

# Treatment of a complex Pyoderma Gangrenosum with a Hydro Responsive Wound Dressing

Donna Ashton, Practice Nurse, Three Spires Medical Practice

## Introduction

Pyoderma Gangrenosum (PG) is a complex non-infectious neutrophilic dermatosis in which high numbers of neutrophils congregate in the skin (George et al 2019) this results in prolonged inflammation and breakdown of the tissues. It can progress rapidly into a severely painful lesion that is difficult to heal.

This poster discusses the care of Mr X, a 73-year-old man who had PG for over 2 years and explores the impact the wounds had upon him and the nurses caring for him. It also discusses how the use of a Hydro Responsive Wound Dressing enabled the wounds to progress to healing, improved the patient's quality of life and allowed the nurses to regain confidence in their ability to manage complex wounds.

## Case Study

Mr X had Pyoderma Gangrenosum for over two years. He was on long term steroids which prevented the wound from deteriorating, however repeated attempts to achieve healing were unsuccessful. Chronic inflammation within the wounds resulted in pain and high exudate levels, the wound bed was covered in thick slough, which was difficult to remove, there was no evidence of healing and the wound was very stagnant. He had recurring infections and was repeatedly prescribed antibiotics. An array of dressings had been used to control the exudate and pain and provide the conditions for healing with little success. This resulted in high levels of nursing intervention that were ineffective with feeling of frustration and inadequacy.

## Results

There was a vast improvement within the first week of using the Hydro Responsive Wound Dressing and pain, infection and exudate reduced within the first 2-4 weeks. Pain reduced and the patient walked with a spring in his step. Recurrent infection was no longer a problem and repeat prescriptions for antibiotics discontinued. Within three months the wounds progressed to healing and the steroid treatment was discontinued.

## Discussion

Chronic wounds present a major challenge for nurses, nonetheless the impact they have upon their professional confidence has been rarely explored. Failure to achieve healing may often result in feelings of frustration and despair as nurses don't know what else they can do to help the patient. This may impact upon their professional confidence as they question their ability to meet the patient's needs.

The use of a Hydro Responsive Wound Dressing stimulated healing in a very complex PG resulting in a reduction in the use of antibiotics, analgesia and systemic steroids. The cost of wound care within the NHS is increasing (Guest, 2020) and nurses need to ensure the most effective treatment is utilised to optimise the speed of healing and negate the need for adjunctive therapies. The greatest cost however it is the impact the wound has on the patient and nurses. In this case the use of a Hydro Responsive Wound Dressing resulted in a positive outcome for the patient and the nurse as she commented "healing made a massive difference to myself and the patient".

## Overview of Hydro Responsive Wound Dressings

Hydro Responsive Wound Dressings consist of a moist pad containing super absorbent particles. These are fully hydrated with Ringer's Solution to promote softening and removal of devitalised tissue, (Ousey et al 2016). The dressing has also been found to disrupt biofilm and remove bacteria, whilst the Ringer's solution provides an isotonic environment to support cellular activity and effectively reduce pain (Colgrave et al 2016).

Mr X agreed to try Hydro Responsive Wound Dressing being applied to his wounds. The dressings were changed weekly and the wounds reassessed at every dressing change.



25.11.2020 - Right foot ulceration



25.11.2020 - Left foot ulceration



08.03.2021 - Right foot



08.03.2021 - Left foot

## References

- Colgrave M et al (2016) the effects of Ringer's solution within a dressing to elicit pain relief Journal of Wound Care Vol 25 No 4
- George C et al (2019) Pyoderma Gangrenosum - a guide to diagnosis and management Clinical Medicine Vol 19 No 3 pp 224 – 228
- Guest J et al (2020) cohort study evaluating the burden of wounds in the UK's National Health Service in 2017/2018: update from 2012/2013 BMJ Open <https://bmjopen.bmj.com/content/bmjopen/10/12/e045253.full.pdf> accessed 27/07 2021
- Ousey K et al (2016) HydroClean® plus; a new perspective to wound cleansing and debridement Wounds UK Vol 12 No 1 pp 224 – 228