

Ten Patient case study series – across an integrated care board with a novel new advanced wound dressing with Bioactive Microfibre Gelling (BMG™) technology leading to formulary application

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INTRODUCTION

Ulceration of the lower limbs results in painful, often debilitating leg wounds that can have a profound effect on patients physical, social, and psychological wellbeing.

It is estimated that the UK spends nearly £2bn each year managing lower limb ulceration. NHS England has highlighted the care patients receive is often sub-optimal and unwarranted variation results in higher costs and longer healing times. Non-healing rates are both common and costly, adding to burden on patients and the healthcare system. Prevalence of leg ulceration is higher in older age groups so as our population ages the problem is likely to increase. (1)

Our integrated care board covers six boroughs, with our trust setting the budget for planning and monitoring most of the health services in the region. Our role is to ensure patients benefit from convenient and high quality healthcare whenever patients are in need. Our leg ulcer service sees approximately 50 patients a week. We receive referrals from all health care professionals, with the majority being from primary care, for patients suffering with recurrent non healing leg ulcers.



In March 2022, an advanced wound dressing with Bioactive Microfibre Gelling (BMG™) technology (MaxioCel®) was launched in the UK. As a team we were interested to evaluate the clinical impact this dressing could have across our clinical workload.

METHOD

10 patient case study series over a 4 week period.

RESULTS

- Healing trajectory excellent, improved healing rates within just the first few dressing changes
- Significant reduction in pain and exudate and wound size
- Improved wound bed and periwound skin
- Facilitated earlier debridement and biofilm removal
- Haemostatic ability of dressing was exceptional
- Reduction in pain facilitated commencement of compression therapy in two patients, who previously were unable to tolerate compression.

CONCLUSION

Multidisciplinary management of patients with chronic ulcers is crucial and should include cost analysis. Data collection supports not only improved wound management objectives but reduced visits improved quality of life to support an application for formulary status. We will go on to publish the complete findings of this ten patient evaluation in the coming months, in order to share best practice.

References Atkin L (2019) Venous leg ulcer prevention 1: identifying patients who are at risk. Nursing Times [online issue]; 115: 6, 24-28.

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AXIO
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CASE STUDY

84 year old female

Essential hypertension, chronic kidney disease stage 3, chronic venous insufficiency, suspected covid 19, hypothyroidism, athletes foot, cellulitis of foot, ulcer of lower extremity.

- Bilateral leg with dry skin/varicose veins and hemosiderin deposition around gaiter aspect of both legs
- **Right leg:** Varicosities – ankle flare, reticular/circular veins, no oedema present
- **Left leg:** Varicosities flare, reticular/circular no oedema present
- Pulses Palpable on both feet, skin warm to touch
- Capillary refilling in less than 3 seconds
- No intermittent claudication reported
- Pain score 8 (VAS) on regular prescribed analgesia from her GP
- Doppler assessment: Right leg 1.12mmHg, Left leg 1.20mmHg

Diagnosis

- Chronic venous ulcer to left leg of 6 weeks duration
- High exudate, non viable tissue, slight odour, 100% biofilm on wound bed
- Severe skin changes, fragile skin around wound bed, telangiectasia, reticular veins with ankle flare
- Wound measurement (L-10cm)x(W- 5.2cm)

Previous medical interventions

- Gelling fibre (AQUACEL® Extra) and Superabsorbent (Zetuvit®pad)
- No compression
- On antibiotics for local infection

MaxioCel commenced

Patient was first seen at the leg ulcer clinic on 28th September for initial wound and holistic assessment – MaxioCel commenced. Dressing changes initially three times per week, then twice per week, then weekly. Patient concordant, no pain at dressing change.

Wound healing progression

Wound began to reduce in size, and by 8th November was at 98% epithelialisation. Exudate levels were low. By 3rd January, wound was healed.



Key Clinical Benefits

- 1 Speed of healing described as "amazing".
- 2 BMG dressing (MaxioCel) kept infection at bay meaning no further antibiotics or silver dressings were required.
- 3 Debridement achieved faster than expected.
- 4 Exudate management allowed reduction in nursing time from 3 times a week to weekly.
- 5 Reduction in pain meant that analgesics were not required.

Key Patient Benefits

- 1 Pain reduction (8 to 1 on VAS) meant patient was able to sleep better.
- 2 Patient was concordant to treatment BMG dressing (MaxioCel).
- 3 Patient was excited throughout treatment often using words such as "wow" and "I want to see how my wound looks this week".
- 4 Exudate management improved patients quality of life, allowing confidence to go out as she wasn't experiencing strikethrough, compared to previous dressing regime.

