

# Case Study: Radiation Burn Skin



## PCCA PracaSil™-Plus

**Summary:** A 72-year-old caucasian male reported extreme pain, scaling, redness, and irritation on his burns resulting from multiple radiation treatments. He applied PracaSil™-Plus, a proprietary anhydrous silicone scar base, several times per day as needed to the lateral side of the face and neck which resulted in complete healing within 14 days.

**Case Description:** A 72-year-old caucasian male had surgery to remove an acinic cell carcinoma. Following surgery, treatment for the carcinoma was continued with 33 sessions of radiation therapy to the right side of the lateral area of his face. The area that was exposed to the radiation became extremely painful, sensitive, dry and scaly (Figure 1). PracaSil-Plus was applied four times per day and as needed when the skin felt dry. By day 4, there was significant tissue re-growth. By day 10, the area was almost completely healed. By day 14, the skin was smooth, soft and pink and the patient considered it completely healed and pain-free (Figure 2).



**Figure 1.** Lateral side of the face (before PracaSil-Plus)



**Figure 2.** Lateral side of the face (14 days after PracaSil-Plus)

**Pharmacist Report:** The pharmacist recommended PracaSil-Plus due to her knowledge of other case reports with success in healing burns. A small sample of PracaSil-Plus was given to the patient which he tried for a day then came back for more. He wanted to treat the area with only PracaSil-Plus over what was prescribed to him because it was not painful to apply. The patient noticed how his external burns from radiation were improving, and at the same time, his internal burns (inside the mouth) at the area were not improving. He directly related his skin healing to PracaSil-Plus.

**Acknowledgements:** This case study was reported by Robin Johnson, a PCCA member of 25 years. PCCA Science is grateful for the valuable information shared.

**Introduction:** PracaSil-Plus is a proprietary anhydrous silicone base designed to be applied typically in scar therapy treatment (PCCA, 2013a). Silicones have been widely used for their occlusion and hydration properties, which are essential in scar management (Widgerow *et al.*, 2000; Mustoe, 2008). PracaSil-Plus also contains Pracaxi oil, extracted from the oilseed plant *Pentaclethra maculoba*, which has several medicinal applications including skin regeneration and healing (Costa *et al.*, 2013). PracaSil-Plus may be used alone or as a base for the incorporation of active substances in scar therapy treatment (PCCA, 2013a).

**Research Studies:** The efficacy of PracaSil-Plus in scar therapy treatment was evaluated by visual and instrumental methods in an eight-week, randomized, double-blind, controlled pilot trial conducted on eleven adult Caucasian subject volunteers. PracaSil-Plus showed qualitative and quantitative improvements in the following scar attributes: scar length, scar color/pigment intensity, scar texture/smoothness/roughness, and overall appearance in both old scars and new scars (PCCA, 2013b).

### References:

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- Mustoe, T. (2008) 'Evolution of silicone therapy and mechanism of action in scar management', *Aesthetic Plastic Surgery*, 32 (1), p.82-92.
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- PCCA (2013b) 'Efficacy of PracaSil-Plus in scar therapy treatment: a randomized, double-blind, controlled pilot trial', *Technical Report: 2TR0513*.
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