Prontosan® Wound Gel X

Case Studies



CoE Infection Control





Introduction

Since the launch of Prontosan® Wound Gel X, reports have been reaching us of sensational treatment successes. We would like to share these with you today in the form of a short photo storyboard.

In the meantime, the product has become available throughout the world and has already successfully benefited patients suffering from burns.

Due to its special betaine formulation in particular, Prontosan® facilitates efficient removal of coatings and biofilm from wounds, which considerably reduces both duration of therapy and costs for healthcare services.

The use of polihexanide as a preservative means the tube can be used for up to eight weeks after it is first opened.

B. Braun Medical AG CoF Infection Control

Sempach, Switzerland January 2012

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Right. From the start.

B. Braun Wound Care

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The Prontosan® product family

Clean. Easy Wound Healing.

Wound Cleansing | Wound Bed Preparation

	chronic wounds	acute wounds	I. degree burns	II. degree burns	III. degree bruns	IV. degree bruns		
Prontosan® Wound Gel X	•	•	•	•	•	•	Province Market 1 TOTAL TO	 Sterile, highly viscous hydrogel Prevents biofilm formation Well-known substances with low allergenic potential Compatible with commonly used wound dressings Can be used up to 8 weeks after first opening Painless application
Prontosan® Wound Gel	•	•	•	•			The state of the s	 Sterile hydrogel Prevents biofilm formation Well-known substances with low allergenic potential Compatible with commonly used wound dressings Can be used up to 8 weeks after first opening Painless application
Prontosan® Wound Irrigation Solution	•	•	•	•			de 10 Tourne de 10	 Sterile solution Prevents biofilm formation Well-known substances with low allergenic potential Compatible with commonly used wound dressings Can be used up to 8 weeks after first opening

Prontosan® Wound Gel X

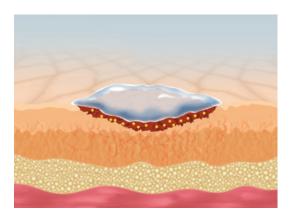


Prontosan® Wound Gel X is a ready to use high viscous gel containing 0.1% polihexanide (preservative) and betaine (surfactant), glycerol (moisturizer) and hydroxyethylcellulose (gelling agent) in water for:

- cleansing, decontamination and moistening of acute and chronic wounds, 1st to 4th degree burns
- highly viscous gel for large surface area wounds, e.g. ulcus cruris or decubitus
- absorption of wound odours
- does not inhibit granulation and epithelialisation
- the 250 g tube enables multiple easy and economical applications

HINTS AND TIPS

All wounds should, in principle, first be rinsed and cleansed with Prontosan® Wound Irrigation Solution, Prontosan® Gel and Gel X remain on the wound until the next dressing change. It therefore has a long acting effect.



For large surface area wounds, apply a 3 – 4 mm thick layer of **Prontosan**° **Wound Gel X** and cover with a secondary dressing.

Prontosan® Wound Gel

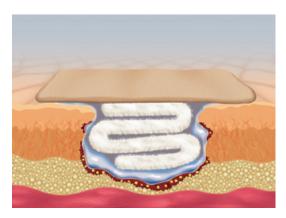


Prontosan® Wound Gel is a ready to use gel containing 0.1% polihexanide (preservative) and betaine (surfactant), glycerol (moisturizer) and hydroxyethylcellulose (gelling agent) in water for:

- cleansing, decontamination and moistening of acute and chronic wounds, 1st and 2nd degree burns
- for smaller, deep tunneling wounds, as well as for difficult to access wounds
- absorption of wound odours
- does not inhibit granulation and epithelialisation

HINTS AND TIPS

All wounds should, in principle, first be rinsed and cleansed with Prontosan® Wound Irrigation Solution, Prontosan® Gel and Gel X remain on the wound until the next dressing change. It therefore has a long acting effect.



For the application in deep or tunneling wounds, wound cavities and difficult to access areas, apply a 3-5 mm layer of **Prontosan® Wound Gel** and cover with a secondary dressing.

Prontosan® Wound Irrigation Solution



Prontosan® is a ready to use solution containing 0.1% polihexanide (preservative) and betaine (surfactant) in water for:

- releases fibrin coatings and debris from the wound gently
- absorption of wound odours
- usage up to 8 weeks after opening
- cleansing and moistening of acute and chronic wounds,
 1st and 2nd degree burns
- keeping wounds and wound dressings moist

PAINLESS DRESSING CHANGES WITH PRONTOSAN®

Dressings are often encrusted and adhere to wound surfaces. If attempted to be removed from the wound surface when dry, new injuries often arise with the additional risk of infection, which in turn delays the healing process. In cases where dressings are difficult to release, intensive moistening of the dressings with Prontosan® Wound Irrigation Solution is advisable. They can then be gently released without traumatising the wound surface. If stubborn large encrustations are present, the dressing should be thoroughly saturated with Prontosan® Wound Irrigation Solution until the dressing can be easily released.

Betaine

- particularly high quality tenside
- effective wound irrigation
- excellent skin tolerance
- complete absence of regreasing compounds
- skin and mucous membranes are not affected and do not dry out
- exemplary record in the cosmetics industry

Polihexanide

- excellent skin tolerance
- skin and mucous membranes do not dry out
- no irritations
- non-toxic
- high tolerability
- hypoallergenic
- no tissue irritation
- no absorption

Prontosan® Wound Gel X case studies in burns

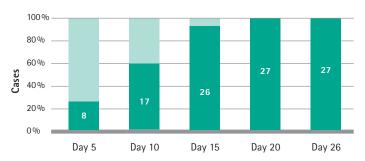
In the Burn Centre of Scientific Emergency Institute Dshanelidze in St. Petersburg, 27 patients have been treated with Prontosan® Wound Gel X. In the following pages are the summarized observations as well as randomly selected photo case reports:

Dressing change

Intensively moistening adhered dressings with Prontosan® Wound Irrigation Solution helps to gently release the dressings without traumatising the wound surface.

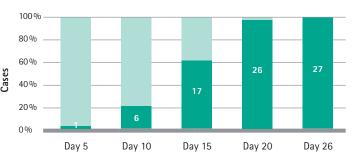
Burn care must focus on the optimal control of pain to avoid patient suffering and reduce the risk of post-traumatic stress disorders.

Easy removal of wound dressing



Dark green represents # of patients where an easy removal of wound dressing was reported and the day of treatment.

Painless dressing change



Dark green represents # of patients where a painless dressing change was reported and the day of treatment.

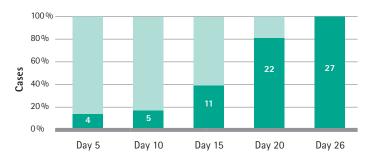
The application of Prontosan® Wound Gel X was found to be easy in all of the 27 case reports.

Wound condition

Exudate was effectively managed and an optimal moist environment necessary for wound healing was created by using Prontosan® Wound Gel X.

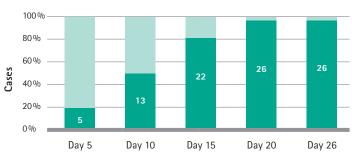
The surrounding skin was effectively protected from the risks of maceration.

No exudation



Dark green represents # of patients where no exudation was reported and the day of treatment.

No wound maceration



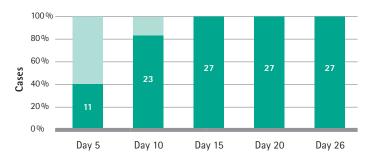
Dark green represents # of patients where no wound maceration was reported and the day of treatment.

20 (74%) out of 27 cases healed without secondary infection.

Quality of life

Control of wound odour is imperative, as it can significantly improve the quality of life for patients.

No odour



Dark green represents # of patients where no wound odour was reported and the day of treatment.

The comfort of treatment with Prontosan® Wound Gel X was reported by all 27 case studies to be good.

Thermal burn caused by fire

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	54
Past medical history (PMH)	Thermal burn caused by fire
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Arm
Age of wound	17 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	8 % of body surface area (2 % III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 8)





Day 0 Day 3





Day 10 Day 14

Thermal burn caused by fire

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	71
Past medical history (PMH)	Thermal burn caused by fire
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Back
Age of wound	19 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, Atrauman Ag
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	7 % of body surface area (5 % III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 5) with several microrganism species





Day 0 Day 5





Day 12 Day 17

Thermal burn caused by fire

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	43
Past medical history (PMH)	Thermal burn caused by fire
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Back
Age of wound	17 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, necrectomy
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	8% of body surface area (approx. 5% III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 3)



Day 0



Day 14





Day 4 Day 7



Day 21

Thermal burn caused by fire

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	32
Past medical history (PMH)	Thermal burn caused by fire
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Head / Face
Age of wound	19 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, necrectomy
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	2% of body surface area
Outcome (final comments)	Skin graft take Microbial count reduction (log 4)



Day 0



Day 12



Day 5



Day 17

Thermal burn caused by fire

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	54
Past medical history (PMH)	Thermal burn
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Thigh (upper leg)
Age of wound	7 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	7% of body surface (approx. 2% III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 7)



Day 0



Day 9





Day 4 Day 7



Day 14

Thermal burn caused by hot water

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	51
Past medical history (PMH)	Thermal burn caused by hot water
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Foot
Age of wound	15 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, necrectomy
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	7% of body surface area (approx. 4% III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 4)



Day 0



Day 12



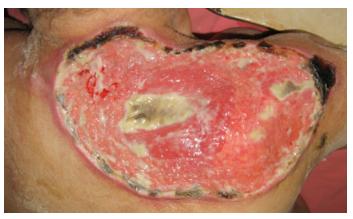
Day 5



Day 19

Thermal burn caused by local contact with hot surface

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Female
Age of patient (years)	73
Past medical history (PMH)	Thermal burn caused by local contact with hot surface
Medical treatment	Skin grafting Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Shoulder
Age of wound	21 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	3 % of body surface area
Outcome (final comments)	Skin graft take Microbial count reduction (log 5) with several microrganism species





Day 0 Day 5





Day 13 Day 21

Thermal burn caused by local contact with hot surface

D	Duef Kanatantin M. Kudan
Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	38
Past medical history (PMH)	Thermal burn caused by local contact with hot surface
Medical treatment	Local treatment with Prontosan® Wound Gel X
Allergies	None
Wound diagnosis	Partial and full thickness
Localisation of wound	Back
Age of wound	15 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, necrectomy
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	6% of body surface area
Outcome (final comments)	Skin graft take Microbial count reduction (log 2)



Day 0



Day 14





Day 2 Day 7



Day 23

Thermal burn caused by local contact with hot surface

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Male
Age of patient (years)	53
Past medical history (PMH)	Thermal burn caused by local contact with hot surface
Wound diagnosis	Partial and full thickness
Localisation of wound	Hip and upper thigh
Age of wound	15 days
Previous treatment of wound	Daily dressing changes in combination with treatment with povidone iodine solution, necrectomy
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	3% of body surface (approx. 2% III degree)
Outcome (final comments)	Skin graft take Microbial count reduction (log 3)





Day 0 Day 5





Day 10 Day 14

Skin grafting

Responsible person for treatment	Prof. Konstantin M. Krylov
Institution	Burn Centre of Scientific Emergency Institute Dshanelidze, St. Petersburg
Gender (female, male)	Female
Age of patient (years)	53
Past medical history (PMH)	Skin grafting
Allergies	None
Wound diagnosis	Critically colonized skin donor site
Localisation of wound	Thigh (upper leg)
Age of wound	41 days
Other products used	Systemic therapy with antibiotics
Wound dimensions (start)	18% of body surface area
Outcome (final comments)	Complete epthelization of wound Microbial count reduction (log 4)





Day 0 Day 6



Day 20

