ALHYDRAN

medical after care
for the skin

Treatment for
the disrupted skin barrier

- Optimal hydration of the epidermis
- Restoring the skin barrier

TO HELP AGAINST ITCHING, REDNESS AND SCARS

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TREATMENT FOR THE DISRUPTED SKIN BARRIER

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ABOUT ALHYDRAN

What is ALHYDRAN?

ALHYDRAN is a medical cream specially developed for:

- **After care of the skin immediately after wound closure**
- **Treatment for disrupted skin barrier**

These indications are an example of serious disruption of the skin barrier, as a result of which the skin will lose too much moisture, the skin dries out, complaints will occur (the skin irritates, itches, is red, etc). This vulnerable skin must be assisted in order to function and heal.

Example indications

Burn

Scar

Wound edge/Peri wound skin

Radiation after care

"The effectiveness of ALHYDRAN has been proven scientifically[1]. As a result of this, the product has been widely used by specialists for more than 10 years[2-5,8-14]".

ALHYDRAN provides help

ALHYDRAN cream ensures optimal hydration of the epidermis (by means of a unique combination of hydration and occlusion), and promotes healing of the skin barrier[1].

This brochure sets out the indications for treatement with ALHYDRAN, how the cream works and its results. The effectiveness of ALHYDRAN has been proven scientifically[1]. As a result of this, the product has been widely used by specialists for more than 10 years[2-5,8-14].

ALHYDRAN IS USED BY SPECIALISTS, IN BURN CENTRES AND HOSPITALS WORLDWIDE IN:

- **Medical after care**
- **Scar prevention**
- **Treatment of vulnerable skin after burns**
- **Peri wound skin around chronic wounds**
- **Extreme redness**
- **Radiotherapy after care**
- **Other indications**

THE SKIN BARRIER

Healthy skin barrier

Regulating hydration is an important tool for the skin in protecting itself against harmful external influences.

The amount of water that leaves the body via the skin is known as *Trans Epidermal Water Loss (TEWL)*.

A healthy skin has a stable level of TEWL with the upper skin layer consisting of approximately 30% water[6]. This level is necessary for optimal maintenance of the skin. *(Image 1)*

IMPORTANT FACTORS IN SKIN BARRIER RECOVERY

Important factors for effective skin barrier recovery are[1,6,7,15]:

- **Optimum hydration of the epidermis**
- **Skin barrier repair**
- **UV protection***

ALHYDRAN has a proven track record: the unique mix of ingredients ensures both effective hydration and moisture retention (via occlusion). The cream accordingly helps to restore hydration to the level required for normal functioning[1,8]. As a result, the skin does not dry out and can recover normally.

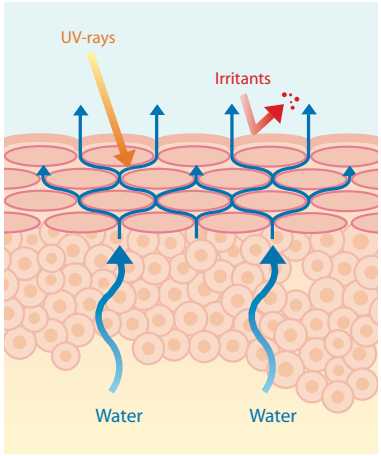

Image 1:
Healty skin barrier. A stable level of TEWL.

"A healthy skin has a stable level of TEWL".

Disrupted skin barrier

Skin barrier disruption increases TEWL. The body then loses an abnormally high volume of water through the skin.

This will result in a decrease of the water percentage in the epidermis, below the normal level, causing the skin barrier to disfunction.
This vulnerable skin is unable to heal and protect itself. *(Image 2)*

Complaints arise such as severe itching, redness, dry skin etc.
This in turn can cause, among other conditions, detrimental scar development, triggering eczema and stagnation of wound healing.

This skin needs optimal hydration of the epidermis and restoration of the barrier function to be able to recover.

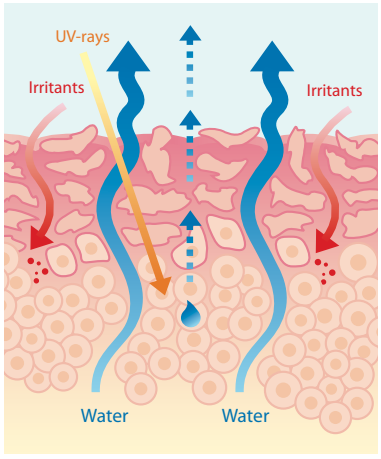

Image 2:
Disrupted skin barrier. Increased TEWL.

** The unique effects of Alhydran are also available with high-level sun protection. See page 8. 'ALHYDRAN with high-level sun protection'.*

HOW DOES ALHYDRAN WORK?

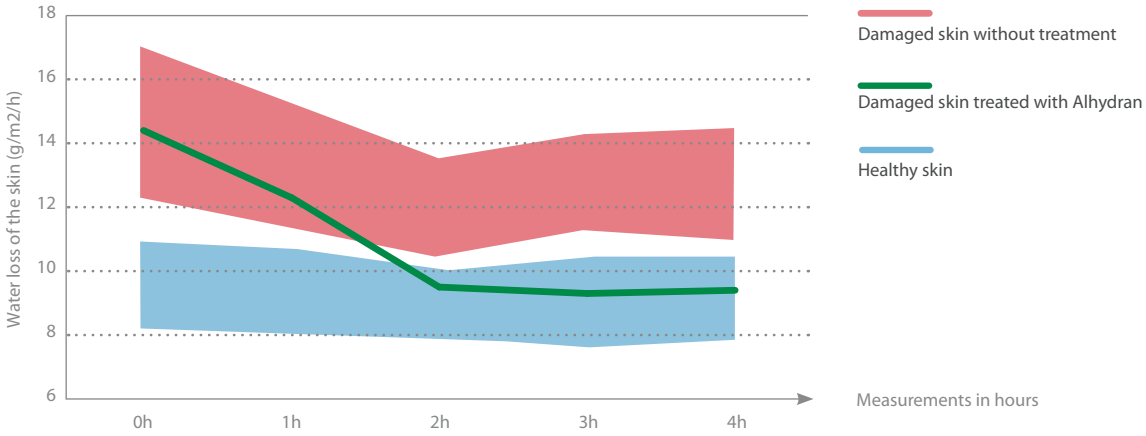

***Chart 1:** ALHYDRAN restores moisture balance within 2 hours[8].*

ALHYDRAN has dual functions, both necessary for repairing a disrupted skin barrier

1. OPTIMAL HYDRATION OF THE EPIDERMIS

The unique, proven effect of ALHYDRAN ensures powerful hydration as well as moisture retention (via occlusion). This results in long-term reinstatement of the moisture balance in the skin. *(Chart 1)*

2. SKIN BARRIER RECOVERY

Good skin barrier recovery requires the following:

- **Optimal hydration of the epidermis**
- **Repair of the skin barrier**

ALHYDRAN contains ingredients, such as antioxidants, which protect the skin against free redicals. These unique restorative effects, in combination with optimal hydration and occlusion, ensure that the disrupted skin can repair itself.

The risk of scarring is decreased, existing scars and complaints such as itching are relieved, eczema triggers are reduced, and peri wound complications are reduced, to promote optimal wound healing[2,4,5,8-14].

! Treatment of a defective skin barrier with a moisturizer with only humectants will dry out the outer layer of the skin and should be avoided: TEWL will remain high which can worsen complaints[1].

For more than 10 years ALHYDRAN has been successfully used by specialists, scientists, dermatologists, hospitals and burn centres worldwide. The benefits of ALHYDRAN are supported by extensive scientific research and studies:

Scientific research : page 11
Clinical studies : page 12 - 19
Case studies : page 20 - 33

SCIENTIFICALLY PROVEN

WHEN CAN YOU USE ALHYDRAN

Burn

Non-matured scar

Very dry skin / Peri wound skin

Radiation after care

Skin transplant

Actinic keratosis

Laser therapy

Atopic eczema

Indications

ALHYDRAN is used in all cases of disruption of the skin barrier, but always after wound closure.

THE BENEFITS OF ALHYDRAN FOR YOUR PATIENT

- Rapidly reduces itching[4,9,11,13]
- Reduces dry and reddened skin[4,9,10]
- Less pain[10,11,14]
- Reduces stretched / contracted skin complaints[4,9,10]
- Prevents of scars[14]
- Fades and reduces existing scars[11]
- Softens the skin[4,9-12]
- Increases skin elasticity[4,9-12]
- Decreases skin irritation[9,14]

ALHYDRAN has proven its worth in cases of:

- ✓ Burns
- ✓ Scar treatment (new & existing)
- ✓ Reddened and (extremely) dry, painful skin
- ✓ Extremely itchy skin
- ✓ Wound edges and peri wound skin
- ✓ After care
  - *Dermatological treatment*
  - *Surgical interventions*
  - *Actinic keratosis*
- ✓ Chronic skin disorders
- ✓ Radio therapy
- ✓ Cosmetic intervention (such as laser therapy)

These effects have been extensively documented and scientifically substantiated. For further information in this regard: *see page 11-33 'ALHDRAN References'.*

Scars and burn wounds

Scars and burns disrupt the function of the skin barrier and lead to excessive water loss (TEWL), causing scar tissue to grow in an uncontrolled manner. *(Image 3)*

ALHYDRAN provides immediate hydration and moisture retention, restoring the skin barrier to prevent scarring and reducing complaints. *(Image 4)*

Apply ALHYDRAN for:

- **Restoring skin elasticity**[4,9-12]
- **Reducing painful tightness**[4,11]
- **Reduced itching and redness**[4,9-14]

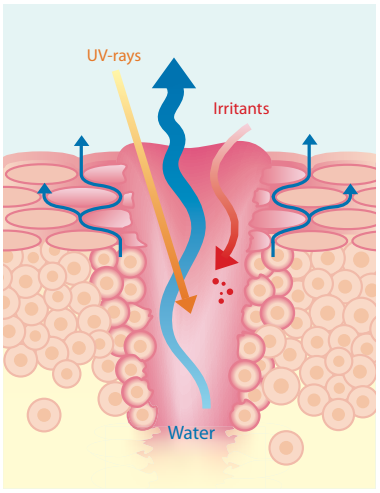

Image 3:
Increased TEWL

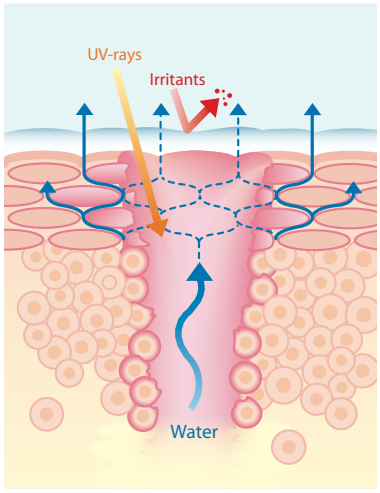

Image 4:
*TEWL normalised after treatment with ALHYDRAN**

Extremely dry and red skin

A disrupted skin barrier fails to provide a protective function. The excessive volume of water leaving the body through the epidermis reduces proper functioning of the skin. Causes of extremely dry and red skin include erosive skin conditions, chronic skin diseases, and radio and lasertherapy. *(Image 5)*

ALHYDRAN provides immediate hydration and moisture retention. *(Image 6)*

Apply ALHYDRAN for:

- **Rapid healing**[2]
- **Calming irritated skin**[2]
- **Reducing redness and itching**[2]

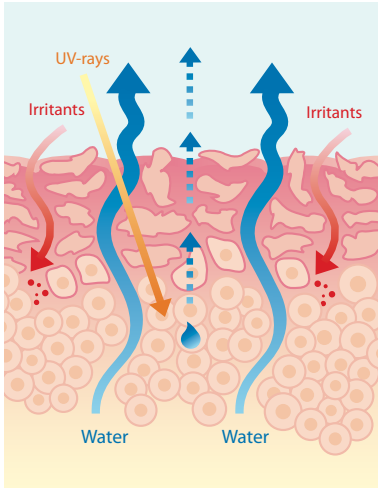

Image 5:
Increased TEWL

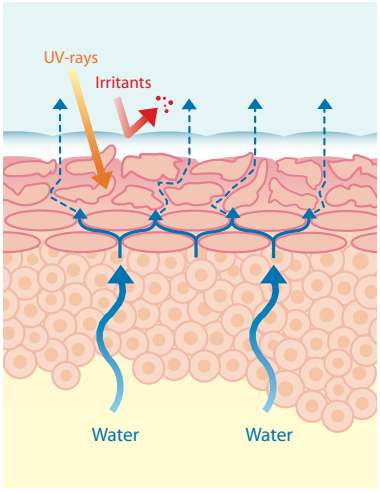

Image 6:
*TEWL normalised after treatment with ALHYDRAN**

**Alhydran is also available in a variant that actively protects vulnerable skin against damaging UV rays:*
see page 8; 'ALHYDRAN with high-level sun protection'.

ALHYDRAN

Most important characteristics

- ✓ ALHDYRAN is the first medical cream for treatment of the disrupted skin barrier immediately after wound closure
- ✓ ALHYDRAN's effects have been proven in scientific[1] and clinical studies[3-5,8-14] and are supported by many case studies[2]
- ✓ ALHYDRAN is complies with the *European Scar Management guideline*[6,15] (prevention and treatment)
- ✓ ALHYDRAN is the standard product in after care protocols[4,5]
- ✓ ALHYDRAN is registered as a Medical Device
- ✓ ALHYDRAN is hypoallergenic and free of parabens and perfumes
- ✓ ALHYDRAN contains antioxidants; vitamins E and C
- ✓ ALHYDRAN has not been tested on animals

CE

HYPO ALLERGENIC

FRAGRANCE FREE

PARABEN FREE

NOT TESTED ON ANIMALS

ALHYDRAN WITH HIGH-LEVEL SUN PROTECTION

SPF 30 **High protection** broad spectrum UVA and UVB protection

The unique effects of Alhydran are available in a variant with high-level sun protection. *The European guideline* recommends using a high sun protection cream as a routine component of postoperative wound care[6,15].

The disrupted skin barrier must be protected - also against damaging UV rays.
On a completely cloudy day 40% of available, damaging UV radiation still reaches the earth. *The guideline* recommends avoiding exposure to the sun and applying a high sun protection factor of 30 (SPF 30)[6].

ALHYDRAN with high level UV protection provides this protection. The unique mix of ingredients ensures optimal treatment and protection of the disrupted skin barrier.

How to use ALHYDRAN

- Only to apply after wound closure
- Can be used in combination with silicone therapy and under wound dressings, support stockings and pressure garments[4,10]
- A small amount per application is enough to moisturize the skin.

ALHYDRAN is

- ✓ Concentrated[1]
- ✓ Long lasting[1,8]
- ✓ Cost effective

The ALHYDRAN range

ALHYDRAN

- 30 ml (1 fl. oz.)
- 100 ml (3.4 fl. oz.)
- 250 ml (8.5 fl. oz.)

ALHYDRAN with SPF

- 59 ml (2 fl.oz.)

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journal homepage: www.elsevier.com/locate/burns

Scar management by means of occlusion and hydration: A comparative study of silicones versus a hydrating gel-cream

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ABSTRACT

Despite the worldwide use of silicones in scar management, its exact working mechanism based on a balanced occlusion and hydration, is still not completely elucidated. Moreover, it seems peculiar that silicones with completely different occlusive and hydrating properties still could provide a similar therapeutic effect.

The objective of the first part of this study was to compare the occlusive and hydrating properties of three fluid silicone gels and a hydrating gel-cream. In a second part of the study these results were compared with those of silicone gel sheets.

Tape stripped skin was used as a standardized scar like model on both forearms of 40 healthy volunteers. At specific times, trans epidermal water loss (TEWL) and the hydration state of the stratum corneum were measured and compared with intact skin and a scar-like control over a 3–4 h period.

Our study clearly demonstrated that fluid silicone gels and a hydrating gel-cream have comparable occlusive and hydrating properties while silicone gel sheets are much more occlusive, reducing TEWL values far below those of normal skin.

A well-balanced, hydrating gel-cream can provide the same occlusive and hydrating properties as fluid silicone gels, suggesting that it could eventually replace silicones in scar treatment.

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Conclusion

ALHYDRAN: A well-balanced, hydrating cream with occlusive and hydrating properties for treatment of disrupted skin barrier (e.g. scars).

- ✔ Significantly reduced TEWL
- ✔ Increased stratum corneum water content
- ✔ Long-lasting effect

Burns 2013: test areas

CLINICAL STUDY **EBA 2007**
Burn Centre, University Hospital Ghent, Belgium

TWO YEARS OF EXPERIENCE WITH A NEW PRODUCT BASED ON ALOE VERA FOR HYDRATION OF BURN SCARS

AUTHORS: S. Monstrey, MD, PhD, A. Pirayesh, MD, E. Lambrecht, RN
S. Lauwaert, RN, J. Verbelen, RN, MN, H. Hoeksema, RC

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Fig. 1

Fig. 3

Fig. 5

Fig. 2

Fig. 4

Fig. 6

Introduction: In humans deep dermal burns unfortunately do not heal by regeneration of the damaged skin but by the formation of scar tissue (Fig.1). While the prevention of hypertrophic scars (Fig. 2) with pressure garments and silicone inlays has been widely studied, very little evidence has been published on the optimal skin care after burns. The different structure of scar tissue with the absence of sweat and sebaceous glands results in drier, less elastic and itchy skin. Treatment of these annoying skin problems is of utmost importance for the burn patient. An inquiry in the major European burn centres revealed a plethora of creams and ointments that are used for scar treatment after burns but without any standard therapy. Aruba Aloe Balm (Formula F-BC-096) containing 45% of pure, freshly processed Aruba Aloe Vera gel (Fig. 4) obtained directly from the plant (Fig. 3) was used during the last two years for about 50% of our burn patients. We evaluated the presence of residual defects, elasticity of the skin, subjective feeling of the patient especially itching and ease of use, and the final aesthetic outcome.

Methods: All treated patients children and adults had skin grafts or burns with a conservative healing time of > 18 days. Patients underwent a treatment regimen with pressure and silicone garments. Patients were asked to moisten the scars with a thin layer of the product 3 times a day. In order to avoid biased results the Balm (Formula F-BC-096) was delivered in blanc white tubes (Fig. 8) and patients were not aware of the composition of the product. Follow up visits including clinical assessment and digital photography of the scar were done on a regular basis for at least one year as usual in our centre. For some patients in which a control product for comparison was used measurements for skin elasticity (*Dermalab*) (Fig. 6) and colour (*Dermaspectrometer*) (Fig. 5) were performed.

Case 1 : Scar formation after surgery

Start with Alhydran®

3 months with Alhydran®

5 months with Alhydran®

Case 2 : Scald

1 day post burn

Start with Alhydran®

1 year with Alhydran®

Results: No allergic reactions related to the product were noticed. In general the aesthetic outcome of patients treated with the Balm (Formula F-BC-096) was better than in patients treated with other moisturizers as scored in the Vancouver Scar Scale. However these are subjective findings, they were confirmed by objective measurements of the Dermalab and Dermaspectrometer in patients where additionally a control product was used. All patients preferred the test product above other products we always used before in our centre. In more than 90% of the patients itching was reduced as they needed less medication and were more comfortable during the day and especially children had a more quiet sleep. Combination possibilities with pressure garments and silicone sheets are outstanding.

Fig. 7

Conclusion: After a survey throughout the burn centres of Europe we noticed that there is definitely no standard for hydration of scars and the use of these moisturizers. After two years of excellent results using this new product we think now there is the possibility to set this standard. Till 2007 this product was not distributed outside the Caribbean. In an attempt to make this product available for all patients in Europe a new brand name **Alhydran®** (Fig.7)was chosen for distribution. A prospective, randomized, double blinded, controlled clinical trial of the **Aruba Aloe Balm (Formula F-BC-096)** in the treatment of split thickness donor sites after wound closure is already registered at www.ClinicalTrials.gov and is recruiting patients.

Fig. 8

''Itching, is there a remedy ? ''
a pilotstudy with a rehydration gel-creme in burnpatients

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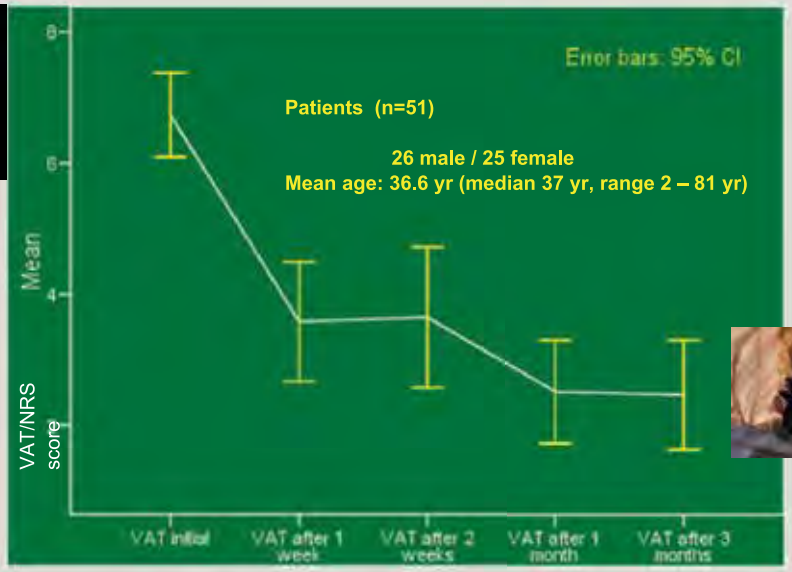
Introduction

Itching after burns is a matter of body and mind, but little is known regarding its exact mechanism. Results of studies show a gradual decrease in itch intensity in time, but still moderate to serious itch several years after burns (van Loey e.a.). In 2006 a gel-creme that supposed to decrease itch was introduced in our Burn Centre. The main ingredients of Alhydran® are Aloë Vera (Aruba Aloe Barbadenis), vitamins C and E and Jojoba oil. To determine its efficacy we performed a pilotstudy.

Methods

Since November 2006 in the outpatient clinic of the Burn Centre Medical Centre Rijnmond-Zuid itching is scored in patients using the Visual Analogue Thermometer (VAT) or the Numeric Rating Scale (NRS 0-10). Measurements were done before application of Alhydran® and after 1 week, 2 weeks, 1 month and 3 months after the start of treatment. Follow up data were collected on outpatient visit or by phone.



Results

Data analyses with ANOVA and T-test show before starting Alhydran® that the mean VAT/NRS for itch intensity is 6.7(see graphic). There is a decrease in time: the mean score after one week is 3.5, after two weeks 3.6, after one month 2.5 and after three months 2.4. There is no relation between VAT/NRS and gender, age, TBSA%, location, cause of burn or combination therapy with other scar treatment. Besides a decreased VAT score parents of young children mentioned their child was more at ease and had a better night's rest. One patient had discontinued Alhydran® because there was no itch anymore after 1 week and 1 patient reduced antihistaminic medication. Two patients said they stopped the creme because of irritation of the skin.

Conclusions

"Itching can make you crazy". Our first experience indicates that this gel-creme could decrease itch intensity after burns, which contributes to improvement of quality of life. Ongoing research will include additional assessment by a Burns Itch Questionnaire, scar evaluation like the Vancouver Scar Scale, Patients and Observer Scar Assessment Scale, cuto – and dermaspectometrie and a Quality of Life questionnaire.

Reference (1) NEE van Loey, e.a. Itching following burns; epidemiology and predictors; accepted in Burns 2007.

CLINICAL STUDY **DAV 2010 CONFERENCE**
Burn Rehabilitation Centre, Bad Klosterlausnitz, Germany

28th Annual Conference
of the German-speaking Working Group
for Burns Treatment

dav2010

13–16 January 2010
Schladming – Rohrmoos (Styria – Austria)

ABSTRACT BOOK

p47

Effect of scar treatment products on unpleasant physical manifestations in patients suffering from extensive burn scarring

Lead author: Dr. med. Hans Ziegenthaler
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Purpose:
Scars lack endogenous sebaceous glands, which means that they do not have a physiological fatty coating to protect the tissue against acid. Consequently, the scarring process is accompanied by unpleasant physical manifestations such as itching, tightness, dryness and flaking, the subjective perception of which varies from one individual to another. The aim of our investigation is to ascertain how far the effect of scar treatment products in the early stages of scar formation during rehabilitation can be measured.

Patients and methods:
15 patients with burn injuries taking part in an in-patient rehabilitation programme (five to eight weeks after their accident) were observed as part of a clinical treatment observation study. The patients all had healed scar tissue patches on the trunk and limbs which flaked quite severely, felt tight and/or itched both at rest and while the patient was moving.
Wound care was generally given every day, in some cases more than once a day, using the proven product SR Unguentum cordes. After inflammatory factors had been ruled out, those patients who were continuing to experience itching and a sensation of tightness exceeding 50% on an intensity scale were switched to ALHYDRAN® cream. The state of the scars was assessed using the Vancouver Scar Scale at point T0, T1 (14 days later) and T2 (a further 14 days later). At these points photographs were taken, medication requirements (analgesics, neuroleptics, antihistamines) were noted, patients' pain perception according to the VAS scale was recorded and their health-related quality of life (SF 36) was ascertained. The Pationnaire® questionnaire, which had never previously been used with burns patients, was also employed (this questionnaire investigates various everyday and injury-specific items). The trial group was too small for statistical assessment, so the findings were assessed by means of descriptions and photographs.

Findings:
A marked improvement compared to the baseline was observed in the subjective categories assessed, particularly itching and a sensation of tightness. However, the treatment group, the period investigated and the absence of randomisation make it impossible to reach any more far-reaching conclusions than an observation of change. No adverse effects were reported. On the other hand, convincing application properties in the burns patient group were indicated by the Pationnaire® questionnaire, which had previously been used only in the context of injuries to the supporting and locomotor systems but which now has a skin module.

Conclusions:
ALHYDRAN® appears to be able to minimise manifestations such as itching and a sensation of tightness, which patients find very distressing, in the early stages of scar formation. This form of scar treatment is well tolerated and can easily be combined with the administration of textile-based compression therapy. We intend to conduct a clinical study with a larger randomised group and a follow-up after three months in order to obtain findings suitable for statistical analysis.

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Orthopädisch-traumatologische Abteilung
Reha-Zentrum für Brandverletzte

Scars after large surface thermal burns – Registration of Quality of Life and therapeutic influence of Alhydran®

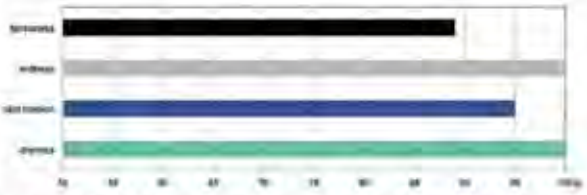
Hans Ziegenthaler

Question:
Scars, as a result of large surface thermal burns, show in comparison with normal and sound skin, serious functional deficits. These deficits can be described by means of objective, biomechanical and physiological characteristics and by the subjective observation of itching, skin tension, dryness and redness of the skin. The main goal of the study was to investigate the influence of the scarring on the Quality of Life related to the patients circumstances, and to measure this as well as the influence of skin care products in the early stage of scar maturation during the rehabilitation of the patients.

Material and Method

Material:	Patient population
number (n)	75
men / woman	54 / 21
average age (years)	51,3 ± 14,8
BMI (kg/m²)	23,9 ± 5.7
average total burn surface area (%)	23.0 ± 15.0
range accident to start inpatient rehabilitation (days)	55,1 ± 30,2
duration of treatment (days)	34,9 ± 16,1

Negative Bodyexperiences related to the burn injuries were noted in the beginning of the test in the following percentages of all patients (%)



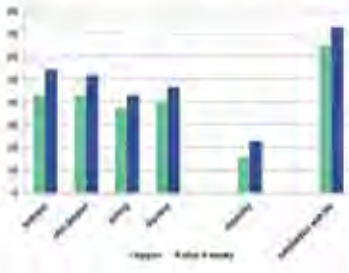
The **Pationnaire®-questionnaire** is a best-suited patient questionnaire for the interactive anamnesis and allows the objective measurement of symptoms, disabilities and well-being. The patient completes the Pationnaire questionnaire himself. It is then discussed with the physician, therapist, study attendant, supplemented and, if necessary, corrected accordingly.
The Construct Validity revealed a very high agreement between the answers to the questionnaire and the personal interviews (94% of the specimen). There was also a partial conformity (6% of the specimen) by older patients with cognitive problems. The reliability by repeated completion of the questionnaire (Test-Retest) produced good values. The Intraclass Correlation Coefficients (ICC) were over 0.7 (good) by 22 of the 33 questions.
The Pationnaire measures more complaints (up to 10 symptoms) than other questionnaires (e.g. SF 36), also specific items of burn victims with a specific module. He is not only of simple design, but also clearly defined and patient-friendly.

The **SF-36v2® Health Survey** asks 36 questions to measure functional health and well-being from the patient's point of view. It is a practical, reliable, and valid measure of physical and mental health that can be completed in five to ten minutes. It's called a generic health survey because it can be used across age (18 and older), disease, and treatment group, as opposed to a disease-specific health survey which focuses on a particular condition or disease. The survey is meaningful to patients, clinicians, researchers, and administrators across the health care spectrum, and has various applications. The SF-36 provides scores for each of the eight health domains [Physical Functioning (PF), Role -Physical (RP), Bodily Pain (BP), General Health (GH), Vitality (VT), Social Functioning (SF), Role-Emotional (RE), Mental Health (MH)] and psychometrically-based physical component summary (PCS) and mental component summary (MCS) scores.

Data evaluation: The specifications have been analyzed by the program for statistical evaluation WINDOWS SPSS 13.0.

Results

The Pationnaire® showed, especially in the fields of redness (20,4%) and skin tension (16,9%) a substantial improvement compared to the initial values. Also the reduction of itching (13,5%) and dryness of the skin (13,8%), were clearly noted in the scoring of the patients. The general score on the experienced impediments of the burn scars was reduced in ²/₃ of the patients, and the general quality of life experience was increased with 12,6%. The use of anti-histamines in the study group of patients was reduced during the total treatment period by ¹/₂. Side effects of the treatment with Alhydran® were not at all experienced. (left)



As could be expected, the SF-36 short-form health survey, showed for all patients and all items and in all subscales, an underscoring of the average Norm value of 50 of the standard population. The biggest underscoring in combination to this standard normation value of 50 of the SF-36 Physical Component Summary and Mental Component Summary, were found in the scales of Physical Functioning, Role-Physical and General Health. This could be expected because of the high physical functional deficits of the patients.
The physical component summary (PCS) had originally an average of 29,7 ± 6,3 which increased after 4 weeks to 21,9 ± 5,9. In the menthal component summary (MCS) the starting value was 49,3 ± 7,9 and this increased to 51,7 ± 8,0. The Physical Funtioning (PF) had in the beginning a value of 21,7 ± 9,5 and this improved to 21,9 ±7,4. The biggest improvement in the patient situation was obtained with the Role-Emotional scoring (RE), where the value increased from 19,1 ± 5,9 towards 33,8 ± 7,9. The values for burns patients however still remain below the values for healthy comparative groups.(right)

Conclusions:

1. This first use of the Pationnaire® questionnaire with a new skin module for the follow-up of burns, showed in practice stable and reliable characteristics of use in the monitoring of burn patients.
2. Alhydran® was successfully used during the early maturation of the scars, to reduce the subjective and unpleasant side effects of burn scars such as redness and skin tension, without noticeable side effects.
3. Alhydran® could trouble free be combined with (textile garments) pressure therapy. Inhomogeneous treatment groups and the missing randomization in this study, do not allow to draw conclusions beyond the observations of this study about a trend in treatment effects.
4. Further clinical, probably multi-centre studies with a larger randomized group of patients, as well as a post-study check, are needed to be able to draw statistically relevant conclusions.

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CLINICAL STUDY **EBA 2011**

Dep. of Plastic Aesthetic and Reconstructive Surgery, Metz, France

Application of Alhydran in the treatment of pathologic scars after cryoshape therapy

Personal experience

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Cryogun.

How cryoshape acts on scars.
Core of the scar at -196 °C (-320.8°F) no solution of continuity of the skin.

Clinical case: Hypertrophic scarring after bilateral reduction mammoplasty.

Close up of the scars to be treated (right breast).

Close up of the scars to be treated (left breast).

Introduction

Aloe Vera has been used as a popular herbal medicine since ancient times for many conditions. In 1851 T and H Smith of Edinburgh discovered the active principle of the plant. Aloe Vera contains 75 active constituents: vitamins, enzymes, minerals, monoacids, and acid salicyliques. After a bibliographic research on EBSCO, Medline and Google with the key words: aloe Vera, topic, surgery and wound healing, we decided to introduce the topical utilization of Aloe Vera in the treatment of scar tissue.
We decided to use Alhydran cream because of the characteristics of the pure and high concentration of the Aloe Vera, associated with high quality oils, Vitamins E and C . The cryoshape is a new technique for treating keloids and hypertrophic scars developed by Dr. Yaron Har-Shai. We present our experience with these new devices.

Materials and Methods

Technics

A specially designed cryo-needle was inserted into the long axis of the hypertrophic scars and keloids so as to maximize the volume of the hypertrophic scars and keloids to be frozen. After the hypertrophic scars and keloids were completely frozen, the cryoprobe defrosted and was withdrawn. After the treatment a dressing with Vaseline gauze was applied. The dressing was replaced after 48 hours by hydrocolloid. We started the application of Alhydran two weeks after these scars had been treated with cryoshape. The topical application was done twice a day for roughly four to six weeks.

Patients

From January 08 till July 09 we have treated 13 patients for a total of 21 scars. The age of the patients were between 17 and 62 years old

5 patients presented pathological scars after breast surgery, 2 patients after abdominal surgery, 2 patients after ear surgery, 1 patient after cleft lip surgery, 1 patient after sternotomy and one patient after burn injury.

Results

None of the patients experienced an intolerance or allergy to the Alhydran. All patients experienced improvement in the scars aspect and pain and itching presented before treatment had disappeared. No adverse events were reported by any of the patients.

Conclusion

Cryoshape and Alhydran showed a good synergy in the management of pathologic scars. Further, well-designed trials should be carried out to determine the effectiveness of Alhydran in improving scars outcome

Keloid of the trunk pre operative view

Follow up at six months after one session of cryosurgey and six weeks of application of Alhydran

Follow up after six weeks of application of Alhydran

Introducing the cryoshape through the scar

Intraoperative view: you can note the freezing of the scar

Scar completely treated.

Immediate post operative

Pathologic scars of mediastinum sequel of cardiac surgery: pre operative view before cryosurgery

kritieke diensten
Universitair Ziekenhuis Gent

UNIVERSITEIT GENT

Development of a new brochure making aftercare of burns more understandable for patients

Henk Hoeksema, Katrien Van Gastel, Veerle Van Geertruy, Pieter Lafaire, Jozef Verbelen, Stan Monstrey
Burn Centre, Ghent University Hospital, Belgium

Introduction:

One of the first questions of burn victims and relatives is whether they will end up with visible scars. Scars are an unavoidable consequence of dermal burns, but the outcome depends largely on the method of scar treatment. This very long and tedious process can only lead to a good result by optimal professional skills and compliance of the patient. We noticed the growing need for a patient brochure concerning the aftercare of burns because an optimal outcome can only be achieved if the patient and family completely understands the reasons behind the treatment.

Methods:

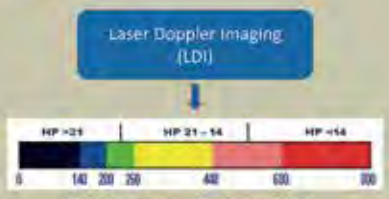

Fig 1: healing time or healing potential

		hydration	UV-protection	Pressure garments	silicones
A					
D	HP >21 days	Yes	Yes	Yes	yes

Fig 2: aftercare related to healing time

Fig 3: individual aftercare schedule

Results:

The creation of a brochure, starting with a short explanation about scar development after burns. A subdivision into three groups based on healing potential by laser Doppler imaging and exact healing time is linked to the appropriate scar treatment. With help of a figure in the brochure, showing the exact healing times for the different burned areas, it is easy for the patient to understand what kind of scar treatment is recommended. Finally answers to the most common questions are provided.

Conclusion:

This brochure improves burn patients understanding of scar treatment and improves patients compliance to the suggested treatment. As a consequence, functional and aesthetic outcomes are positively influenced.

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CLINICAL STUDY **EWMA 2014**
Wound professional, United Kingdom

PSYCHOLOGICAL WELLBEING – SCAR

Authors: Stuart Ashman, Sara-Jane Kray, Tyne & Wear, UK

Aim

To review whether psychological wellbeing can be enhanced by improving the appearance of scar tissue, post injury.

Background

Scar management is not routinely administered for trauma wounds that occur during childhood, however, they can have an effect on how an individual perceives themselves and impact on how they dress.

Scars are the result of an injury to both the dermis and epidermis (and/or deeper tissue). Post proliferation the skin attempts to normalise during the final maturation stage of healing.

Normal remodelling of the skin can take up to 12 months, and depending on how the wound was left to heal, e.g left open or closed with sutures, can also impact on the overall outcome. Scars generally improve over time, becoming less red/pink as blood vessels are removed from the area through apoptosis and flatten as the balance between the synthesis and degradation of collagen is completed.

Routine scar management[1] is primarily based on the use of silicones following wound closure to occlude and hydrate the scar tissue thus reducing the production of excessive collagen[2].

Methodology

This case study reviewed the use of a silicone gel sheet and hydration gel-cream and how improvements in scar tissue can have a positive impact on a child's psychological wellbeing.

A girl aged 7, sustained a traumatic injury to her right shin, measuring 4x2cm, requiring 6 sutures (2nd August 2013, Photo 1). Following suture removal the wound dehisced and the resulting scar area remained bright red and raised. The scars prominence resulted in the child refusing to wear dresses or shorts throughout the summer.

A dual therapy was initiated (November 2013, Photo 2) comprising a silicone gel sheet* and a hydrating gel-cream*. Tolerance to the silicone was built up to recommended wear times and the hydrating gel-cream was applied in between with an hour between the application of the hydrating gel-cream and the silicone sheet to ensure optimum results.

Photo 1 - Aug 2013

Photo 2 - Nov 2013

Photo 3 - Jan 2014

Photo 4 - Apr 2014

Results

Within 6 weeks there were considerable improvements in the elasticity, smoothness, thickness and scar appearance (Photo 3). After a total of 5 months of dual therapy the scar had significantly decreased in size and the overall appearance of the scar was flatter, paler and acceptable to the child, (Photo 4).

The child applied the products herself, stating "It makes me feel better, it's working. I put it on myself and I try to remember to do it every day. I'm really happy that the scar is fading so that I can wear nice dresses next summer without the ugly scar".

Conclusion

Scar management should be initiated immediately after wound closure and should continue until the scar no longer causes a problem both physically and psychologically. Silicones gel sheets are shown to provide pressure at the site of scaring and may be used with pressure garments. The hydration gel-cream has been shown to provide the same occlusion as silicone gels whilst also providing hydration, and improving the overall appearance of the scar. Could a combined therapy of both a silicone gel sheet and a hydration gel-cream therefore be the future?

References

1. Thomas A, Mustoe, M.D., Rodney D. Cooter, M.D., et al. (2001) International Clinical Recommendations on Scar Management. Plastic and Reconstructive Surgery. Vol 110, No. 2 (560-571)
2. Hoeksema H, et al. (2013) Scar management by means of occlusion and hydration: A comparative study of silicones versus a hydrating gel-cream. Burns. http://dx.doi.org/10.1016/j.burns.2013.03.025

*Product references: * Bapscarsare ** Alhydran*

Supported by an educational grant from H&R Healthcare

Use of ALHYDRAN cream in the treatment of burn scars following a chemical explosion - a case study

Author: Rina Rijkenberg, Bachelor of Health, Skin Therapist. Skin Therapy Clinic, Scars and Burns Aftercare Department, Oosterbeek, The Netherlands.

Background

A 58 year old male had been injured in a chemical explosion. The explosion caused a fire, resulting in flame burns to the skin on his face and hands. Burns to the face were second degree, with second to third-degree burns on the hands. On admission to hospital, the Burns Centre Maasstad in Rotterdam, treatment of the burns involved the daily use of silver sulfadiazine cream and changing the bandages until the wounds closed.

The Medical Consultant at the Burn Centre recommended continuation of the treatment by a skin therapist specialising in the aftercare of burn injuries.

Complaints

The patient complained of extremely dry and itching skin on the face and hands. His skin felt extremely tight due to the burns and his hands were highly oedematous.

Post-burn skin therapy

Our therapy consisted of twice-weekly, manual lymphatic drainage, bandaging and endermotherapy, followed by the application of silicon sheets (BAP**SCAR**CARE). A hydrating cream (**ALHYDRAN**) was also applied 4 to 6 times a day as a very thin layer, by the patient himself. (Normal application is 3 times a day.) We also applied this hydrating cream before and after every endermotherapytreatment.

Results

ALHYDRAN made the patient's facial skin more flexible. The patient reported noticing a difference one or two hours after applying the hydrating cream to his face. His skin felt much looser. 'The following day the skin on his face was more flexible and "felt great!" His face healed completely, and the skin on his hands became more flexible. Application of the hydrating cream enabled the skin to be moved freely, without tearing, during lymphatic drainage and endermotherapy, which also contributed to the healing process. The cream also significantly reduced the itching.

After three months the skin had noticeably improved; it looked healthier and there were fewer squamae. The hydration level of the skin was improved and the patient reported less itching. Treatment was concluded after 18 months.

References

1) "Two years experience with a new product for the hydration of Burn Scars". EBA Congress 2007; Monstrey, S., MD, PhD, Burns Centre, Ghent University Hospital, Belgium.

2) "Itching, is there a remedy?", pilot study on rehydrating gel-cream for burns patients. EBA 2007; H.J. van Kempen, RN; Burns Centre, Rijnmond-Zuid, Rotterdam, The Netherlands.

3) "Scar management by means of occlusion and hydration: A comparative study of silicones versus hydrating gel-cream". Burns. 2013 Apr 29. pii: S0305-4179(13)00105-8. doi: 10.1016/j burns. 2013.03.025; Hoeksema H, Monstrey S, et al. Department of Plastic and Reconstructive Surgery – Burns Centre, Ghent University Hospital, Belgium.

Conclusions

The burns were successfully treated using a hydrating cream in combination with lymphatic drainage, bandaging and endermotherapy. The cream is pleasant to use and only a thin layer is required.

We recommend ALHYDRAN to all our burn patients, because of the excellent clinical outcomes we have achieved over the past few years with regard to itching[1,2], elasticity[1] and redness[1]. 'This is due to the proven hydration[3] and occlusion[3] properties of this cream.

Picture 1: *These pictures were taken the first time we saw the patient*

Picture 2: *These pictures were taken three months after commencing our treatment*

Picture 3: *These pictures were taken six months after commencing our treatment*

De Huidtherapeuten is a skin and oedema therapy practice. Our therapists are qualified in the treatment of burns and hold the 'Skin Therapy After Burns' diploma from the University of Applied Sciences, Utrecht, which collaborates with several burns centres in the Netherlands and Belgium.*

NETWERK HUIDTHERAPIE
* NETWERKPARTNER VAN DE BRANDWONDEN STICHTING

De Huidtherapeuten
PRAKTIJK VOOR HUID - EN OEDEEMTHERAPIE

AL20-015

CASE ALHYDRAN and BAPSCARCARE S: Surgical Intervention

1. Case study description

patient age	63 years
gender	female
cause	resection of abscess on palmar side of the wrist
therapy after care	start 12 days after surgical intervention during the day; ALHYDRAN 3 times a day, a very thin layer during the night; BAPSCARCARE S

2. Evolution of the wound

12 days after surgery, start with ALHYDRAN treatment

Status: After 1 month of treatment

Status: After 3 months of treatment

Status: After 9 months of treatment

3. Conclusions medical team

- Removal of sutures after 12 days and immediately start of treatment
- The combination of a thin silicone sheet during the night and ALHYDRAN during the day resulted in complete scar maturation within 9 months

Case study: Hoeksema, H. Department of Plastic and Reconstructive Surgery, University Hospital of Ghent, Belgium

AL20-001

Case ALHYDRAN:
Hot water burn (scald)

1. Case study description

patient age	4,5 years
gender	female
cause	hot water burn
treatment to wound closure	modern wound care dressings
therapy after care	1,5 years after wound closure start with ALHYDRAN, after one month completed with pressure therapy

2. Evolution of the wound

Start after care with ALHYDRAN

After 1 month therapy, only with ALHYDRAN

2 months after the start, ALHYDRAN with pressure garments

Almost 4 months after the start, with pressure therapy and ALHYDRAN

3. Conclusions medical team

- The good hydration by ALHYDRAN improves the flexibility of the vulnerable skin and has a positive effect on the itching and the redness. Scars become more flexible
- The use of pressure garments (after one month ALHYDRAN therapy) has a good effect on the aspect (flattening) of the scar
- The use of ALHYDRAN contributes significantly to the reduction of itching and redness. The scar becomes more flexible

4. Patient experience (and parents)

- Improved flexibility of the skin, less itching and redness
- Clear improvement of the mobility and a visual improvement of the look of the scars

Case study: C. Sukan, LotuS MDC, Ankara, Turkey

AL20-002

Case ALHYDRAN:
Flame burn (lower) leg

1. Case study description

patient age	15 years
gender	female
cause	flame burn
treatment to wound closure	1 week Flammazine, thereafter hydrocolloid gel + Jelonet as wound dressing and light therapy to enhance wound healing
therapy after care	ALHYDRAN, immediately after wound closure pressure garments and Silicone sleeve + hydration with ALHYDRAN (2 to 3 times a day) after one year follow up with ALHYDRAN alone

2. Evolution of the wound

Status flame burn 9 days post burn

Status 19 days post burn, total wound closure

Follow-up after 6 months pressure and ALHYDRAN

Follow-up after 1 year pressure and ALHYDRAN

3. Conclusions medical team

- Wound healing after 19 days
- Evolution to complete maturation within 1 year, with excellent results regarding to color (slight hypo pigmentation) and elasticity of the scar
- Absolutely no hypertrophic scarring and impairment of mobility

4. Patient experience (and parents)

The patient was originally not very excited by the typical Aloe Vera smell of the ALHYDRAN. However this patient was very satisfied by the other properties of the gel cream such as easiness of application and the hydration after application, resulting in much better suppleness of the skin. Also less itching was noticed by this young girl.

Case study: Prof. S. Monstrey and H. Hoeksema. University Hospital Ghent – department of Plastic and Reconstructive Surgery and Burns Center, Belgium

AL20-005

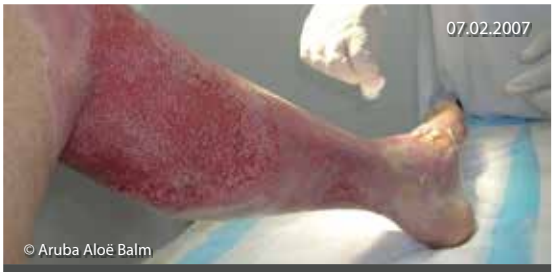
Case ALHYDRAN:
Second degree burn

1. Case study description

patient age	45 years
gender	male
cause	fireworks burn, 31th of December 2006
treatment to wound closure	Flammazine
therapy after care	5 weeks post accident start with ALHYDRAN, 3 daily doses, brought on thick during the first few weeks

2. Evolution of the wound

2 days post accident. Therapy Flammazine



5 weeks post accident. Closed skin is treated with ALHYDRAN

6 months post accident. Therapy ALHYDRAN

14 months post accident. Therapy ALHYDRAN

3. Conclusions medical team

- Deep second degree burn with serious ankle damage
- Therapy starts with Flammazine, patient evolves well, only a lot of complaints on itching of closed skin
- After 5 weeks: start with ALHYDRAN on the freshly closed skin, 3 times per day
- ALHYDRAN had good result on the skin, which improved rapidly
- Itching complaints disappeared immediately when ALHYDRAN was used

4. Patient experience

- Flammazine gave a lot of itching problems
- Upon start of the treatment with ALHYDRAN, immediate reduction of itching
- Therapy: 3 daily doses, or each time the skin was itching
- After 6 months, the skin was soft and calm, patient started sporting again
- Skin looks good and calm now
- After 18 months, maintenance of 1 daily dose of ALHYDRAN

Case study: Dr. K. Veel MD, AAB Aruba

AL20-010

Case ALHYDRAN:
Scald (hot water from exploding radiator)

1. Case study description

patient age	52 years
gender	male
cause	scald (hand, face, chest)
treatment	ALHYDRAN 2 b.i.d. healthy patient, no skin problems hydrochlorothiazide treating hypertension

2. Evolution of the skin

Day 1 after scald (3-10-2011) Blisters punctured/ commencing with ALHYDRAN as single therapy/ 2 b.i.d.

Day 7 following treatment ALHYDRAN (10-10-2011)

Day 14 following treatment ALHYDRAN (17-11-2011)

3. Conclusions medical team

- Positively surprised at fast results & healing process
- Patient indicated absence of pain and itching
- Uneventful healing process within 4 weeks

4. Patient experience

- No pain or itching
- Rapid healing, can resume activities
- Easy application ALHYDRAN, no fragrance

Case study: Drs. R. Ceulen, Dermatologist, Albert Schweitzer Hospital, Dordrecht, The Netherlands

AL20-011

Case ALHYDRAN:
Burn caused by chemical explosion

1. Case study description

patient age	58 years
gender	male
cause	burn scar after explosion
treatment to wound closure	Flamazine and daily dressing change
therapy after care	ALHYDRAN, pressure gloves, scar therapy by skin therapist , endermotherapy

2. Evolution of the skin

Start ALHYDRAN

After 3 months of ALHYDRAN therapy

After 6 months of ALHYDRAN therapy

3. Conclusions medical team

- Fast healing
- Improved restoration skin hydration
- Visibly improved supple skin
- Reduction squamae, ie. skin particles

4. Patient experience

- Skin has stopped itching
- Improved flexibility of the skin
- Reduced contractions
- Easy to apply

Case study: Ms J.M. de Graaf and Ms C.T.M. Rijkenberg, Practice Skin Therapists, Oosterbeek, The Netherlands

AL20-012

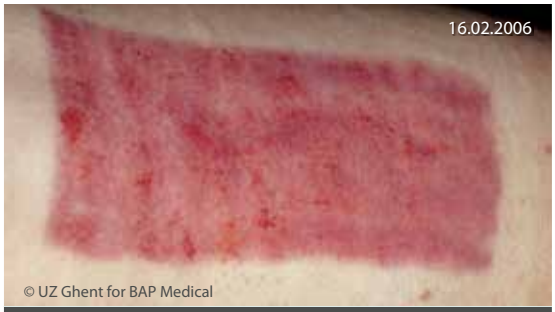
Case Suprathel and ALHYDRAN: Donor site

1. Case study description

patient age	13 years
gender	female
cause	donor site
treatment to wound closure	Suprathel 14 days
therapy after care	ALHYDRAN, immediately after wound closure pressure garments and hydration with ALHYDRAN (2 to 3 times a day)

2. Evolution of the wound

Donor site: immediately after skin removal



14 days after wound closure: start ALHYDRAN and compression

3 months after start of treatment with ALHYDRAN and compression

1 year after start of treatment with ALHYDRAN and compression

3. Conclusions medical team

- Full wound closure within 14 days
- Evolution to complete maturation within 1 year, with excellent results regarding to color (slight hypo pigmentation) and elasticity of the donor site
- Significantly less redness and itching during maturation

4. Patient experience (and parents)

- No significant pain during wound healing
- No significant itching during the treatment, before nor after wound closure
- Good flexibility and feel of the skin on the donor site

Case study: Prof. S. Monstrey and H. Hoeksema. University Hospital of Ghent – department of Plastic and Reconstructive Surgery and Burns Centre, Belgium

AL20-006

Case ALHYDRAN:
Radiotherapy (after care)

1. Case study description

patient age	68 years
gender	female
diagnosis	mastectomy with axillary dissection
therapy after care	started with ALHYDRAN (3 times daily) immediately after (27x) radiotherapy

2. Evolution of the skin

Start ALHYDRAN 3x daily

Operation area after 5 days, ALHYDRAN 3x daily

3. Conclusions medical team

- ALHYDRAN ensures that the radiated area is less inflamed, red and painful
- ALHYDRAN ensures that the skin heals optimally. As a result of the good and rapid healing, the follow-up phase can be started earlier
- ALHYDRAN is pleasant to use and simple to apply

4. Patient experience

- ALHYDRAN ensures less pain and redness
- There is noticeably rapid improvement to the radiated area
- ALHYDRAN is pleasant to use

Case study: Ms M. van 't Hekke, Skin Therapist, Zwolle, The Netherlands

AL20-007

Case ALHYDRAN: Radiotherapy

1. Case study description

patient age	42 years
gender	female
diagnosis	breast carcinoma
therapy after care	ALHYDRAN during and after the radiation period

2. Evolution of the skin

At the end of radiation

2 months after treatment

3. Conclusions medical team

- ALHYDRAN is a good alternative for cetomacrogol
- Patients are almost always positive about its use
- ALHYDRAN is better than an Aloe Vera gel only, due to hydrating properties of ALHYDRAN. If only a gel is used, the radiated skin will become too dry and flaky
- ALHYDRAN is used with grade I and II radiation dermatitis

4. Patient experience

- ALHYDRAN is better than an indifferent cream (cetomacrogol), because ALHYDRAN eliminates the pain of radiation skin burn
- Reduces itching
- ALHYDRAN was easy to apply and has a neutral odour

Case study: N.S. Russell, radiotherapist, Netherlands Cancer Institute (NKI), Antoni van Leeuwenhoek Hospital, Amsterdam, The Netherlands

AL20-004

Case ALHYDRAN:
Chronical wound

1. Case study description

patient age	79 years
gender	female
cause	open fracture luxation (04-2006), right ankle with osteosynthesis material post operation, a chronical wound developed
treatment to wound closure	curettage and hydrogel on wound wound borders with ALHYDRAN
therapy after care	ALHYDRAN

2. Evolution of the wound

Post operation removal of OS material. Irritation around the wound. Treatment: Hydrogel in the wound, ALHYDRAN around the wound.

Before curettage of the wound

After curettage of the wound

Further treatment with ALHYDRAN

3. Conclusions medical team

- After luxation fracture and the operation with osteosynthesis material, the wound had never been closed
- Due to the presence of the characteristics of a chronical wound with underlying OS material, there is a big chance of deeper infections and the wound will be very difficult to close
- OS material was removed laterally
- The wound borders have improved significantly due to treatment with ALHYDRAN
- In the after care only ALHYDRAN was used

Case study: E. Roovers, Wound Care Coordinator, Ziekenhuisnetwerk Antwerpen (ZNA), Belgium

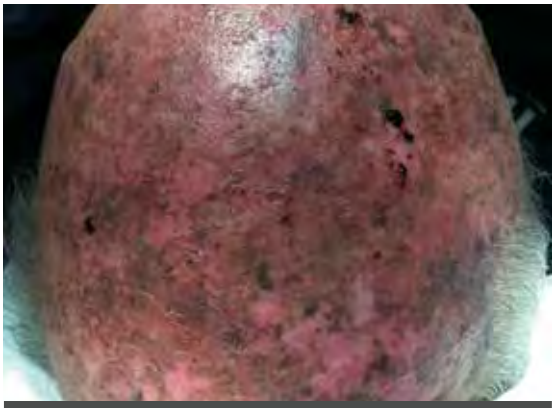
AL20-009

Case ALHYDRAN:
Multiple actinic keratosis

1. Case study description

patient age	81 years
gender	male
diagnosis	actinic keratosis of the scalp
treatment	a single session of 5-ala PDT
therapy after care	ALHYDRAN twice daily

2. Evolution of the skin



Start of ALHYDRAN as a single treatment, applied twice a day

Day 7 after starting ALHYDRAN

3. Conclusions medical team

- Day 1 after PDT, patient was seen during an emergency consultation with serious reactions: inflamed erythema, erosions, crusting
- Good and quick clinical improvement (within a week)

4. Patient experience

- Complaints of pain disappeared within 48 hours
- ALHYDRAN had a cooling effect

Case study: Dr. R. Ceulen, Dermatologist, Albert Schweizer Hospital, Dordrecht, The Netherlands

AL20-008

Case ALHYDRAN: Erosive skin

1. Case study description

patient age	70 years
gender	male
diagnosis	actinic keratosis (skin cancer)
treatment	3 weeks twice daily application of 5-Fluorouracil
therapy after care	after 3 weeks start ALHYDRAN

2. Evolution of the skin

3 weeks after application of 5-Fluorouracil (start of ALHYDRAN)

3 weeks after start of treatment with ALHYDRAN

3. Conclusions medical team

- ALHYDRAN is easy to apply to mildly erosive skin
- ALHYDRAN is a pleasant alternative to fusidic acid cream
- ALHYDRAN does not entail a risk of bacterial resistance, unlike fusidic acid cream
- ALHYDRAN keeps the skin slightly oily and hydrated
- ALHYDRAN also promotes wound healing

4. Patient experience

- ALHYDRAN is easy to apply
- Nice to use, does not sting
- Noticeable result in just a couple of days
- ALHYDRAN also works well on grazes

Case study: Dr. Njoo, dermatologist, Hospital Group Twente, Hengelo (Ov.), The Netherlands

AL20-013

Case ALHYDRAN:
Actinic keratosis

1. Case study description

patient age	72 years
gender	male
diagnosis	actinic keratosis after cryotherapy
treatment	patient had 2 actinic keratosis on the scalp both lesions were treated with 2 cycles of liquid nitrogen spray treatment
therapy after care	ALHYDRAN cream twice daily for 14 days

2. Evolution of the wound

Start ALHYDRAN treatment, 2x daily

14 days after start of ALHYDRAN treatment, 2x daily

3. Conclusions medical team

- The treated skin areas closed after 14 days, leaving no scar formation or hypopigmentation
- ALHYDRAN is easy to use and has no local side effects
- ALHYDRAN can be used as an alternative for fusidinic acid cream
- In contrast to fusidinic acid, ALHYDRAN does not cause bacterial resistance
- ALHYDRAN cream proved to heal wounds rapidly

4. Patient experience

- Easy in use
- No skin irritation or other side effects
- Fast clinical results, within a few days

Case study: Dr. Njoo, dermatologist, Hospital Group Twente, Hengelo (Ov.), The Netherlands

AL20-014

Case ALHYDRAN:
Atopic eczema

1. Case study description

patient age	22 years
gender	female
diagnosis	atopic eczema patient had suffered from atopic eczema since childhood, the patient was reluctant to use local corticosteroids as she feared atrophy of the skin. The eczema is quite persistent and recurring, especially inside the elbows
treatment	ALHYDRAN cream twice daily, monotherapy inside the elbows

2. Evolution of the skin

Start ALHYDRAN treatment, 2x daily | During ALHYDRAN treatment | 14 days after start of ALHYDRAN treatment

3. Conclusions medical team

- The eczema cleared within 2 weeks
- Monotherapy with ALHYDRAN cream proven to be effective in mild eczema cases
- ALHYDRAN delivered results comparable with a local corticosteroid
- ALHYDRAN had no side effects, in particular no skin atrophy

4. Patient experience

- Easy to apply and quickly absorbed
- No skin irritation or other side effects
- More confidence in the product, as there are no side effects such as atrophy

Case study: Dr. Njoo, dermatologist, Hospital Group Twente, Hengelo (Ov.), The Netherlands

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ALHYDRAN

medical after care for the skin

ALHYDRAN range

100ml (3.4 fl. oz.)

250ml (8.5 fl. oz.)

SPF 30 - 59ml (2 fl. oz.)

30ml (1 fl. oz.)

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MEDICAL CARE FOR THE SKIN

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