

CASE REPORT

A Case Report of Complicated Multiple Facial Basal Cell Carcinoma Treatment in a Young Woman

Aleksandrs Derjabo ^{*,**}, Ingrida Cema^{*,**}, Sergejs Isajevs^{**}, Simona Donina^{*,**}

^{*}Rīga Stradins University, Latvia

^{**}RECUH Latvian Oncology centre, Riga, Latvia

Summary

A 36-year-old woman was consulted in Riga Eastern Clinical University Hospital Latvian Oncology centre Outpatient Department with multiple histology-proven basal cell carcinomas. The patient was treated with diode laser 980 nm and immunotherapy and had 5 years disease free survival.

Key words: multiple facial basal cell carcinoma, treatment, laser, immunotherapy.

AIM OF THE DEMONSTRATION

Basal cell carcinoma (BCC) is the most common skin cancer over the world. BCC is a non-melanocytic skin cancer with slow growth tendency and low mortality. BCC typically appears on sun-exposed skin (face, neck). High relapse risk (until 40%) is common for BCC. However, there is no common opinion on the most efficient method for BCC treatment – method, which would ensure the highest possibility of non-relapse and good cosmetic result. In order to evaluate the most appropriate method for BCC treatment longitudinal 5-year follow-up period is required.

CASE REPORT

36-year old patient was consulted in Latvian Oncology centre Riga Eastern Clinical University Hospital with multiple (8) tumors on face skin (5 on cheek and 3 on chin) (Fig.1). Punch biopsy of tumours was performed and morphological diagnosis of basal cell carcinoma with adnexal differentiation (trichobazalioma) was recognised.



Fig. 1. Five small BCC tumors on the chin

After consultation with maxillo-facial surgeon on February 22, 2006 second consultation was done by oncologist - laser surgeon due to high sensitivity to expected cosmetic result. To remove all lesions two level laser surgery was suggested: level I – for 5 tumours on cheek with a tumour diameter 2-3 mm, level II – for 3 tumours on chin up to 4 mm diameter. On March 8, 2006 laser surgery on left cheek was performed. (Fig.2).



Fig. 2. State after laser surgery

A cytological analysis of tumours showed basal cell carcinoma with inflammation and hyperkeratosis. It was consistent with morphological report. (Fig.3).

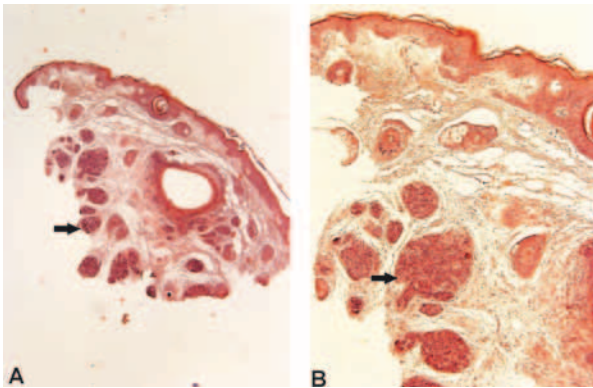


Fig. 3. Basal cell carcinoma with adnexal differentiation. A - The overall view shows the presence of adnexal differentiation including basaloid buds and prominent tricholemmal and follicular differentiation (black arrow). B - High power view showing groups of atypical basaloid with peripheral palisading cells (black arrow). A- magnification×40; B- magnification×200 Hematoxylin-eosin.

On March 22, 2006 second level laser surgery was completed for 3 tumours on chin. After scar-healing (Fig.4) immunologist consultation was allocated. On May 8, 2006 cellular immune parameters were determined and immune therapy was assigned.



Fig. 4. Clinical outcome 1 month after laser surgery

From November 2006 until December 2010 patient received eight courses of immunomodulation with interferon (IFN) inducer and proteolytic enzymes. The number of CD16+NK cells at the beginning of the therapy had decreased and there were no signs of T system deficiency.

Immunomonitoring was performed during the therapy; cellular immune response was evaluated by measuring CD3+, CD4+, CD8+, CD16+, CD19+, CD38+ and CD95+ cells.

Absolute count of T cell subsets was relatively stable during the therapy. Number of CD16+ cells and activated lymphocytes were slightly increased. During the last control visit on December 27, 2010 no signs of relapse were seen in all 8 places. Also there were no signs of any other suspicious new skin lesion.

DISCUSSION

BCC is a common form of skin cancer, however, quite rare in young age (1, 5). Highlighted case demonstrates complication of diagnostics – the discrepancy between clinical (viral infection) and histological diagnostics (BCC) – as well as difficulty to choose correct treatment method. The age of patient (36 years) and multiple tumours (8) on face forced to search for two-fold method – the most reliable way of treatment (without recurrence) and also the most suitable from the esthetical point of view. Traditionally, surgery, radiation therapy and cryosurgery are used for BCC treatment (2, 4, 5, 6). However, all these methods can lead to rather unsatisfactory cosmetic result in case of multiple tumours, especially located on face. Therefore, laser surgery method was chosen to minimize complications (6). Laser surgery was performed ambulatory under local anaesthesia without any local complications. In addition, the postoperative period was without complications. The patient was able to work and the quality of life was not decreased. All postoperative scars were normothrophic. Immune therapy was assigned to ensure lower risk of new BCC occurrence.

Presented patient with multiple basal cell carcinomas had insufficiency of non-specific effector phase of cellular immunity, which leads to the deviation in antitumor immune response.

IFN plays an important role in tumour microenvironment. Induction of cytokine in the innate and adaptive immune cells could help to overcome tumour escape from immunological control. Production of IFN- α is able to enhance Th-1 mediated cellular antiviral and antitumor immunity (8). Various studies demonstrated clinical efficacy of cytokines and other immune response modifiers in the treatment of basal cell carcinoma (3,7). To reach remarkable cosmetic result for multiple BCC with a 5-year disease free survival a treatment should be enabled by multidisciplinary team.

Conflict of interest: None

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Address:

Aleksandrs Derjabo
Outpatient Department Riga Eastern Clinical University
Hospital,
4 Hipocrata street, Riga, LV-1079, Latvia
Tel.: +37129542195
E-mail: aleksandrs.derjabo@aslimnica.lv