



Askina® Calgitrol® CASE STUDIES

### INTRODUCTION

Since the launch of Askina® Calgitrol® Ag, Askina® Calgitrol® THIN and recently Askina® Calgitrol® Paste, we have received reports of treatment successes. We would like to share these with you today in the form of a short photo storyboard.

The prevention and treatment of wound infection is of the utmost importance in order to remove barriers to healing. Wound bed preparation and infection prevention are a prerequisite but treatment of local infection is essential for the healing process.

We would like to take this opportunity to thank all the doctors, nursing staff and B. Braun employees for forwarding the material and helping us put this picture book together.

**B. Braun Medical** Center of Excellence Wound Management

### INTRODUCTION

#### Askina® Calgitrol® Paste (2,3)



Highly conformable paste for close contact with the wound hed

Provides for broad antimicrobial effectiveness

Long lasting antibacterial protection

Maintains a maist wound environment

Easy to remove by simply rinsing

Can be stored and used for 7 days if the lid / cap is replaced after use

Askina® Calgitrol® Paste is indicated for the management of partial to full thickness wounds, stage I –IV pressure ulcers, venous, arterial and neuropathic ulcers, second degree burns and donor sites.

Askina® Calgitrol® Paste is a highly conformable paste composed of the same ionic silver alginate matrix used in the Askina® Calgitrol® Ag flat dressings. The high conformability allows a closer contact between the active ionic silver alginate matrix and the wound bed, which is particularly valuable in difficult to manage wounds such as tunnels and sinuses, seen in patients with burns and diabetic foot ulcers.

For the absorption of wound exudate and the security of the wound this must be cover with an appropriate secondary dressing.



Askina® Calgitrol® Paste exists in different presentations

**Tubes:** 15g or 100g

#### Askina® Calgitrol® Ag (1,3,4,5)



Broad antimicrobial effectiveness (1)

Immediate availability of silver ions (2)

Sustained controlled release to the wound bed during use of the dressing (2)

Tolerable and antimicrobially efficient [4]

Fasy to use & conformable [3]

No activation needed: ready to use

Askina® Calgitrol® Ag is indicated for the management of exuding partial full thickness wounds, stage I -IV pressure ulcers, venous ulcers, second degree burns and donor sites.

Askina® Calgitrol® Ag is a sterile dressing consisting of two layers:

- an absorbent polyurethane foam layer which provides for the absorption of wound exudate
- an ionic silver alginate matrix which provides for broad antimicrobial effectiveness and helps reduce the bacterial load
- for better absorption of wound exudate and secureness of dressing select an appropriate secondary dressing.



In contact with wound exudate, the Calgitrol® ionic silver alginate matrix forms a soft gel allowing the liberation of silver ions.

Dressings size available (10 Pieces / Pack): 10 cm x10 cm, 15 cm x15 cm, 20 cm x 20 cm.

<sup>(1)</sup> Instruction for use: Askinal® Calgitrol l®Aq, Askinal® Calgitrol l®THIN, Askinal® Calgitroll® Paste

<sup>(2)</sup> Opasanon S, Magnette A, Meuleniere F, Harding K. Askina Calgitrol Made Easy. Wounds International 2012; 3(1). Available from http://www.woundsinternational.com

<sup>(3)</sup> Wounds International. Using Askina Calgitrol Paste for the treatment of diabetic foot infection: case studies. London: Wounds International 2013. Available for free download from: www.woundsinternational.com

<sup>(4)</sup> Trial C, Darbas H, Lavigne J-P, Sotto A, Simoneau G, Tillet Y, et al. Assessment of the antimicrobial effectiveness of a new silver alginate wound dressing: a RCT. J Wound Care. 2010 Jan; 19(1):20–6.

<sup>(5)</sup> Ricci E, Pittarello M, Cassino R. Askina Calgitrol\* Ag: clinical use of an advanced ionic silver dressing. Acta Vulnologica. 2007;5(3):105–11.

### INTRODUCTION

#### Askina® Calgitrol® THIN (1)



Broad antimicrobial effectiveness (1)

Sustainable antimicrobial effectiveness for up to 7 days (2)

Deliver ionic silver to a wound from both sides (2)

Can be used to pack deep wounds, cavities or sinuses (2)

Conform to irregularly shaped wounds or to wounds in awkward anatomical sites (eg on the heel, elbow or shoulder) (2)

Non-adhesive (2)

Can be cut (1)

Askina® Calgitrol® THIN is indicated for the management of partial to full thickness wounds: Stage I-IV pressure ulcers, venous ulcers, second degree burns and donor sites.

Askina® Calgitrol® THIN is a thin layer of ionic silver alginate matix. Soft and conformable, it is well adapted for deep and difficult-to-dress wounds. It is required to cover the dressing to keep it place and to absorb exudate with an appropriate secondary dressing like Askina® Foam.



Askina Calgitrol THIN is also suitable for cavity wounds or sinuses.

Dressings size available:

10 Pieces / Pack: 5 cm x 5 cm, 10 cm x 10 cm, 10 cm x 20 cm,

20 cm x 20 cm

3 Pieces / Pack: 20 cm x 40 cm

## **CONTENT**

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## **DIABETIC FOOT ULCERS**

Responsible practitioner	Liezl Naude, RN	
Centre	South Africa	
Gender, age (years)	Male, 62 years	
Past medical history	<ul> <li>Diabetes Type II (insulin-dependent)</li> <li>Severe neuropathy with history of previous amputations</li> </ul>	
	Chronic diabetes foot ulceration for the last four years	
Wound diagnosis	Abscess drained by an orthopaedic surgeon in January	
	Plantar wound on the left foot	
	Wound size: L=62 mm, W=50 mm, D=12 mm,  50 % proportions 50 % critical biomage.	
Wound profile	• 50 % granulation, 50 % epithelial tissue	
	<ul> <li>Clinical signs of localised infection</li> <li>High levels of exudate and maceration of the surrounding callous</li> </ul>	
Previous wound management	Negative Wound Pressure Therapy (NWPT) for two weeks then removal by the patient (mid March)	
Reason(s) for switch to Askina® Calgitrol® Paste	To treat the local infection and manage exudate	
Treatment regimen	<ul> <li>Prontosan® Gel used to soak the wound during 15/20 minutes, then wound was cleaned with saline</li> <li>Application of Askina® Calgitrol® Paste (for four weeks)</li> <li>Secondary dressings depending on the exudate level, such as non adhesive foam</li> <li>Dressings changed 2 or 3 times per week</li> </ul>	
Other treatment(s) used	Offloading	
Clinical outcomes	<ul> <li>Wound improvement, less maceration one week after treatment</li> <li>By Week 2, wound size reduction, cleaned wound bed with 100 % granulation tissue</li> <li>By Week 4, eradication of all signs of infection, treatment with Askina® Calgitrol® discontinued</li> </ul>	
Treatment benefits	Askina*Calgitrol* paste shows:  - Improvement of the wound healing process  - Decrease in pain and improvement in quality of life  - The paste is easy to apply and remove	
Conclusion	Askina® Calgitrol® Paste permitted eradication of the local infection in this patient with high risk of amputation	





Day 1 Week 2





Week 4 Week 5

## **DIABETIC FOOT ULCERS**

Responsible practitioner	Anne Kataja, Foot therapist	
Centre	Diabetes Clinic, Tampere, Finland	
Gender, age (years)	Male, 72 years	
	Patient with Type II diabetes	
	Diabetic polyneuropathy and angiopathy in both lower limbs	
Past medical history	As a result both of his feet were numb	
	Previous wounds treated with growth factors	
	<ul> <li>Left foot was revascularised</li> </ul>	
Wound diagnosis	Recurrent ulceration on the ball of left foot	
	Wound size: L=9 mm, W=5 mm, D=3 mm,	
Wound profile	<ul> <li>No slough, but thick callous surrounded wound</li> </ul>	
vvound proffic	Moderate exudate	
	No signs of infection	
	Wound care was initiated with a gelling dressing	
	<ul> <li>Use of offloading with a felt and footwear to accommodate pressure</li> </ul>	
Previous wound management	<ul> <li>Wound size reduction (L=5 mm, D=3 mm, W=3 mm) a month later</li> </ul>	
, and the second	<ul> <li>Cleaned wound bed.</li> <li>Low level of exudates but callus surrounding the wound.</li> </ul>	
	<ul> <li>Local wound care was changed to resin salve</li> </ul>	
	Short-term use of normal shoes causes the wound to enlarge: L=7 mm, D=5 mm, W=5 mm	
Reason(s) for switch to Askina®	A haematoma developed next to the wound, which had burst with leakage	
Calgitrol® Paste	Ball of left foot slightly warmer than right foot	
Treatment regimen		
Treatment regimen	Askina® Calgitrol ® Paste	
Other treatment(s) used	-	
	After 24h, significant improvement of the wound bed	
	<ul> <li>By Day 11, reduction of the wound size L=2 mm, W=1 mm, D=2 mm</li> </ul>	
Clinical outcomes	There was good epithelialization	
	<ul> <li>Low level of exudates, no maceration</li> </ul>	
	Wound completely healed after 4 weeks of treatment	
Treatment benefits	Fast wound healing of the diabetic foot ulcer in this patient with recurrent ulcers and history of con-	
	stant ulceration	
Canalysian	The use of Askina® Calgitrol® Paste in this patient resulted in complete healing of his chronic diabetic	
Conclusion	foot ulcer	



Wound prior inclusion



Day 0 – Application of Askina® Calgitrol® Paste



Day 2 – Wound at 24 hours following application of Askina® Calgitrol® Paste



Day 11 – Wound healing in process

## **DIABETIC FOOT ULCERS**

Responsible practitioner	Samantha Haycocks, Dr Paul Chadwick	
Centre	Podiatry department, Salford Royal Hospital, UK	
Gender, age (years)		
dender, age (years)	Female, 69 years	
Past medical history	<ul><li>Diabetes Type II (insulin-dependent)</li><li>Peripheral arterial disease</li></ul>	
	Osteomyelitis	
Wound diagnosis	Amputation of left 5th toe and distal third of metatarsal	
	Wound size: L=63 mm, W=27 mm	
	• Surface area: 1734 mm²	
Wound profile	Clinical signs of localised infection	
	Granulation tissue and slough	
	High levels of exudate	
Previous wound management	-	
Reason(s) for switch to Askina®		
Calgitrol® Paste	To reduce the signs and symptoms of infection	
Treatment regimen	Application of Askina® Calgitrol® Paste during four weeks	
Other treatment(s) used	Offloading	
	By Week 1, good evolution	
Clinical outcomes	$\bullet$ By Week 6, very good wound improvement, wound size reduction ( L=30 mm, W=15 mm) with area decrease of 45 $\%$	
Treatment benefits	Askina®Calgitrol® paste shows:	
	- Improvement of the wound healing process	
	<ul><li>Ideal use on difficult to manage wound shapes, and tunnels</li><li>Ease of application</li></ul>	
Conclusion	Askina® Calgitrol® Paste permitted to reduce the local infection in this patient with amputation	



Wound at inclusion



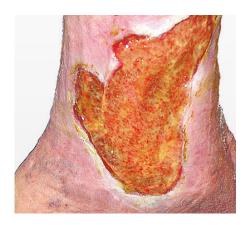
Wound one week after



Wound 6 weeks after

# LEG ULCERS ASKINA® CALGITROL® AG

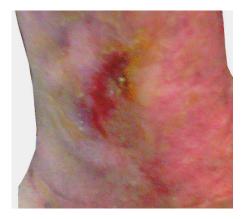
Responsible practitioner	Simon Barrett	
Centre	Humber NHS Foundation Trust, East Yorkshire, United Kingdom	
Gender, age (years)	Male, 74 years	
Past medical history	<ul> <li>Rhumatoid arthritis</li> <li>Recent malignant lesions to scalp</li> <li>Post traumatic wound to left inner ankle at age 40</li> </ul>	
Wound diagnosis	Ulcer, which failed to heal during the previous 34 years despite most up to date intervention	
Wound profile	<ul> <li>Wound size: L=12 cm, W=8 cm</li> <li>Superficial depth, 100 % liver red, critically colonized, high volume of exudate, low viscosity</li> </ul>	
Previous wound management	<ul> <li>Skin grafting, bed rest and elevation, compression therapy and electrical stimulation</li> <li>Use of several antimicrobial dressings e.g. iodine, silver and Prontosan®</li> <li>Dressings changed three times per week to manage exudate and due to maceration</li> </ul>	
Reason(s) for switch to Askina® Calgitrol® Ag	The skin breakdown did not respond to any conventional or advanced therapies for a period of approximately two years	
Treatment regimen	Two dressings per week	
Other treatment(s) used	Multi layer compression therapy	
Clinical outcomes	<ul> <li>Significant wound size reduction to L=3 cm, W=2 cm</li> <li>Decreased level of exudate</li> <li>Wound bed is 100 % healthy red, very superficial wound</li> </ul>	
Treatment benefits	<ul> <li>Very good exudate management, no further maceration dressing change twice a week</li> <li>The dressing is conformable to apply</li> <li>Dressings are comfortable for the patient</li> </ul>	
Conclusion	<ul> <li>Having lived with it for 34 years, the leg ulcer has now healed, which has dramatically changed the patient's life</li> <li>Askina® Calgitrol® Ag is cost effective: reduction of the dressing changes (from 3 to 2 per week) resulting in reduced nursing time</li> </ul>	







Week 1 Week 4 Week 8





Week 12 Final result

# LEG ULCERS ASKINA® CALGITROL® PASTE

Responsible practitioner	Katharine Speak, Clinical Lead Podiatrist	
Centre	Centre For Diabetes and Endocrinology, York Hospital, York, United Kingdom	
Gender, age (years)	Female, 93 years	
Past medical history	<ul> <li>Peripheral arterial disease: Superior femoral angioplasty deemed successful, resulting in in-line flow</li> <li>Cardiac disease (heart failure, atrial fibrillation)</li> <li>No diabetes</li> <li>The patient was living independently with help from the family and her level of self-care was good</li> </ul>	
Wound diagnosis	<ul><li> Ischaemic great toe with subungual ulceration</li><li> Symptoms started approximately one month earlier</li></ul>	
Wound profile	<ul> <li>Wound was covered 100 % in slough, was difficult to sharp debride</li> <li>Wound was malodorous</li> <li>Erythema on the peri-wound skin</li> <li>Nail had avulsed</li> </ul>	
Previous wound management	<ul> <li>lodine dressing causing irritation making it uncomfortable especially at night</li> <li>Previous dressing applied too tightly causing a secondary ulcer at the base of the toe</li> </ul>	
Reason(s) for switch to Askina® Calgitrol® Paste	Irritation and traumatism with iodine dressing	
Treatment regimen	<ul> <li>Cleansing with saline solution</li> <li>Application of Askina® Calgitrol® Paste</li> <li>Dressing changes done every three days at home</li> <li>Askina® Calgitrol® Paste was applied for a further week after which it was stopped</li> <li>A silicon foam dressing was applied thereafter</li> </ul>	
Other treatment(s) used	-	
Clinical outcomes	<ul> <li>Marked improvement of the toe after one week</li> <li>The slough had lifted with granulation tissue showing in small areas of the wound</li> <li>Two weeks following treatment the nail bed was clean and granulating well</li> </ul>	
Treatment benefits	<ul> <li>Some erythema was still evident but the patient was really pleased, reporting greater comfort and undisturbed sleep</li> <li>Due to the antimicrobial effectiveness of Askina® Calgitrol® Paste no antibiotic therapy was required resulting in lower treatment costs</li> </ul>	
Conclusion	Askina® Calgitrol® Paste treatment resulted in rapid healing of the leg ulcer, improved quality of life for the patient and lower treatment costs	



Day 1 – Pre-treatment



Week 1 – Following treatment with Askina® Calgitrol® Paste

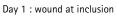


Week 2 – Clean nail bed and wound granulating

# LEG ULCERS ASKINA® CALGITROL® PASTE

Responsible practitioner	Mazizi Njokweni, Podiatry Dpt	
Centre	Leratong Hospital, Gauteng, South Africa	
Gender, age (years)	Female, 54 years old	
Past medical history	<ul> <li>Hypertension</li> <li>Recurrent chronic Venous Leg Ulcer present for 18 years</li> </ul>	
Wound diagnosis	Recurrence of venous leg ulcers present for 18 years	
Wound profile	<ul> <li>The methology of the case study was a random selection of subjects with chronic venous leg ulcers that have been present for more than 1 year.</li> <li>The period of the trial was 8 weaks with chronic venous leg ulcers consultations once a week.</li> <li>At 1st consultation chronic leg ulcer presented with raised and inflamed wound edges, macerated peri-wound areas, fibrin with slough, moderate to high exuding wounds and pain grade above 3</li> </ul>	
Previous wound management	-	
Reason(s) for switch to Askina® Calgitrol® Paste	<ul> <li>Bacterial infections, if not treated properly, can lead to a delay in wound healing and induce severe systemic complications</li> <li>The primery objective was to examine the use of Prontosan® solution to control the bioburden of the wound bed and askina calgitrol paste to properly treat the Bacterial infection</li> </ul>	
Treatment regimen	Askina® Calgitrol® Paste dressing was changed once a week on a period of 8 weeks	
Other treatment(s) used	-	
Clinical outcomes	<ul> <li>At last consultation chronic wound ulcer showed significant improvement.</li> <li>Reduction of the level of exudate</li> <li>Significant pain reduction</li> <li>Promotion of granulation tissue</li> </ul>	
Treatment benefits	<ul> <li>Real improvement in stagnant ulceration</li> <li>Accelerated closure of the ulcerreduction in pain</li> </ul>	
Conclusion	The combination of Prontosan® solution and Askina® Calgitrol® Paste in chronic venous leg ulcer is appropriate and relevant to reduce local infection and promote tissue viability when other treatments had failed.	







Week 8 : good wound improvement

## PRESSURE ULCERS

### ASKINA® CALGITROL® AG

Responsible practitioner	Lindsey Bullough, Tissue Viability Nurse
Centre	Wrightington, Wigan and Leigh NHS Foundation Trust, United Kingdom
Gender, age (years)	Male, 49 years
Past medical history	The patient has a history of spina bifida
	<ul> <li>He is immobile and confined to a wheelchair but is independent with activities of daily living</li> </ul>
Wound diagnosis	Category 4 pressure ulcer -> admission to the hospital
	• Size: L=15 cm, W=20 cm
Wound profile	Necrotic tissue covering the whole wound
	<ul> <li>Infected wound: A swab identified MRSA</li> </ul>
	The necrosis was sharply debrided
Previous wound management	<ul> <li>After sharp debridement, Prontosan® irrigation solution and gel were used to remove any biofilm and complete the debridement process</li> </ul>
Reason(s) for switch to Askina®	Provide an active concentration of silver ions on wound bed to reduce local infection, to support the
Calgitrol® Ag	debridement process and control the exudates
Treatment regimen	<ul> <li>Step 1:</li> <li>A layer of gauze soaked in Prontosan® irrigation solution was placed onto the necrotic tissue for 15 minutes prior to applying Prontosan® gel</li> <li>Askina® Calgitrol® Ag was applied with an adhesive film to secure in place</li> <li>The dressing was replaced every alternate day until the necrosis was softened, revealing soft yellow slough</li> <li>Debridement of the wound was then carried out</li> <li>Step 2:</li> <li>After necrosis debridement, dressing changes were undertaken on a daily basis to manage the high level of exudate</li> </ul>
Other treatment(s) used	<u>-</u>
Clinical outcomes	<ul> <li>Day 20</li> <li>Wound size reduction (L=11 cm, W=15 cm)</li> <li>Decrease of slough by 90 %</li> <li>Reduction of dressing changes to twice weekly due to a decrease of the exudate</li> <li>Day 26</li> <li>Good progression of the wound healing with a wound size reduction (L=10.5 cm, W=14.75 cm)</li> <li>Minimal slough</li> </ul>
Treatment benefits	Dressing changes decreased with the level of exudates from daily to twice weekly saving on nursing time and reducing discomfort for the patient
Conclusion	Askina® Calgitrol® Ag  Contributed to the rapid clearing of infection leading to wound progression in this stage 4 pressure ulcer  Controlled exudate from which no maceration was seen to the surrounding skin







Day 1 Day 20 Day 20







Day 26 Day 26

## PRESSURE ULCERS

### ASKINA® CALGITROL® AG

Responsible practitioner	Sue Johnson, Lead Nurse	
Centre	Wound Care, Doncaster and Bassetlaw Hospitals NHS Foundation Trust, Doncaster, United Kingdom	
Gender, age (years)	Male, 54 years	
Past medical history	<ul> <li>Paraplegic following accident</li> <li>Recurring right heel pressure ulcers over a six year period</li> </ul>	
Wound diagnosis	Presented with self-inflicted traumatic wounds to left leg	
Wound profile	<ul> <li>The wound was clinically critically colonized with surrounding erythema, odour and increased exudate</li> <li>100 % of necrotic tissue on the wound bed</li> </ul>	
Previous wound management	-	
Reason(s) for switch to Askina® Calgitrol® Ag	The pressure ulcer was critically colonized and it's recognized that ionic silver is safe and effective in complex wounds	
Treatment regimen	<ul> <li>Askina® Calgitrol® Ag was used in conjunction with Viscopaste sofban and a Klite bandage</li> <li>The dressing was changed weekly</li> </ul>	
Other treatment(s) used	<ul><li>Viscopaste sofban</li><li>Klite pressure bandage toe to knee to reduce oedema</li></ul>	
Clinical outcomes	<ul> <li>The necrotic tissue was largely removed within one week of initiating treatment with Askina® Calgitrol® Ag</li> <li>Important decrease of the exudate level compared to pre-treatment levels</li> <li>Infection resolved in two weeks</li> <li>Important size reduction within two weeks</li> </ul>	
Treatment benefits	Askina® Calgitrol® Ag was clinically effective and rapidly reduced necrosis, infection and exudate in this patient with complex wounds	
Conclusion	Askina® Calgitrol® Ag is a cost-effective alternative to other silver products and also reduces secondary dressing costs without increasing nursing time	





Day 0 Week 2



Week 3

### PRESSURE ULCERS

Responsible practitioner	Ponghatai Pumraya, MSN, RN
Centre	Wound Care Clinic, Nopparat Rajathanee Hospital, Bangkok, Thailand
Gender, age (years)	Female, 71 years
Past medical history	<ul> <li>Cerebrovascular accident (CVA)</li> <li>Sepsis</li> <li>Patient requires assistance with daily living</li> </ul>
Wound diagnosis	Two unstageable pressure ulcers, left buttock
Wound profile	<ul> <li>Size: L=2.0 cm, W=6 cm and L=1 cm, W=3 cm</li> <li>The wound beds were covered with black and brown eschars and slough</li> </ul>
Previous wound management	-
Reason(s) for switch to Askina® Calgitrol® Paste	Alternative treatment for an elderly patient who could not tolerate the removal of necrosis by surgical procedure
Treatment regimen	<ul> <li>Wound cleansing with saline solution</li> <li>Application of Askina° Calgitrol° Paste on the wound bed</li> <li>A foam dressing was used as the secondary dressing</li> <li>Dressing changes every 3-4 days until the dark necrosis was removed</li> </ul>
Other treatment(s) used	-
Clinical outcomes	Marked wound bed improvement: The eschars from the two unstageable pressure ulcers were removed within 18 days after Askina® Calgitrol® Paste application
Treatment benefits	<ul> <li>The paste is comfortable to apply for the patient</li> <li>Both the patient and caregiver were pleased with the outcome of the treatment</li> </ul>
Conclusion	<ul> <li>Askina® Calgitrol® Paste is an effective alternative to remove eschars in patients at risk from surgical debridement</li> <li>Askina® Calgitrol® Paste supports wound healing and is considered safe for the patient</li> </ul>



Day 1 - At inclusion



Day 1 – Application of Askina® Calgitrol® Paste



Day 1 – Dressings in place on both wounds



Day 3 – Wound evolution



Day 10 - Wound evolution



Day 18 – Wounds demonstrating removal of necrosis tissue

Responsible practitioner	Evgeny Zinovyev, PR	
Centre	Burns Unit, Leningrad Regional Hospital, St. Petersburg, Russia	
Gender, age (years)	Male, 24 years	
Past medical history	The patient was admitted to hospital as an emergency case three hours after injury	
Wound diagnosis	Partial thickness flame burn	
Wound profile	The burn affected 12 % of the total surface area of the trunk and extremities	
Previous wound management	Not applicable	
Reason(s) for switch to Askina® Calgitrol® Paste	Evaluation of a new dressing, Askina® Calgitrol® Paste	
Treatment regimen	<ul> <li>Askina® Calgitrol® Paste alone was initially applied on a daily basis to the burns</li> <li>Dressing changes were based on an evaluation of the condition of the wound, adhesion of the dressing, level of suppuration, bleeding</li> </ul>	
Other treatment(s) used	-	
Clinical outcomes	<ul> <li>Askina® Calgitrol® Paste dressing was 'rejected' on Day 6. The wound surface was covered with mucous exudate and fibrin, under which could be seen numerous areas of regional and focal epithelialisation</li> <li>Askina® Calgitrol® was re-applied, this time with a gauze bandage to hold it close to the skin surface for a further six days</li> <li>Complete wound epithelialisation on both the trunk and extremities after 12 days</li> </ul>	
Treatment benefits	<ul> <li>Askina® Calgitrol® Paste improved the treatment of dermal burns in this patient by reducing:         <ul> <li>Time to wound healing</li> <li>Duration of individual stages of the wound healing process (reducing time of rejection of the burn eschar)</li> <li>Frequency of suppuration</li> </ul> </li> </ul>	
Conclusion	Askina® Calgitrol® Paste is very cost effective as it reduces both the time of wound healing and the overall cost of treatment	



Day 1 – Burn at inclusion



Day 6 - Good evolution



Day 1 – Application of Askina® Calgitrol® Paste



Day 12 - Complete epithelialisation

### BURNS ASKINA® CALGITROL® AG

Responsible practitioner	Jinghua Zang	
Centre	Burn Unit, Heilongjiang Province Hospital, Harbin, China	
Gender, age (years)	Female, 23 years	
Past medical history	The patient suffered burns when a pot of boiling water spilt over her right leg	
Wound diagnosis	Right leg dermal burns	
Wound profile	Partial thickness burns involving 4 % of the body surface area	
Previous wound management	1 % silver sulfadiazine (1 % AgSD) was used once (Day 1)	
Reason(s) for switch to Askina® Calgitrol® Ag	Evaluation of a new dressing, Askina® Calgitrol® Ag	
Treatment regimen	Application of Askina® Calgitrol® Ag on Day 2 post-injury	
Other treatment(s) used	-	
Clinical outcomes	<ul> <li>Partial epithelialisation by Day 12</li> <li>Partial wound healing on Day 16 -&gt; patient discharge</li> </ul>	
Treatment benefits	<ul> <li>Compared with 1% AgSD cream (traditional treatment), Askina® Calgitrol® Ag was:         <ul> <li>Much easier to apply and remove, making it more comfortable for the patient</li> <li>Easier use for the nurse</li> <li>Left on the wound for up to seven days and therefore both the frequency of dressing changes and pain control medication was significantly reduced</li> </ul> </li> </ul>	
Conclusion	<ul> <li>Askina® Calgitrol® Ag dressing is a safe treatment for partial thickness burns as it exerts a highly antimicrobial effect and provides an optimal moisture-balanced healing environment.</li> </ul>	



Day 1 - Post-burn



Day 2 – Application of Askina® Calgitrol® Ag



Day 12 – Partial epithelialisation of the wound



Day 16 – Almost healed wound

## **BURNS**

Responsible practitioner	Carlos Segovia and Magaly Yarza, Intensive care Nurses	
Centre	Burn ICU Hospital Clinico Mutual de Seguridad, Santiago, Chile	
Gender, age (years)	Male, 31 years	
Past medical history	Deep partial thickness burn (hot water) occurred at age of 2. Back and Lower limbs are currently cover with a keloid	
Wound diagnosis	Severe burns caused by fire from gaz explosion	
Wound profile	<ul> <li>TBSA: 39 %</li> <li>Superficial Partial thickness Burn: Facial 6 %</li> <li>Superficial Partial thickness Burn: Cervical 1,5 %</li> <li>Superficial Partial thickness Burn: Back 18 %</li> <li>Superficial Partial thickness Burn: Upper limbs 13,5 %</li> </ul>	
Previous wound management	-	
Reason(s) for use of Askina® Calgitrol  ®Paste	<ul> <li>Impossible to perform an early scarectomy due to medical record</li> <li>It was decided to prepare the wound bed for further dermoepidermal graft with Askina® Calgitrol® Paste</li> </ul>	
Treatment regimen	<ul> <li>Wound bed preparation with Prontosan® solution</li> <li>Application of Askina® Calgitrol® Paste (primary dressing)</li> <li>Secondary dressing with Gauze with petrolatum</li> <li>Traditional dressings on the top</li> <li>Treatment of 12 days in total with daily dressings changes</li> </ul>	
Other treatment(s) used	Hydrotherapy on daily basis	
Clinical outcomes	<ul> <li>Askina® Calgitrol® Paste demonstrated to be an excellent alternative for wound bed preparation before grafts</li> <li>Successful dermoepidermal graft</li> </ul>	
Treatment benefits	<ul> <li>Excellent synergy between Prontosan® solution ( for biofilm and inflammatory parameters) and Askina® Calgitrol® Paste (for bacterial bioburden and exudates)</li> <li>Decreased antibiotics consumption</li> <li>Less pain</li> </ul>	
Conclusion	<ul> <li>Decreased nursing workload</li> <li>Early discharge of the patient from ICU</li> <li>Decreased total cost of patient treatment</li> </ul>	



1- Burn on the back



2- Application of Askina® Calgitrol® Paste



3- Sterile petrolatum gauze used as secondary dressing



4- Successful dermoepidermal graft

### **ACUTE WOUNDS**

Responsible practitioner	Danielle Frassi Bastos	
Centre	B Braun, Brazil	
Gender, age (years)	Male, 68 years	
Past medical history	-	
Wound diagnosis	<ul> <li>Wisdom tooth extraction</li> <li>Application of dry ice after the procedure for one hour to reduce the swelling -&gt; created a burn to the neck</li> </ul>	
Wound profile	<ul> <li>Wound Size: L=5.5 cm, W=5.0 cm</li> <li>Purulent wound</li> </ul>	
Previous wound management	Not applicable	
Reason(s) for switch to Askina° Calgitrol° Paste	Abscess wound with pus	
Treatment regimen	<ul> <li>Cavity wound is cleaned with Prontosan® solution</li> <li>Application of Askina® Calgitrol® Paste in conjunction with a secondary gauze dressing</li> <li>Dressing changes every third day</li> </ul>	
Other treatment(s) used	Prontosan *solution for wound bed cleansing	
Clinical outcomes	<ul> <li>Wound size reduction to L=5 cm, W=3 cm at Day 4</li> <li>Size reduction over time</li> <li>By Day 15 it measured L=1.5 cm, W=1.0 cm</li> <li>Complete wound healing at day 23</li> </ul>	
Treatment benefits	Very rapid wound healing for this large and cosmetically obvious wound	
Conclusion	Use of Askina® Calgitrol® Paste in the early stages post-injury resulted in prevention of infection together with rapid and complete healing of an acute chemical burn	



Day 1 – Wound with pus before debridement



Day 4 – Wound size reduction: L=5.0 cm, W=3.0 cm



Day 7 – Wound size L=1.5 cm, W=1.5 cm



Day 10 – Wound size L=1.2cm, W=1.5 cm



Day 23 – Wound completely healed

### **ACUTE WOUNDS**

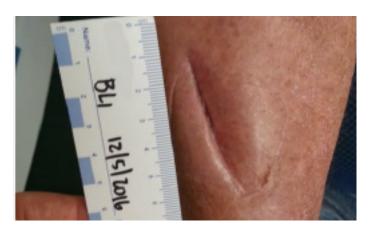
Responsible practitioner	Liezl Naude, RN	
Centre	South Africa	
Gender, age (years)	Male, 74 years	
Past medical history	-	
Wound diagnosis	Skin puncture with rusty iron wire	
	<ul> <li>Developed severe cellulitis and abscess formation</li> </ul>	
	Admitted to hospital on the 6th March	
	<ul> <li>Wound measurement: L=37 mm, W=10 mm, D=10 mm</li> </ul>	
Wound profile	<ul> <li>Wound bed is composed of 80 % slough, 10 % granulation, tissue and 10 % epithelial tissue</li> </ul>	
	<ul> <li>Treatment with IV antibiotics in hospital</li> </ul>	
	After 8 weeks of treatment the wound measured L=37 mm, W=10 mm, D=10 mm	
Previous wound management	Negative Pressure Wound Therapy (NWPT) for 21 days started in March	
Reason(s) for switch to Askina® Calgitrol® Paste	Infected wound	
Treatment regimen	Askina® Calgitrol® Paste	
Other treatment(s) used	<u>-</u>	
Clinical outcomes	Complete wound healing less than two weeks following initiation of treatment with Askina® Calgitrol® Paste	
Treatment benefits	Paste very easy to apply to this sinus wound	
Conclusion	Askina® Calgitrol® Paste in conjunction with IV antibiotics encourages rapid healing of an abscess wound with severe cellulitis	



Day 1: Wound at inclusion Wound size: L=37 mm, W=10 mm, D=10 mm



Day 1: Wound at inclusion Wound size: L=37 mm, W=10 mm, D=10 mm



Day 13 – Wound completely healed

### **ACUTE WOUNDS**

#### ASKINA® CALGITROL® AG

Responsible practitioner	Frans Meulenière, RN	
Centre	AZ St Elisabeth Zottegem, Belgium	
Gender, age (years)	-	
Past medical history	-	
Wound diagnosis	Skin abrasion following fall off from a motorbike	
Wound profile	Dirty wound on the right arm	
	High level of exudate	
Previous wound management	Standard antiseptic treatment	
Reason(s) for switch to Askina® Calgitrol® Ag	Wound with high risk of infection	
	No improvement after preceding antiseptic treatment	
Treatment regimen	Wound cleansing with Prontosan® solution	
	<ul> <li>Application of Askina® Calgitrol® Ag dressing</li> <li>Dressing changes on average every two days</li> </ul>	
Other treatment(s) used	- Dicasing changes on average every two days	
	After two days, first dressing removed, appearance of red granulation tissue	
Clinical outcomes	On Day 20, good evolution in moist wound environment	
	Marked wound improvement by Day 31	
Treatment benefits	The dressing is easy to use and can be cut to fit the wound size	
	Less frequent dressing changes save nursing time and product cost	
Conclusion	Askina Calgitrol® Ag® is a cost effective dressing for the treatment of infected acute wounds	



Day 1 – Abrasion prior to treatment



Day 2 – First dressing change following treatment with Askina® Calgitrol® Ag



Day 7 – Wound appearance after seven days



Day 20 – Good wound healing process in moist wound environment



Day 31 – Marked wound improvement

### **B. BRAUN SOLUTIONS**



#### Prontosan® Wound Irrigation Solution

is indicated for cleansing irrigation and moistening of superfical acute and superfical chronic wounds. Prevents:

- Wound infection
- Biofilm formation
- MDRO contamination

It moisten wound dressings and dissolves encrusted bandages or wound dressings during dressing changes.

**Prontosan**<sup>®</sup> **Gel** X proper wound cleansing is essential. The use of Prontosan<sup>®</sup> Wound Gel X provides long-lasting cleansing and decontamination of the wound bed between dressing changes.



Prontosan® Debridement Pad has been designed to support the Wound Bed Preparation with Prontosan® Wound Irrigation Solution.



#### Askina® Calgitrol® range

is a sterile dressing, consisting of an ionic silver alginate matrix, provided for broad antimicrobial effectiveness; helps prevent contamination from external bacteria.



#### Askina® Foam range

is a polyurethane foam wound contact surface with a high absorption capacity and a vapour permeable, water and bacteria resistant polyurethane film outer layer.



Askina® Carbosorb is a conformable dressing composed of an activated charcoal cloth as a middle layer and two layers of non-wove viscose-rayon and polyester for top layer.

# NOTES

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