

# Surgical Scar Management with Topical Treatment

**SUMMARY:** Melanoma is the most dangerous type of skin cancer, and it often leads to the surgical excision of the affected area, which results in destruction of the tissues and skin scarring. This case study discusses the successful management of a melanoma post-surgical scar with a topical compounded gel: Naltrexone HCl 0.5%, Aloe Vera 0.2% and Beta Glucan in PracaSil-Plus (PCCA Formula 14310).

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## Introduction:

Skin cancer is by far the most prevalent of all cancers. Melanoma is the most dangerous type of skin cancer, and it occurs when melanocytes grow out of control and spread quickly. Although melanoma accounts for only 1% of skin cancers, it is responsible for the majority of deaths. Following diagnosis, surgical excision of the cancerous cells is the most common treatment option for melanomas [1]. Surgery on the skin 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 [2,3].

The purpose of this case study is to discuss the management of a facial melanoma post-surgical scar using a topical compounded medication.

## Case Report:

A 66-year-old Caucasian male with no significant underlying medical conditions was diagnosed with facial melanoma, presented as a solitary patch on the forehead, approximately 5-6 cm above the right eye. Following diagnosis, the melanoma cells were removed with surgical excision of the affected area and its surroundings, leaving 38 stitches from the midway of the eye to top of the forehead.

According to the patient, the melanoma was about the size of a dime but, after complete removal, it ended being about the size of a silver dollar.

The compounding pharmacist had recently published a case study on a topical naltrexone formulation for surgical wound healing [4], and recommended a similar treatment for the management of this melanoma post-surgical scar (Table 1). For one month, the patient applied Naltrexone HCl 0.5%, Aloe Vera 0.2% and Beta Glucan in PracaSil-Plus (PCCA Formula 14310), once every day. In addition, the patient took Vitamin D 5,000 and Hyaluronic Acid capsules to further support the healing process.

Rx	
Naltrexone HCl Anhydrous	0.5 g
Aloe Vera Powder	0.2 g
Beta Glucan	0.2 g
Glycerin USP	5 g
Base, PCCA PracaSil-Plus	q.s. 100 g

**Table 1.** Naltrexone HCl 0.5%, Aloe Vera 0.2%, Beta Glucan Topical Gel (PracaSil-Plus).

## Methodology:

The Patient Scar Assessment Questionnaire (PSAQ) and standardized digital images of the surgical scar were the research instruments used to evaluate the efficacy of the topical treatment. The PSAQ is a validated questionnaire designed to measure scarring from the patient's perception, according to scar appearance, symptoms, scar consciousness and satisfaction. For each domain, a lower score represents a better self-perception of the scarring [4,5].

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**Figure 1a.** Surgical scar before treatment. **Figure 1b.** Surgical scar post-treatment with the topical gel.

## Results and Discussion:

Topical treatment of the facial scar (Figure 1a) was initiated 4 days post-surgery. At first, the patient applied the gel in the area around the stitches, and only at a later time the gel was applied on top of the stitches. The PSAQ patient scores, completed after treatment, showed a very high level of satisfaction for all domains: 12 for appearance (9-36); 7 for symptoms (6-24); 6 for consciousness (6-24); and 13 for satisfaction with appearance and symptoms (13-52). Overall assessment by the patient was described as 'excellent,' 'not at all troublesome/self-conscious,' and 'very satisfied.' These results are consistent with the good clinical outcomes shown in Figure 1b, and are similar to the previous case study by Dunn *et al.* [4].

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 [2,3]. Scar management therapy is therefore an

essential component in the post-surgical recovery process. This case study has demonstrated that a compounded topical gel containing Naltrexone HCl 0.5%, Aloe Vera 0.2% and Beta Glucan in PracaSil-Plus, is effective in surgical scar management therapy.

## References:

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