Using haemoglobin to improve oxygen diffusion in complex chronic ulcers leads to faster healing and reduced cost of dressing changes and nursing care – 3 case studies

Aim
To evaluate the use of enhanced oxygen diffusion in wound healing through topical application of haemoglobin spray in the treatment of chronic wounds where standard care has failed.

Method
Three patients with non-healing ulcers which had failed to improve despite standard care had their wounds reviewed. After assessment, topical haemoglobin spray (Granulox®) was added with a view to kick-start the healing process by improving the oxygen level in the wound bed of each wound. Hydro polymer foams were used as secondary wound dressing.

Conclusion
Haemoglobin, when used as an adjunct therapy, has proved to be very effective in enhancing wound healing. Also it led to more cost effective way of managing long-term wounds, where nursing time was reduced by two-thirds and less dressing change being undertaken.

Case Study 1
45 year old male patient with intermittent right leg ulcers for the past 8 years. Previous history of recurrent DVT and angioplasty to right leg. He was started on Granulox® in August 2014 and by December 2014 the wound bed appeared healthier with dressings only needing to be changed every 3 days (instead of daily as before Granulox®). Patient quote: “I am not costing my GP so much money anymore as they used to say I’m using too many dressings”. The patient is now back at work and able to wear proper footwear with no issues arising from malodour.

Case Study 2
44 year old female patient with Spina bifida acquired a Stage 4 pressure ulcer in October 2014 (18 x 10cm) due to prolonged sitting in wheelchair. After daily dressings had been applied with limited healing progress, Granulox® was introduced in November 2014. Within 4 weeks the wound size was reduced by 80% (with 100% granulation of tissue) and only required dressing once every 3 days. The patient is now completely healed and able to get on with her life, and still refers to the ‘magic spray’.

Case Study 3
78 year old male Type 2 diabetes patient, homebound for the past 2 years, due to a diabetic foot ulcer requiring dressing every 2 days by district nurses. Granulox® was introduced in November 2014 to a wet, sloughy wound bed. After 2 weeks with Granulox®, the wound bed appeared clean and granulating (but still wet). After 4 weeks of Granulox® being applied twice weekly, the wound bed became healthier and had reduced in size. The district nurse now only sees the patient for a twice-weekly skin check.
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Presented at EWMA 12–15 May 2015