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Case Report / Vaka Sunumu
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Keratoacantoma Like Squamous Cell Carcinoma and Basal Cell Carcinoma, Collision Tumor in the Skin

Keratoakantoma Benzeri Skuamöz Hücreli Karsinom ile Bazal Hücreli Karsinomun Kollisyon Tümörü

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ABSTRACT

Collision tumor refers to two or more different neoplasms within the same lesion. This tumor was considered to be coincidental, or formed as a response to epithelial and stromal changes developed in one of these tumors. Collision tumors of the skin are very rarely seen. We present herein a 48-year-old woman with a nodular lesion on the nose. The histological examination showed the presence of a collision tumor with keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma developed in the same lesion. The first tumor was composed of deeply infiltrated solid squamous cell islands with keratinization. At the bottom of the keratoacanthoma-like areas, there were malign tumor with keratinized squamous cell islands with invasion to the dermis. Adjacent to this area, basal cell islands demonstrating peripheral palisading row of cells. So, we evaluated it as a collision tumor.

Keywords: *Skin cancer, basal cell carcinoma, collision tumor*

ÖZ

Kollisyon tümör aynı lezyonda iki ya da daha fazla tümörün birlikte görülmesidir. Bu tümörlerin rastlantısal ya da tümörlerden birinde gelişen epitelyal ve stromal değişikliklere yanıt olarak ortaya çıktığı düşünülmektedir. Derinin kollisyon tümörleri nadir görülür. Bu olguda, 48 yaşında kadın hastanın burun üzerinde yerleşimli nodüler lezyonu sunulmuştur. Histopatolojik incelemede aynı lezyonda gelişen keratoakantoma benzeri skuamöz hücreli karsinom ve bazal hücreli karsinomun kollisyon tümörü gösterilmiştir. İlk tümör derine uzanım gösteren keratinize skuamöz hücre adalarından oluşmaktaydı. Keratoakantoma benzeri alanların zemininde dermise invaze atipik skuamöz hücre adaları izlendi. Bu alanlara bitişik periferal palizatlama gösteren bazofilik hücre adaları izlendi. Bu nedenle kollisyon tümör olarak değerlendirildi.

Anahtar kelimeler: *Deri kanseri, bazal hücreli karsinom, kollisyon tümör*

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INTRODUCTION

A collision tumor, which is very rare skin disease, exist with two or more distinct neoplasms existing within the same lesion[1]. Collision tumors on the skin have been observed to include benign and malign neoplasms[2]. Squamous cell carcinoma is locally invasive and has the capacity to metastasize[3]. Squamous cell carcinoma may be seen with other tumors within the same lesion. We report here a 48-year-old woman with a nodule on the nose for a very long time. The purpose of our study was to present a collision tumor with keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma.

CASE REPORT

A 48-year old woman presented with a chronic hyperkeratotic nodule on the nose. The lesion was completely excised and sent to department of pathology. The lesion was 1 cm in size. Histology revealed the presence of two adjacent tumors. These were keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma. The first tumor was composed of deeply elongated and merged solid islands of large, pale squamous cells with keratinization. At the bottom of the keratoacanthoma-like areas, there were malign tumor islands with atypical squamous cells with invasion to the dermis. Near this area and the collision to the squamous cell carcinoma, there was basal cell carcinoma. This tumor demonstrated aggregates of basophilic staining neoplastic cells with well-defined contours palisading off the peripheral row of cells. Desmoplastic stroma was also seen (Fig. 1-2). In the same lesion, there were two tumors, apart from each other. So, we concluded that it was a collision tumor.

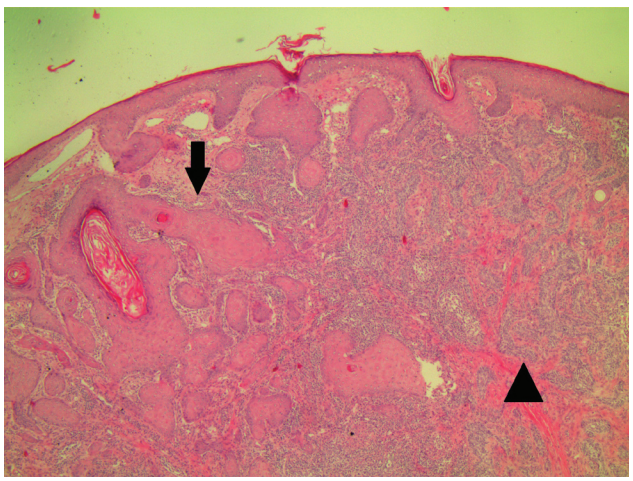

Figure 1. X40 HE (Hematoxylin-Eosin) Keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma (arrow: keratoacanthoma-like squamous cell carcinoma, arrow head: basal cell carcinoma).

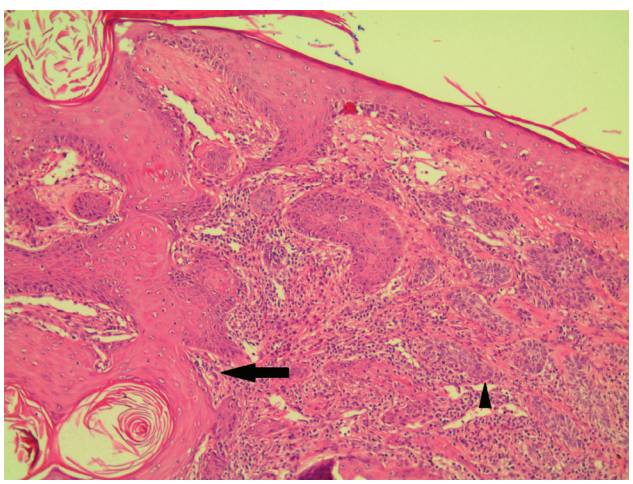

Figure 2. X100 HE (Hematoksilen-Eosin): Keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma (arrow: squamous cells, arrow head: basaloid cells).

DISCUSSION

A collision tumor on the skin refers to two adjacent tumors in the same lesion[1,2]. This tumor was considered to be coincidental, or the presence of one tumor may undergo epithelial and stromal changes which are responsible for the development of the other tumor[1].

A study by Moscarella et al.[2] examined 24 collision tumors. The patients' ages ranged from 45 to 87 years of age. The most commonly detected malignancy was basal cell carcinoma. Basal cell carcinoma and seborrheic keratosis were the most common collision tumors. Squamous cell carcinoma and basal cell carcinoma were not seen together in a collision tumor.

Squamous cell carcinoma is a tumor which is locally invasive and has the capacity to metastasize[3]. Histopathologically, it is necessary to differentiate benign and malignant neoplasms[3].

Squamous cell carcinoma coexists with other malignant skin tumors within the same lesion. The most common combination is squamous cell carcinoma and malignant melanoma[3].

Keratoacanthoma is a squamous proliferative lesion which is characterized by frequent spontaneous resolutions[3,4]. Keratoacanthoma is a squamous cell proliferation with an invaginating and crateriform mass surrounding a keratin plug. There is no dermal invasion and stromal desmoplastic reaction pattern

as in the case of squamous cell carcinoma[5]. Some authors accepted keratoacanthoma as a low-grade squamous cell carcinoma, while others stated that it may show malignant transformation into squamous cell carcinoma[5,6].

It is difficult to distinguish keratoacanthoma from squamous cell carcinoma due to their similarities[4,5]. Squamous cell carcinoma causes ulceration, asymmetry, deep dermal invasion, anaplasia and numerous of mitoses[7]. In differential diagnosis, clinical follow-up and pathological examination are very important[4]. Moreover, squamous cell carcinoma may be a tumor which metastasizes, while keratoacanthoma does not metastasize[4].

Keratoacanthoma-like squamous cell carcinoma is a borderline tumor between keratoacanthoma and squamous cell carcinoma[7]. It is a lesion which histopathologically resembles keratoacanthoma, but its cellular morphology is too atypical[7].

A study by Arnault et al.[5] examined 13 skin lesions associated with sorafenib therapy. Five of these were diagnosed as keratoacanthoma-like squamous cell carcinoma. These tumors were characterized with a crateriform pattern by pushing borders and disorderly nests which invaded the dermis[5].

Basal cell carcinoma is the most commonly seen skin tumor[8]. Neoplasms may be seen on areas that have been exposed to sunlight such as head and neck[8]. It is characterized by basaloid cells which have small round nuclei and scanty cytoplasm[8]. Usually increased stromal mucin production in a cleft between the nests of the tumor and stroma, and a peripheral palisading were observed[8]. Basal cell carcinoma may be seen most frequently in collision with actinic keratosis and seborrheic keratosis[8].

A study by Jee et al.[9] presented a collision tumor with basal cell carcinoma and seborrheic keratosis.

In the literature, no study presented a case of keratoacanthoma-like squamous cell carcinoma and basal cell carcinoma together. So, we emphasized this collision tumor and the importance of differential diagnosis.

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