phototyped II, was admitted to our clinic in February 2012. She presented with complaints of multiple variable-sized, itchy, slow-growing lesions on her scalp and face. After a histopathologic examination performed from the oldest lesion on right temporal lesion, she was diagnosed as BCC and similar lesions over the past 12 years had gradually developed on right parietal region, vertex, forehead and left temporoparietal region. These lesions were excised by plastic surgery. Subsequently, the patient was treated with imiquimod 5% and cryotherapy intermittently, but recurrences occurred. She had no history of sun or ionizing radiation exposure. But, she had a history of using tar on to her scalp to provide hair regrowth in childhood. The family history of skin cancer was negative. At the latest follow up examination in January 2013, the patient revealed recent multiple hyperpigmented and crusted papules and nodules ranging between 0.5-1.2cm in size, localized in the left zygomatic region, right parietal region and right preauricular region (Figure1,2).



Figure 1: The multiple hyperpigmented and crusted papules and nodules localized in the left zygomatic region

Diagnostic skin biopsy from the right preauricular region revealed as BCC and all of them were surgically removed. The patient had no additional anomalies (mandibular cyst, palmar and plantar pitting, costal abnormalities, ectopic calcification of the dura, mental retardation etc.) suggestive of Gorlin or Basex Syndrome.



Figure 2: The multiple lesions that right parietal region and right preauricular region

DISCUSSION

Non-melanoma skin cancers are the most common neoplasms that gradually increased in the recent years. BCC consists of nearly 90% of all head and neck non-melanoma skin cancers. Etiology of BCC is multifactorial, environmental factors on genetic basis seem to play role. Sunlight is the most important environmental factor in its pathogenesis, therefore four main questions to assess UV exposure are available, as; predisposition to the formation of sunburn, more than 25 years history of sun exposure, living in a sunny place for more than a year, and sun-protection behaviour. Other risk factors thought to play role in BCC are male sex, elder age, light hair colour, light eye colour, alcohol consumption, cigarette smoking, high body mass index, and low educational level.

In addition, chemicals as arsenic or immunosuppressant drugs may be a cofactor in development of BCC (1,2). BCC characteristically, develops as a single lesion especially on sun exposed areas and the occurrence of multiple lesions are very seldom. The presence of multiple BCC is usually associated with syndromes. The most common syndromes being responsible are multiple BCC Syndrome (Gorlin's Syndrome) or nevoid BCC Syndrome or Muir-Torre syndrome and Basex Snydrome (3,4). Our patient had multiple lesions, which were diagnosed as BCC, that were not related to any syndrome. In a literature search, we did not find any similar case. On the other hand, non-syndromic but hereditary BCC or multiple BCC have been reported in literature (5-7). Our case had no positive family history. In addition, in the history of patient there were neither extensive long-term exposure to UV radiation nor were memorable sunburns. Although BCC more frequently affects male sex, our case was a female. In the recent years, the increasing number of women entering male-dominated business world has also increased the development of BCC among female population. Age is also an individual risk factor, although already known, patients who developed the first lesion before 65 years of age are significantly more likely to develop multiple lesions. Robin et al. was reported the recurrent BCC in young women in 1975 (8). Interestingly, our patient previously used tar on to her scalp in childhood. In 1985, Tsyrkunov et al. reported occurrence of multiple basalioma in asphalt workers. Additionally, in 1992, Dietz et al. observed squamous cell cancer of the larynx formed after exposure tar vapour. These reports point out the carcinogenic potential of tar (9,10). To our knowledge, there are few case reports describing an association between a malignant process and tar exposure.

CONCLUSION

We consider that dermatologists must be more cautious about the risk profiles of nonhereditary, non-syndromic multiple BCC. Moreover, we recommend careful history taking in patients who suffer from multiple, recurrent BCC lesions, especially ask for tar exposure in addition to sun or ionizing radiation exposure. Consequently, further epidemiological investigations on nonhereditary, non-syndromic multiple BCC should be planned.

REFERENCES

1. Lacour JP. Carcinogenesis of basal cell carcinomas: Genetics and molecular mechanisms. Br J Dermatol. 2002;146(61):17–9.
2. Kossard S, Epstein EM, Cerio R, Yu LL Weedon D. WHO Classification of tumors. In LeBoit PE, Burg G, Weedon D, Sarasin A, eds. Pathology and Genetics of Skin tumors. Vol.1. Lyon: IARC-Press, 2006. pp. 13–9.
3. Kiiski V, de Vries E, Flohil S.C, Bijl M.J, Hofman A, Stricker B.H.C, et al. Risk Factors for Single and Multiple Basal Cell Carcinomas. Arch Dermatol. 2010;146(8):848-55.
4. Itin PH, Happle R. Non-syndromic hereditary basal cell carcinomas: a reduplicated discovery. J Eur Acad Dermatol Venereol. 2009; 23(10):1219-20.
5. Ferreira CB, Diniz LM, Filho JBS. Multiple basal cell carcinomas in the pubic area in a patient with skin type IV - Case report. An Bras Dermatol. 2011;86(3):589-91.
6. Terzioğlu A, Ateş L, Aslan G, Sarifakioglu N. Nonsyndromic Multiple Basal Cell Carcinoma on the Face: Case Report. T Klin J Med Sci. 2002;22(6):409-12.
7. Aigner BA, Darsow U, Grosber M, Ring J, Plötz SG. Multiple basal cell carcinomas after long-term exposure to hydrazine: case report and review of the literature. Dermatology. 2010;221(4):300-2.
8. Robins P, Albom M. Recurrent basal cell carcinoma in young women. J Dermatol Surg. 1975;1(1):49-51.
9. Tsyrkunov LP. Multiple basalioma in an asphalt-laying worker. Vestn Dermatol Venerol. 1985;(2):48-51.
10. Dietz A, Maier H. Squamous cell cancer of the larynx after exposure to tar vapor--a case report. HNO. 1992;40(9):360-3.