

Case Study:



Basal Cell Carcinoma Post-Surgical Scar

PCCA PracaSil™-Plus

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Abstract: Basal cell carcinoma is a type of skin cancer that often leads to surgical excision of the affected area, which results in destruction of the tissues and skin scarring. The purpose of this case study is to discuss the management of a basal cell carcinoma post-surgical scar using PracaSil-Plus in a 41-year-old Caucasian male. The POSAS Patient Scale (adapted) was the research instrument used to evaluate the efficacy of PracaSil-Plus in scar management therapy. Following PracaSil-Plus treatment, the total POSAS score decreased by 33 and the patient's overall opinion by 6, corresponding to improvements of 76.7% and 75.0%, respectively. The post-treatment scar was no longer painful or itchy and all other parameters (color, stiffness, thickness and irregularity) were very similar to normal skin, which demonstrates a successful recovery process and a considerable improvement in the patient's quality of life.

Introduction:

Basal cell carcinoma (BCC) is a type of skin cancer that arises from the uncontrolled growth of basal cells lining the deepest layer of the epidermis. There is a high incidence of BCC as over 2 million people are estimated to be diagnosed with BCC every year in the United States, with a higher prevalence in the Caucasian population [1, 2]. The etiology of BCC is usually associated with exposure to ultraviolet radiation in sunlight. Following diagnosis, surgical excision of the cancerous cells is the most common treatment option [2]. Surgical excision can result in destruction of the tissues, leading to scarring and disfigurement. Unfortunately, scars cannot yet be made to disappear, and may range from a desirable fine line to a variety of abnormal scars, including hypertrophic and keloid scars. Taking into account that clinical treatments do not entirely eliminate skin scarring, the therapeutic goal is to reduce, as much as possible, the severity of the scars [3-5].

The purpose of this case study is to discuss the management of a basal cell carcinoma post-surgical scar using PracaSil-Plus, a topical silicone base containing Pracaxi oil, used alone or in combination with active pharmaceutical ingredients in scar management therapy [6].

Methodology:

A 41-year-old Caucasian male with no significant underlying medical conditions was diagnosed with basal cell carcinoma, presented as a solitary patch at the tip of his nose. Following diagnosis, tumor cells were removed with surgical excision of the affected area. Graft skin was taken from the patient's forehead to patch the tip of his nose. The patient was then instructed by his physician to use Bactroban™ ointment for 5 days until the wound closed. Following wound closure, the patient was instructed to apply PracaSil-Plus to the affected area, one to two times a day. The patient was asked to obtain standardized digital images of the affected area before and after treatment with PracaSil-Plus.

The Patient and Observer Scar Assessment Scale (POSAS) v2.0/EN, in particular the POSAS Patient Scale (adapted), was the research instrument used to evaluate the efficacy of PracaSil-Plus in scar

management therapy. The POSAS Patient Scale is a validated scar assessment instrument designed for a subjective evaluation of various types of scars directly by the patients. It is commonly used in clinical practice as it has shown good internal consistency, reliability and agreement. The POSAS Patient Scale contains seven items that are scored numerically on a Likert scale from 1 (normal skin) to 10 (worst scar). The first six items refer to the following scar parameters: pain and itching (scar sensation); color; stiffness; thickness and irregularity (scar appearance). The last parameter rates the patient's overall opinion of the scar when compared to normal skin. The numerical rating is obtained by adding the scores of the six parameters (range 6 to 60), in addition to the overall score (range 1 to 10). The higher the scores obtained, the worse the scar quality [7].

The patient was asked to complete the POSAS Patient Scale retrospectively by rating his basal cell carcinoma post-surgical scar, before and after treatment with PracaSil-Plus. Written informed consent was obtained from the patient for publication of this case study and the accompanying digital images.

Results and Discussion:

The patient completed all parameters of the POSAS adapted scale, as displayed in Table 1. The patient also shared the digital images of the affected area, before and after treatment with PracaSil-Plus (Figures 1-3).

Before treatment with PracaSil-Plus, the total score of the first six items was 43 which suggests a poor quality scar, very different from normal skin. For sensation, the patient rated the scar to be painful (n=8) and itchy (n=7). For appearance, higher (worst) scores were obtained for scar color (n=9) and stiffness (n=9), whereas lower scores were obtained for scar thickness (n=4) and irregularity (n=6). The overall opinion was rated 8 (range 1 to 10) which also suggests a poor quality scar, very different from normal skin.

After treatment with PracaSil-Plus, the total score of the first six items was 10 (range 6 to 60) which suggests a very good quality scar. The total score decreased by 33, from 43 (pre-treatment) to 10 (post-treatment), corresponding to an improvement of 76.7% in relation to scar sensation and appearance.

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Figure 1. Digital image of post-surgical scar before treatment with PracaSil-Plus.

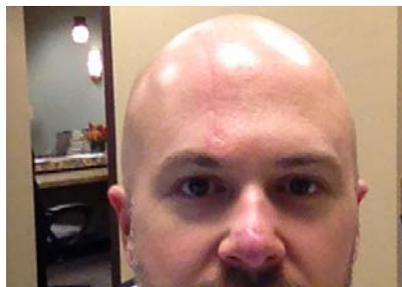


Figure 2. Digital image of scar 2 months post-treatment with PracaSil-Plus.



Figure 3. Digital image of scar 11 months post-surgery.

The scar was no longer painful (n=1) or itchy (n=1) and all other parameters (color, stiffness, thickness and irregularity) were very similar to normal skin (n=2). The patient's overall opinion decreased by 6, from 8 (pre-treatment) to 2 (post-treatment), corresponding to an overall improvement of 75.0%, as displayed in Table 1.

Table 1. POSAS parameters and corresponding patient's scores, before and after treatment with PracaSil-Plus.

Parameters	Score (n) Before	Score (n) After	% Change
Pain	8	1	87.5%
Itching	7	1	85.7%
Color	9	2	77.8%
Stiffness	9	2	77.8%
Thickness	4	2	50.0%
Irregularity	6	2	66.7%
Total	43	10	76.7%
Overall opinion	8	2	75.0%

Conclusions:

Skin scarring is often considered trivial but may also be aesthetically unpleasant and disfiguring, causing distress, anxiety and other psychosocial consequences. Scars may also have physical consequences such as tenderness, itching and pain, which are functionally disabling and can contribute to diminished quality of life [3-6]. Scar management therapy is therefore an essential component in the post-surgical recovery process.

This case study has demonstrated that PracaSil-Plus, a topical silicone base containing Pracaxi oil, is effective in scar management therapy. The POSAS patient scores showed a significant reduction of all scar parameters, from scar sensation (pain and itching) to scar appearance (color, stiffness, thickness and

irregularity), indicating significant improvements in scar quality following PracaSil-Plus treatment. The highest improvements were noticed in pain (87.5%) and itching (85.7%), which are the parameters that are likely to have the greatest impact on the patient's quality of life. The total POSAS score and the patient's overall opinion also showed considerable improvements in scar quality (76.7% and 75.0%, respectively). The patient rated his basal cell carcinoma post-treatment scar as very similar to normal skin (n=2), which demonstrates a successful recovery process and a considerable improvement in the patient's quality of life. PracaSil-Plus may then be recommended by compounding pharmacists as the treatment of choice in scar management therapy.

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