EVALUATING THE PERFORMANCE OF A CARBOXYMETHYL CELLULOSE DRESSING FOR THE TREATMENT OF A CHRONIC INFECTED VENOUS LEG ULCER

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Introduction
Chronic venous leg ulceration has an estimated prevalence of between 0.1% and 0.3% in the UK1, with the risk of developing a leg ulcer increasing with age. The impact of such a wound can have a significant effect on a patient’s quality of life. It is estimated that approximately 1% of the population will suffer from leg ulceration at some point in their lives1. In this case study, a carboxymethyl cellulose gelling fibre dressing (KerraCel™, Crawford Healthcare) was evaluated on an elderly patient resulting in positive clinical and patient outcomes upon the management of his chronic venous leg ulcer.

Method
The patient in this study was an 89 year old active male who is independent with all activities of daily living. The patient presented with a venous leg ulcer suspected of infection which had previously been managed by the Tissue Viability team for 10 months. Prior to this period, the wound had been managed for a 9 week period by a practice nurse team. The patient was receiving full compression therapy and upon presentation an ABPI measurement of 0.92 was taken. The treatment plan was discussed and agreed with the patient. KerraCel dressings were used as primary dressings with short stretch bandages (full compression) as these were used previously and were well tolerated by the patient. Previous dressings had been applied to the wound (silver dressings, hydrofibre dressings, hydrogels, PHMB dressings and alginates) which unfortunately proven unsuccessful in managing the wound. Upon presentation the wound was assessed and reported as having a mixed sloughy and granulating wound bed. The wound measured 6cm x 2.5cm with a depth of 3cm. Significant wound improvement was noted within 3 days of treatment with KerraCel dressings. On day 3 the wound was assessed and measured as 2cm x 2cm with a depth of 0.2cm. The wound was further monitored with continuous wound improvement at each dressing change until wound closure was achieved.

Upon application of KerraCel dressings the wound bed was noted to be healthier in appearance and exudate levels continuously reduced. This lead to the dressing change regime reducing from twice weekly to once weekly. Wound closure was achieved after 3.5 months of application of KerraCel dressings.

Wound images were taken during the treatment period to help visualise the improvements in the wound tissue and size (see below – images reproduced with patient permission).

Results

The aim of the treatment was to manage wound exudate, debride the wound and progress the wound to closure.

The patient and clinician both reported that they were very happy with the wound progression in such a short time period. The patient noted that during the evaluation the wound felt ‘less wet’. The patient also commented that KerraCel dressings were comfortable to wear with no pain was reported upon dressing application, wear or removal. The introduction of KerraCel dressing regime improved the rate of wound healing and significantly improved the patients quality of life by reducing the number of clinic visits from twice weekly to once weekly. This had a major impact on the patient as he was able to re-establish visiting his family and continue with other social activities which had previously been restricted. This also had an impact of reducing nursing time.

Discussion

These findings provide an excellent example of how KerraCel – a carboxymethyl cellulose gelling fibre can effectively manage a chronic venous leg ulcers where previously trialled wound dressings had proved unsuccessful. The rapid wound progression enabled significant improvement in the patients quality of life, reducing dressing changes and nursing time. This can also be linked to helping to reduce dressing costs and reduced nursing time.

Conclusion

Venous leg ulcers can be difficult to manage. Positive clinical outcomes have been noted with the use of KerraCel dressings along with high patient satisfaction. This study demonstrates a positive clinical performance of KerraCel dressings for managing chronic venous leg ulcers.

This study also suggest that KerraCel dressings have the potential to reduce the number of dressing changes and clinical contact between appointments reducing nursing time and ultimately providing a clinically and cost-effective product.

References

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