# A CLINICAL CASE STUDY OF THE EFFECTIVE TREATMENT OF WOUND INFECTION WITH



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KERRACONTACT AG

# Introduction

Wound infection can have a huge impact on a patient's quality of life. The signs and symptoms of infection including pain, malodour and an increase in exudate levels can result in further health complications and have a negative effect on a patient's health and wellbeing. It is important to ensure wound infection is treated quickly and effectively, reducing these symptoms and preventing any further complications.

With the amount of antimicrobial dressings currently available it is sometimes difficult to choose the right antimicrobial dressing that will treat wound infection quickly and effectively. The aim of this case study was to assess the effectiveness of KerraContact Ag (Crawford Healthcare) at treating wound infection, specifically reporting on the reduction in signs and symptoms of infection and any changes in the wound appearance.

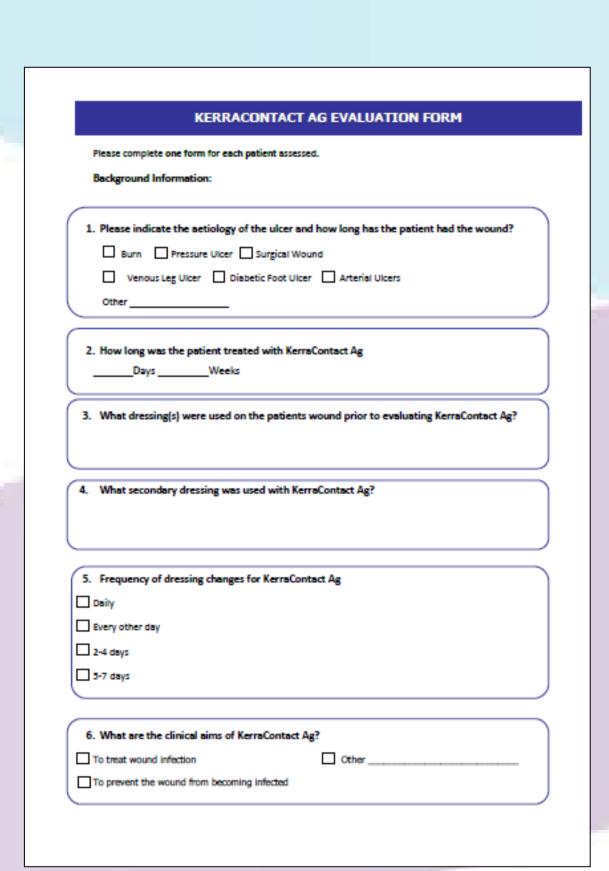
KerraContact Ag has been used on two patients presenting with infected venous leg ulcers. Both patients presented with malodour, pain and slough, which were indicative of wound infection. KerraContact Ag was used for 7 days to help treat the infection and reduce the signs and symptoms.

# Method

An evaluation form was filled out for each patient and which looked at the following:

- Clinical signs and symptoms of infection present before the treatment
- Managing the signs and symptoms of infection; pain, exudate, odour and swelling/heat/redness
- Condition of the wound following treatment

This allowed a clinical assessment after treatment to identify the clinical benefits of using KerraContact Ag for 7 and the benefits to the wound and patient.



# Results

#### Patient 1

Patient 1 is a 28 year old male with sickle cell who is training to be an accountant. He presented with a chronic leg ulcer that had been present for more than one year. He was originally referred to the clinic following an unsuccessful skin graft to medial and lateral leg ulcers. The lateral ulcer went on to heal with compression but the medial ulcer had become static and is affected by his sickle cell status. The ulcer frequently showed signs of infection (redness, heat, discoloured wound bed, odour, pain). Dressing changes were limited to once a week due to the patients work commitments meaning there was limited time available for dressing changes.

Several different dressings were used before KerraContact Ag to help treat the infection including a variety of silver dressings, PICO (negative pressure dressing), and added compression, none of which were effective for more than 2 weeks. KerraContact Ag was used as the primary dressing and KerraMax Care was used to absorb the excess exudate. An improvement of the wound was noticed within the first week, the wound then continued to improve unlike previous treatments.

After KerraContact Ag being left in situ for 7 days Patient 1's wound showed a 60% reduction in thick green slough, a reduction in wound size and an increase in epithelial tissue. The wound was no longer static and the changes in the condition of the wound meant that the dressing exceeded clinical expectations.



**Before Treatment** 





Week One Week Three

After 6 weeks of treatment the wound is 0.5cm smaller in width and 0.3cm smaller in length. There remains 20% of slough in the wound but healthy granulation tissue is evident beneath which was not previously present.

#### Patient 2

Patient 2 is a fit 89 year old woman who presented with ulcers on both legs. She had suffered a spider bite 5 years ago on her right leg which resulted in an ulcer that has never completely healed. The wound starts to heal but then breaks down frequently showing signs of infection. The ulcer bleeds easily, is malodourous, and is suspected as having a biofilm present. Prior to treatment with KerraContact Ag the wound had leaked through the compression bandages and became malodorous before she was due to return to the weekly clinic.

A variety of dressings had been utilised most recently to try and treat the wound including Aquacel Ag+ (Convatec) and then Granulox which worked for a while but the wound deteriorated again.

KerraContact Ag was used to treat the infection and the suspected biofilm with KerraMax Care being used as a secondary dressing to absorb excess fluid away from the wound bed. As a result of the treatment with KerraContact Ag sloughy tissue has been removed and there is a noticeable improvement in granulation tissue within just one week. Treatment of the leg ulcer had been continued with KerraContact Ag and all the ulcer is decreasing in size and has a healthier wound bed.







**Before treatment** 

Week One

**Week Three** 

Before KerraContact Ag was used the patient would remove the bandages and change the dressing herself. This meant that she was without compression for a number of days and so was not receiving effective treatment. KerraContact Ag reduced the need to change the dressing in between clinic visits as it was not leaking or malodourous.

KerraContact Ag has been used for 14 days. The patient rated the dressing 5 out of 5 when compared with the previous dressing and commented on the positive effect KerraContact Ag had on wound odour. The wound showed signs of improvement and was acceptable to the patient which again meant that the dressing exceeded clinical expectations.

## Discussion

It is believed that silver has been used in woundcare since the 17th Century and the woundcare dressings that are being used in today's clinical practice have been used for many years. Ag Oxysalt Technology is the latest development in the silver dressings market. Ag Oxysalts have a higher reactivity and oxidation state, allowing the dressing to have a lower silver content and still have an excellent antimicrobial effect, with positive effects on patient outcomes being shown within the first 7 days.

# Conclusion

The two case studies outlined provide evidence that the correct use of a silver dressing for the management of infection can help reduce the signs and symptoms within the first 7 days. Therefore KerraContact Ag is a clinically appropriate dressing that kills infection fast and manages the biofilm within a wound.

## References

Thomas S (2010) Surgical Dressings and Wound Management. Medetec Publications, Cardiff
Carol Hedger (2015) Choosing the appropriate dressing: silver Wound Essentials 2015, Vol 10 No 1
Wounds UK Best Practice Statement. The use of tropical antimicrobial agents in wound management. London: Wounds UK, 2013 (third edition)