

Case Study: Facial Burn & Diaper Rash

PCCA PracaSil™-Plus *Pediatrics*



Summary: PracaSil™-Plus, a proprietary anhydrous silicone base, was applied topically on an infant's facial second degree burn and on a toddler's diaper rash, resulting in considerable improvements in both pediatric case studies. Results from a dermatologist review showed a grade of "much improved" and "improved" for the infant's facial burn and toddler's diaper rash respectively.

Case Description (1): A 5-month-old infant was severely scalded with a liquid on the face resulting in a major second degree burn. Following the incident, PracaSil-Plus, a proprietary anhydrous silicone base, was advised to be applied twice daily, in addition to a sterile bacitracin ointment. After eight days, there was a considerable progress of the infant's facial burn, as shown in the figures below (Figures 1 and 2).



Figure 1. (L)
Infant facial burn (before PracaSil-Plus)

Figure 2. (R)
Infant facial burn (8 days after PracaSil-Plus)

Dermatologist Review: In order to assess any clinically relevant improvements in burn healing attributes, photographs of the burn were taken by the patient or caregiver prior to application of PracaSil-Plus, at specific time points throughout the application period, and at the completion of the application period. Subject photographs were provided to an independent, blinded dermatologist reviewer. The burn was graded by the reviewer using a photo of the burn before the application of PracaSil-Plus as a baseline. Improvement in burn healing attributes over time was graded by the reviewer on a scale of "much worse," "worse," "neutral," "improved," and "much improved" when compared to baseline. The results of the blinded dermatology review were correlated with the results of the self-reported questionnaire.

Dermatologist Results: The infant's second degree facial burn was graded as "much improved" by the dermatologist.

Pharmacist Report: Eight days after the treatment, the father came back to my pharmacy with the baby and my staff was about to cry. The father was absolutely blown away with the results and we were, too.

Case Description (2): The caregivers of a 15-month-old toddler suffering from diaper rash had tried several over-the-counter topical products without success. The condition got worse with time resulting in increasing pain and discomfort for the toddler. The caregiver was then advised to apply PracaSil-Plus two to four times per day at diaper change. After 48 hours, there was an overall improvement of the toddler's diaper rash, as shown in the figures below (Figures 3 and 4).

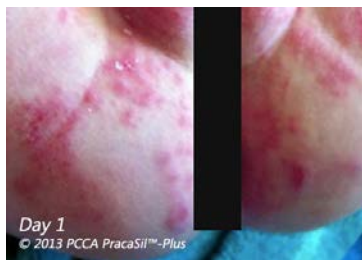


Figure 3. (L)
Toddler diaper rash (before PracaSil-Plus)

Figure 4. (R)
Toddler diaper rash (48 hours after PracaSil-Plus)

Dermatologist Review: In order to assess any clinically relevant improvements in diaper rash healing attributes, photographs of the diaper rash were taken by the patient or caregiver prior to application of PracaSil-Plus, at specific time points throughout the application period, and at the completion of the application period. Subject photographs were provided to an independent, blinded dermatologist reviewer. The diaper rash was graded by the reviewer using a photo of the diaper rash before the application of PracaSil-Plus as a baseline. Improvement in diaper rash healing attributes over time was graded by the reviewer on a scale of "much worse," "worse," "neutral," "improved," and "much improved" when compared to baseline. The results of the blinded dermatology review were correlated with the results of the self-reported questionnaire.

Dermatologist Results: The toddler's diaper rash was graded as "improved" by the dermatologist.

Caregiver Report: PracaSil-Plus was applied only twice in the first day and we still got amazing results. It worked so quickly – it took away the pain almost immediately. We are very happy!

Acknowledgements: Case Description (1) was reported by Mark Binkley, a PCCA Member of 30 years. Case Description (2) was reported by the grandmother of the patient, Cathie Berg, a PCCA Member of 27 years. PCCA Science is grateful for the valuable information shared by both Members. For medical confidentiality purposes, the identity of both the patients and the dermatologist reviewer were kept anonymous.

Introduction: PracaSil-Plus is a proprietary anhydrous silicone base designed to be applied topically 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 macroloba*, 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:

- Costa, M., Muniz, M., Negrao, C., Costa, C., Lamarao, M., Morais, L., Junior, J. and Costa, R. (2013) 'Characterization of *Pentaclethra macroloba* oil', *Journal of Thermal Analysis and Calorimetry*, 16 January 2013 [Online].
- Mustoe, T. (2008) 'Evolution of silicone therapy and mechanism of action in scar management', *Aesthetic Plastic Surgery*, 32 (1), p.82-92.
- PCCA (2013a) *PracaSil-Plus*. Available at: <http://www.pccarx.com/pcca-products/pcca-exclusives/bases/PracaSil-plus> (Accessed: 17 May 2013).
- PCCA (2013b) 'Efficacy of PracaSil-Plus in scar therapy treatment: a randomized, double-blind, controlled pilot trial', *Technical Report: 2TR0513*.
- Widgerow, A., Chait, L., Stals, R. and Stals, P. (2000) 'New innovations in scar management', *Aesthetic Plastic Surgery*, 24 (3), p.227-234.

Click the QR to see more PCCA studies and reports.

