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**Olgu Sunumu**

# Basal Cell Carcinoma Arising from Vaccination Site

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**Abstract**
Basal cell carcinoma (BCC), a malign tumor of skin and mucous membranes that occur in areas with the dense concentration of follicles. The majority of basal cell carcinoma is originated from hand, back and face that are exposed to UV radiation. Also burned areas, scar tissues, chronic ulcers, hydradenitis suppirativa, ionized radiation, chemical carcinogens are responsible at etiology. But BCC that arising from vaccination site has been infrequently described in the medical literature. In this case report we reported a 53-year-old man with a BCC lesion on his right deltoid region where has been vaccinated 22 years ago.
**Key words:** Basal cell carcinoma, vaccination

**Özet**
Bazal hücreli karsinom, deri ve müköz membranların özellikle derinin kıl folliküllerinin yoğun olduğu bölgelerinde gelişen, yüz ve el sırt gibi güneşle maruziyetin fazla olduğu bölgelerde görülebilen malign bir neoplazidir. Ayrıca; yanık, skar, kronik ülser, hidradenitis süpürativa, iyonize radyasyon, ve kimyasal karsinojenler gibi bazı etkenler de hastalığın etyolojisinden sorumlu tutulmaktadır. Fakat medikal literatürde aşı sonrası gelişmiş BCC olgusuna nadir rastlanmaktadır. Bu olgu sunumunda 22 yıl önce deltoid bölgesine aşı yapılmış 53 yaşındaki erkek hastada bu bölgede gelişen BCC lezyonunu sunduk.
**Anahtar kelimeler:** Bazal hücreli karsinom, aşılama

## Introduction

Basal cell carcinoma a malign tumor of the skin that occur in areas with the dense concentration of follicles. It arise from the basal layer of the epitelium and the external sheat of the hair follicle. UV radiation is the most common at ethiology[1]. Also there is a correlation between xeroderma pigmentosum and basal cell carcinoma[2]. Its most seen at head and neck. The nose is the area with the highest frequency of primary tumors; the periorbital area and ear have the highest incidence of recurrent lesions[2].The majority of basal cell carcinoma is occur in male but incidence in female is increasing. Burn scar, post-traumatic skin lesions, immunosuppression are the other reasons for basal cell carcinoma[1].

Malignant change at vaccination site has been infrequently described in the medical literature. Panizzon et al reported a case at 31-year-old patient with a basal cell nevus syndrome from basal cell carcinoma vaccination site[3]. In 1992 Braithwaite et al reported a young woman arising basal cell carcinoma from BCG vaccination scar[4]. In this case we reported a basal cell carcinoma lesion at deltoid area that occurred after vaccination procedure.

## Case Report

A 53-year-old man admitted us with a hyperkeratotic lesion on his right deltoid region. He had been vaccinated in the right deltoid area 22 years ago. After vaccination a small pustule like lesion has occurred at his right deltoid region. Twenty-two years later it has become a 2x3,5 cm irregularly pigmented, exophytic lesion on the right deltoid area (Figure 1). Upon careful questioning the patient suggested that the lesion had arisen in precisely the area of the vaccination. There was no other scar or lesion on the right deltoid region. No lymphatic nodes were palpable at the right axilla and supraclavicular area.

Figure 1: Preoperative photo of the lesion

We took a biopsy from the lesion. It was reported as basal cell carcinoma (Figure 2, 3). Then we

excised it with a 0, 5 cm margin and made a flap at defect site.

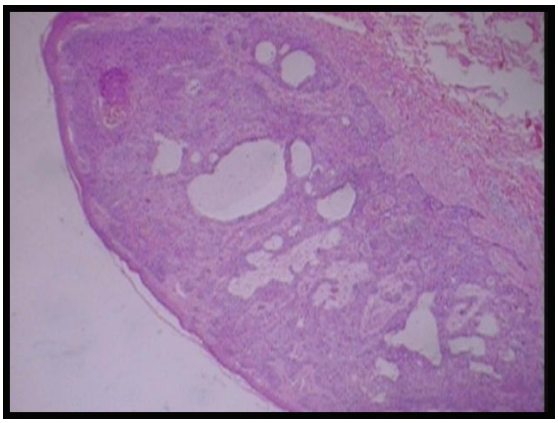

Figure 2: X40 HE Basaloid tumor cells budding from epidermis.

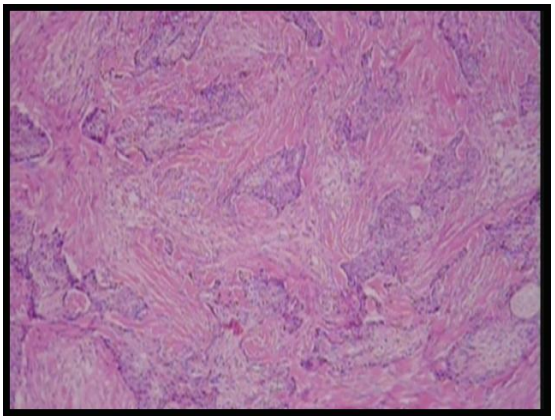

Figure 3: X100 HE Basaloid tumor cells, forming nests in dermis. There is peripheral palisating of basal cells around these nests.

**Discussion**

Basal cell carcinoma most seen at head and neck. The nose is the area with the highest frequency of primary tumors; the periorbital area and ear have the highest incidence of recurrent lesions[2].

Although neck and head account for nearly 85% of tumors, it can be seen at the other areas. Ban et al have been reported a case that basal cell carcinoma at external auditory canal[5]. In 2006, Giuliani et al have shown a basal cell carcinoma at vulva[6]. Nazari et al reported a case that have a lesion in her perineum. In their case, chronic irritation secondary to long-term chronic candidiasis in the presence of diabetes mellitus may have been cause to the development of basal cell carcinoma[7].

Malignant tumors have been described that occured at vaccination areas. Escudero Nafs et al reported a basal cell carcinoma from vaccination site[8]. Rich et al described a basal cell carcinoma arised from 56-year-old woman's left deltoid area after revaccination[9].

In our case we reported a basal cell carcinoma at deltoid region- a rare locality- after vaccination. However, long term follow- up of larger number of cases would be shown us the other interesting etiologic factors of the tumor.

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