

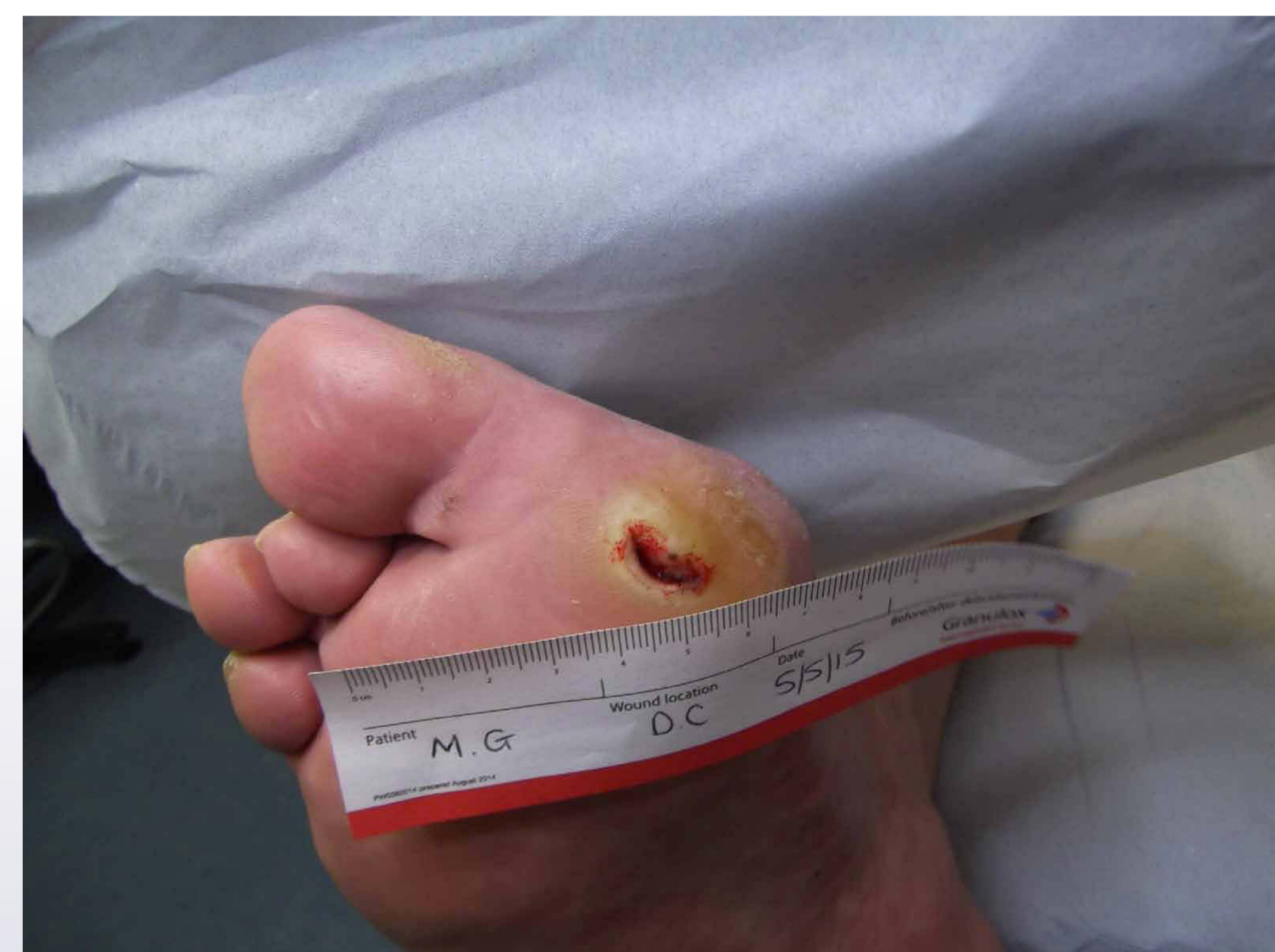
Introduction: Diabetic foot ulceration is encountered frequently by clinicians and can be very challenging to manage often resulting in infection, tissue damage, amputation and long term disability (Edmonds, 2007). The challenge is exacerbated when patients present with complex co-morbidities. In addition to the well documented financial burden to the NHS, there can be a huge quality of life impact for the individual patient.

Patient One

Male, 67 years old. Patient is diabetic (type 2) with multiple co-morbidities including hypertension, peripheral neuropathy, coronary heart disease. The patient was obese (BMI 38) and had a previous history of ulceration. The patient presented in January 2015 and a standard care regime was instigated. In May 2015, as the ulcer was not responding to standard care, Granulox haemoglobin spray was added as an adjunct to the standard care regime. The ulcer measured 10mm x 2mm

Results: At week 9 the ulcer had healed and remains healed (November 2015).

QOL: The patient has subsequently had a bariatric surgery procedure to address the issue of his obesity. This procedure would not have been possible with an open ulcer in situ.



Baseline



Week 9

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

Method: Two patients with non-healing ulcers which had failed to improve despite standard care had their wounds reviewed. After assessment, topical haemoglobin spray was added with a view to kick-starting the healing process by improving the oxygen level in the wound bed.

Patient Two

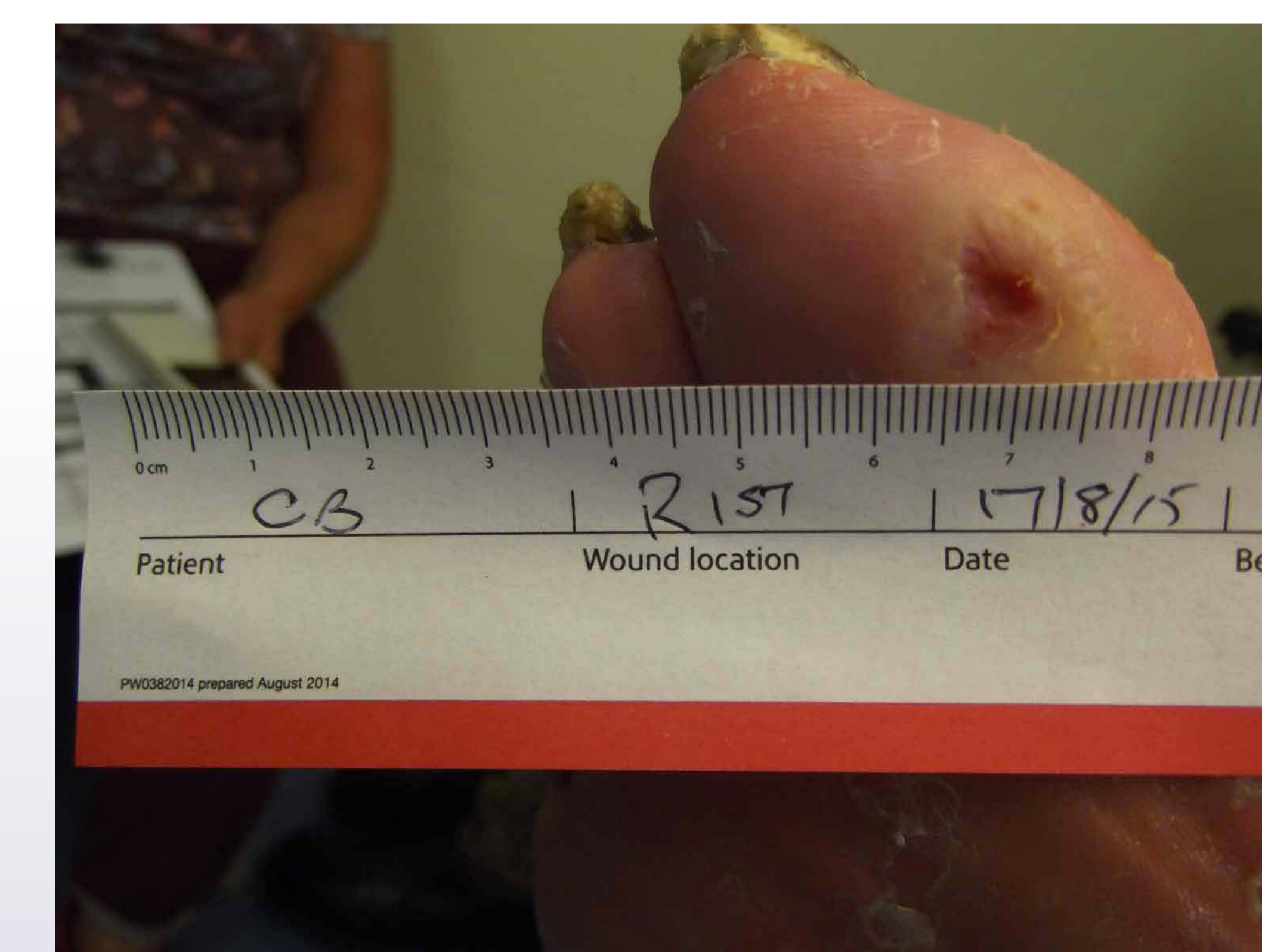
Male, 58 years old. Patient is diabetic (type 2) with multiple co-morbidities including rheumatoid arthritis, hypertension, dyslipidaemia, hypothyroidism and peripheral neuropathy. Patient had a history of re-ulceration dating back to at least 2012. His mental health had been affected by having to give up work due to his ulcer. The patient presented in January 2015 and a standard care regime was instigated. In May 2015, as the ulcer was not responding to standard care, Granulox haemoglobin spray was added as an adjunct to the standard care regime. The ulcer measured 8mm x 7mm

Results: At week 12, the wound had healed and remains stable.

QOL: In September 2015, the patient was able to go abroad for the first time in many years and saw no deterioration to the ulcer area.



Baseline



Week 12

Conclusion: Topical haemoglobin proved an effective adjunct to standard therapy in the management of non-healing diabetic foot ulcers, improving not only the clinical outcomes but also the quality of life issues affecting the individual patients.